Quality Counts
TRANSPORTATION DATA COLLECTION SERVICES

7409 SW Tech Center Dr, Ste B150
Tigard, OR 97223
503-620-4242
www.qualitycounts.net

**Site Codes:** 10940809, 10940810
**Location:** S Wildspring Rd -- IL 120
**Date:** 5/1/13

**Other Muli Units**

| | S Wildspring Rd (Southbound) | | | | IL 120 (Westbound) | | | | S Wildspring (Northbound) | | | | IL 120 (Eastbound) | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Time | U-Turns | Right | Thru | Left | U-Turns | Right | Thru | Left | U-Turns | Right | Thru | Left | U-Turns | Right | Thru | Left |
| 6:00 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 |
| 6:15 AM | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 6:30 AM | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 |
| 6:45 AM | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 |
| 7:00 AM | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 |
| 7:15 AM | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5 | 0 |
| 7:30 AM | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 7:45 AM | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 |
| 8:00 AM | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 0 |
| 8:15 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 |
| 8:30 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 |
| 8:45 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 |
| Totals | 0 | 0 | 0 | 0 | 0 | 0 | 14 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 18 | 0 |

| | S Wildspring Rd (Southbound) | | | | IL 120 (Westbound) | | | | S Wildspring (Northbound) | | | | IL 120 (Eastbound) | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Time | U-Turns | Right | Thru | Left | U-Turns | Right | Thru | Left | U-Turns | Right | Thru | Left | U-Turns | Right | Thru | Left |
| 3:00 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 |
| 3:15 PM | 0 | 1 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 |
| 3:30 PM | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 |
| 3:45 PM | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 0 |
| 4:00 PM | 0 | 0 | 0 | 0 | 0 | 0 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 |
| 4:15 PM | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 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 | 0 | 1 | 0 |
| 4:45 PM | 0 | 0 | 0 | 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 | 0 | 1 | 0 |
| 5:15 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| 5:30 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 5:45 PM | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 |
| Totals | 0 | 1 | 0 | 0 | 0 | 0 | 15 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 11 | 1 |

Quality Counts
TRANSPORTATION DATA COLLECTION SERVICES

7409 SW Tech Center Dr, Ste B150
Tigard, OR 97223
503-620-4242
www.qualitycounts.net

**Site Codes:** 10940811, 10940812
**Location:** S Cedar Lake Rd -- IL 120
**Date:** 5/1/13

**Passenger Vehicles**

| | S Cedar Lake Rd (Southbound) | | | | IL 120 (Westbound) | | | | S Cedar Lake Rd (Northbound) | | | | IL 120 (Eastbound) | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Time | U-Turns | Right | Thru | Left | U-Turns | Right | Thru | Left | U-Turns | Right | Thru | Left | U-Turns | Right | Thru | Left |
| 6:00 AM | 0 | 56 | 53 | 2 | 0 | 4 | 88 | 9 | 0 | 6 | 10 | 3 | 0 | 3 | 105 | 2 |
| 6:15 AM | 0 | 52 | 44 | 4 | 0 | 2 | 118 | 9 | 0 | 14 | 13 | 3 | 0 | 8 | 120 | 9 |
| 6:30 AM | 0 | 73 | 53 | 5 | 0 | 3 | 145 | 18 | 0 | 9 | 16 | 5 | 0 | 7 | 108 | 9 |
| 6:45 AM | 0 | 39 | 55 | 8 | 0 | 5 | 124 | 12 | 0 | 19 | 16 | 6 | 0 | 15 | 135 | 11 |
| 7:00 AM | 0 | 42 | 31 | 4 | 0 | 14 | 118 | 16 | 0 | 18 | 11 | 14 | 0 | 13 | 136 | 17 |
| 7:15 AM | 0 | 37 | 24 | 3 | 0 | 11 | 132 | 15 | 0 | 8 | 22 | 7 | 0 | 14 | 144 | 22 |
| 7:30 AM | 0 | 32 | 35 | 2 | 0 | 5 | 170 | 19 | 0 | 1 | 29 | 3 | 0 | 15 | 150 | 23 |
| 7:45 AM | 0 | 18 | 39 | 2 | 0 | 6 | 142 | 14 | 0 | 11 | 18 | 8 | 0 | 7 | 128 | 30 |
| 8:00 AM | 0 | 29 | 18 | 4 | 0 | 4 | 131 | 13 | 0 | 16 | 14 | 10 | 0 | 10 | 114 | 19 |
| 8:15 AM | 0 | 18 | 20 | 0 | 0 | 2 | 139 | 11 | 0 | 13 | 14 | 4 | 0 | 8 | 96 | 21 |
| 8:30 AM | 0 | 18 | 24 | 3 | 0 | 3 | 99 | 12 | 0 | 15 | 20 | 14 | 0 | 5 | 96 | 17 |
| 8:45 AM | 0 | 18 | 12 | 1 | 0 | 9 | 102 | 5 | 0 | 12 | 17 | 5 | 0 | 7 | 134 | 21 |
| Totals | 0 | 432 | 408 | 38 | 0 | 68 | 1508 | 153 | 0 | 142 | 200 | 82 | 0 | 112 | 1466 | 201 |

| | S Cedar Lake Rd (Southbound) | | | | IL 120 (Westbound) | | | | S Cedar Lake Rd (Northbound) | | | | IL 120 (Eastbound) | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Time | U-Turns | Right | Thru | Left | U-Turns | Right | Thru | Left | U-Turns | Right | Thru | Left | U-Turns | Right | Thru | Left |
| 3:00 PM | 0 | 19 | 17 | 0 | 0 | 4 | 129 | 10 | 0 | 8 | 35 | 3 | 0 | 7 | 101 | 23 |
| 3:15 PM | 0 | 14 | 19 | 4 | 0 | 3 | 144 | 15 | 0 | 23 | 26 | 10 | 0 | 9 | 104 | 44 |
| 3:30 PM | 0 | 14 | 20 | 6 | 0 | 2 | 130 | 17 | 0 | 22 | 54 | 14 | 0 | 6 | 140 | 28 |
| 3:45 PM | 0 | 14 | 19 | 4 | 0 | 6 | 114 | 12 | 0 | 21 | 44 | 10 | 0 | 10 | 145 | 42 |
| 4:00 PM | 0 | 35 | 21 | 7 | 0 | 0 | 154 | 9 | 0 | 24 | 58 | 12 | 0 | 8 | 140 | 46 |
| 4:15 PM | 0 | 23 | 30 | 5 | 0 | 1 | 110 | 15 | 0 | 25 | 59 | 14 | 0 | 4 | 148 | 40 |
| 4:30 PM | 0 | 28 | 10 | 4 | 0 | 5 | 124 | 12 | 0 | 22 | 65 | 12 | 0 | 7 | 156 | 42 |
| 4:45 PM | 0 | 24 | 20 | 4 | 0 | 7 | 143 | 14 | 0 | 19 | 49 | 7 | 0 | 6 | 151 | 26 |
| 5:00 PM | 0 | 22 | 21 | 5 | 0 | 2 | 127 | 18 | 0 | 16 | 50 | 11 | 0 | 8 | 131 | 36 |
| 5:15 PM | 0 | 22 | 18 | 5 | 0 | 4 | 137 | 13 | 0 | 20 | 59 | 11 | 0 | 9 | 161 | 38 |
| 5:30 PM | 0 | 19 | 17 | 1 | 0 | 9 | 113 | 18 | 0 | 21 | 48 | 20 | 0 | 7 | 144 | 41 |
| 5:45 PM | 0 | 22 | 27 | 12 | 0 | 6 | 119 | 10 | 0 | 28 | 59 | 14 | 0 | 6 | 140 | 37 |
| Totals | 0 | 256 | 239 | 57 | 0 | 49 | 1544 | 163 | 0 | 249 | 606 | 138 | 0 | 87 | 1661 | 443 |

Quality Counts
TRANSPORTATION DATA COLLECTION SERVICES

7409 SW Tech Center Dr, Ste B150
Tigard, OR 97223
503-620-4242
www.qualitycounts.net

**Site Codes:** 10940811, 10940812
**Location:** S Cedar Lake Rd -- IL 120
**Date:** 5/1/13

**Single Unit Trucks**

| | S Cedar Lake Rd (Southbound) | | | | IL 120 (Westbound) | | | | S Cedar Lake Rd (Northbound) | | | | IL 120 (Eastbound) | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Time | U-Turns | Right | Thru | Left | U-Turns | Right | Thru | Left | U-Turns | Right | Thru | Left | U-Turns | Right | Thru | Left |
| 6:00 AM | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 0 |
| 6:15 AM | 0 | 1 | 0 | 0 | 0 | 0 | 3 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 4 | 0 |
| 6:30 AM | 0 | 1 | 1 | 1 | 0 | 0 | 3 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 5 | 0 |
| 6:45 AM | 0 | 1 | 1 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 3 | 0 | 0 | 0 | 4 | 0 |
| 7:00 AM | 0 | 2 | 1 | 0 | 0 | 0 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 6 | 1 |
| 7:15 AM | 0 | 6 | 0 | 0 | 0 | 0 | 4 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 3 | 1 |
| 7:30 AM | 0 | 3 | 0 | 0 | 0 | 1 | 11 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 4 | 2 |
| 7:45 AM | 0 | 0 | 1 | 0 | 0 | 1 | 12 | 2 | 0 | 1 | 1 | 0 | 0 | 0 | 4 | 1 |
| 8:00 AM | 0 | 3 | 1 | 0 | 0 | 0 | 7 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 5 | 0 |
| 8:15 AM | 0 | 1 | 1 | 0 | 0 | 1 | 7 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 5 | 1 |
| 8:30 AM | 0 | 1 | 0 | 0 | 0 | 0 | 6 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 7 | 3 |
| 8:45 AM | 0 | 1 | 0 | 0 | 0 | 0 | 4 | 0 | 0 | 2 | 1 | 0 | 0 | 0 | 7 | 0 |
| Totals | 0 | 20 | 6 | 1 | 0 | 3 | 67 | 7 | 0 | 6 | 10 | 1 | 0 | 1 | 57 | 9 |

| | S Cedar Lake Rd (Southbound) | | | | IL 120 (Westbound) | | | | S Cedar Lake Rd (Northbound) | | | | IL 120 (Eastbound) | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Time | U-Turns | Right | Thru | Left | U-Turns | Right | Thru | Left | U-Turns | Right | Thru | Left | U-Turns | Right | Thru | Left |
| 3:00 PM | 0 | 0 | 0 | 0 | 0 | 0 | 10 | 1 | 0 | 1 | 1 | 1 | 0 | 0 | 11 | 2 |
| 3:15 PM | 0 | 1 | 0 | 0 | 0 | 0 | 15 | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 12 | 0 |
| 3:30 PM | 0 | 1 | 0 | 0 | 0 | 0 | 8 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 6 | 1 |
| 3:45 PM | 0 | 1 | 0 | 1 | 0 | 1 | 7 | 0 | 0 | 2 | 0 | 0 | 0 | 1 | 16 | 0 |
| 4:00 PM | 0 | 2 | 0 | 0 | 0 | 1 | 4 | 1 | 0 | 1 | 2 | 0 | 0 | 1 | 4 | 0 |
| 4:15 PM | 0 | 0 | 1 | 0 | 0 | 0 | 12 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 7 | 0 |
| 4:30 PM | 0 | 0 | 0 | 0 | 0 | 0 | 6 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 6 | 1 |
| 4:45 PM | 0 | 0 | 0 | 0 | 0 | 0 | 5 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 |
| 5:00 PM | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 7 | 0 |
| 5:15 PM | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 6 | 0 |
| 5:30 PM | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 0 |
| 5:45 PM | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 3 | 1 |
| Totals | 0 | 5 | 1 | 1 | 0 | 2 | 79 | 5 | 0 | 6 | 8 | 2 | 0 | 4 | 81 | 5 |

Quality Counts
TRANSPORTATION DATA COLLECTION SERVICES

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Tigard, OR 97223
503-620-4242
www.qualitycounts.net

**Site Codes:** 10940811, 10940812
**Location:** S Cedar Lake Rd -- IL 120
**Date:** 5/1/13

**Semi-Trailers**

| | S Cedar Lake Rd (Southbound) | | | | IL 120 (Westbound) | | | | S Cedar Lake Rd (Northbound) | | | | IL 120 (Eastbound) | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Time | U-Turns | Right | Thru | Left | U-Turns | Right | Thru | Left | U-Turns | Right | Thru | Left | U-Turns | Right | Thru | Left |
| 6:00 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 |
| 6:15 AM | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 |
| 6:30 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 |
| 6:45 AM | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 7:00 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 |
| 7:15 AM | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 0 |
| 7:30 AM | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 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 | 0 | 4 | 0 |
| 8:00 AM | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 |
| 8:15 AM | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 0 |
| 8:30 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 8:45 AM | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 0 |
| Totals | 0 | 0 | 0 | 0 | 0 | 0 | 14 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 20 | 0 |

| | S Cedar Lake Rd (Southbound) | | | | IL 120 (Westbound) | | | | S Cedar Lake Rd (Northbound) | | | | IL 120 (Eastbound) | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Time | U-Turns | Right | Thru | Left | U-Turns | Right | Thru | Left | U-Turns | Right | Thru | Left | U-Turns | Right | Thru | Left |
| 3:00 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 3:15 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 |
| 3:30 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 3:45 PM | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 |
| 4:00 PM | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 0 |
| 4:15 PM | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 0 |
| 4:30 PM | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 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 | 0 | 0 | 0 |
| 5:00 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 |
| 5:15 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 |
| 5:30 PM | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 0 |
| 5:45 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 |
| Totals | 0 | 0 | 0 | 0 | 0 | 0 | 14 | 0 | 0 | 0 | 2 | 1 | 0 | 0 | 13 | 0 |

Quality Counts
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www.qualitycounts.net

**Site Codes:** 10940811, 10940812
**Location:** S Cedar Lake Rd -- IL 120
**Date:** 5/1/13

**Other Multi Units**

| | S Cedar Lake Rd (Southbound) | | | | IL 120 (Westbound) | | | | S Cedar Lake Rd (Northbound) | | | | IL 120 (Eastbound) | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Time | U-Turns | Right | Thru | Left | U-Turns | Right | Thru | Left | U-Turns | Right | Thru | Left | U-Turns | Right | Thru | Left |
| 6:00 AM | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 6:15 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 |
| 6:30 AM | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 |
| 6:45 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 |
| 7:00 AM | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 |
| 7:15 AM | 0 | 0 | 0 | 0 | 0 | 0 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 |
| 7:30 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 3 | 0 |
| 7:45 AM | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 |
| 8:00 AM | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 |
| 8:15 AM | 0 | 0 | 0 | 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 | 0 | 0 | 0 |
| 8:45 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Totals | 0 | 0 | 0 | 0 | 0 | 0 | 14 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 12 | 0 |

| | S Cedar Lake Rd (Southbound) | | | | IL 120 (Westbound) | | | | S Cedar Lake Rd (Northbound) | | | | IL 120 (Eastbound) | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Time | U-Turns | Right | Thru | Left | U-Turns | Right | Thru | Left | U-Turns | Right | Thru | Left | U-Turns | Right | Thru | Left |
| 3:00 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 3:15 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 3:30 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 3:45 PM | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 4:00 PM | 0 | 0 | 0 | 0 | 0 | 0 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 0 |
| 4:15 PM | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 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 | 0 | 1 | 0 |
| 4:45 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 5:00 PM | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 |
| 5:15 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 |
| 5:30 PM | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 |
| 5:45 PM | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 |
| Totals | 0 | 1 | 0 | 0 | 0 | 0 | 11 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 9 | 1 |

Quality Counts
TRANSPORTATION DATA COLLECTION SERVICES

7409 SW Tech Center Dr, Ste B150
Tigard, OR 97223
503-620-4242
www.qualitycounts.net

**Site Codes:** 10940813, 10940814
**Location:** IL 134 -- Porter Dr
**Date:** 5/1/13

**Passenger Vehicles**

| | IL 134 (Southbound) | | | | Porter Dr (Westbound) | | | | IL 134 (Northbound) | | | | Porter Dr (Eastbound) | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Time | U-Turns | Right | Thru | Left | U-Turns | Right | Thru | Left | U-Turns | Right | Thru | Left | U-Turns | Right | Thru | Left |
| 6:00 AM | 0 | 0 | 0 | 0 | 0 | 0 | 24 | 15 | 0 | 13 | 0 | 7 | 0 | 8 | 76 | 0 |
| 6:15 AM | 0 | 0 | 0 | 0 | 0 | 0 | 41 | 8 | 0 | 9 | 0 | 6 | 0 | 7 | 94 | 0 |
| 6:30 AM | 0 | 0 | 0 | 0 | 0 | 0 | 49 | 8 | 0 | 10 | 0 | 6 | 0 | 7 | 96 | 0 |
| 6:45 AM | 0 | 0 | 0 | 0 | 0 | 0 | 29 | 9 | 0 | 16 | 0 | 4 | 0 | 11 | 104 | 0 |
| 7:00 AM | 0 | 0 | 0 | 0 | 0 | 0 | 31 | 11 | 0 | 13 | 0 | 5 | 0 | 3 | 106 | 0 |
| 7:15 AM | 0 | 0 | 0 | 0 | 0 | 0 | 56 | 6 | 0 | 10 | 0 | 7 | 0 | 6 | 124 | 0 |
| 7:30 AM | 0 | 0 | 0 | 0 | 0 | 0 | 66 | 2 | 0 | 7 | 0 | 12 | 0 | 14 | 109 | 0 |
| 7:45 AM | 0 | 0 | 0 | 0 | 0 | 0 | 49 | 5 | 0 | 10 | 0 | 12 | 0 | 11 | 105 | 0 |
| 8:00 AM | 0 | 0 | 0 | 0 | 0 | 0 | 60 | 9 | 0 | 19 | 0 | 4 | 0 | 7 | 102 | 0 |
| 8:15 AM | 0 | 0 | 0 | 0 | 0 | 0 | 65 | 10 | 1 | 9 | 0 | 10 | 0 | 7 | 103 | 0 |
| 8:30 AM | 0 | 0 | 0 | 0 | 0 | 0 | 36 | 4 | 0 | 8 | 0 | 11 | 0 | 12 | 123 | 0 |
| 8:45 AM | 0 | 0 | 0 | 0 | 0 | 0 | 49 | 4 | 0 | 7 | 0 | 8 | 0 | 8 | 76 | 0 |
| Totals | 0 | 0 | 0 | 0 | 0 | 0 | 555 | 91 | 1 | 131 | 0 | 92 | 0 | 101 | 1218 | 0 |

| | IL 134 (Southbound) | | | | Porter Dr (Westbound) | | | | IL 134 (Northbound) | | | | Porter Dr (Eastbound) | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Time | U-Turns | Right | Thru | Left | U-Turns | Right | Thru | Left | U-Turns | Right | Thru | Left | U-Turns | Right | Thru | Left |
| 3:00 PM | 0 | 0 | 0 | 0 | 0 | 0 | 72 | 10 | 0 | 4 | 0 | 10 | 0 | 8 | 60 | 0 |
| 3:15 PM | 0 | 0 | 0 | 0 | 0 | 0 | 95 | 5 | 0 | 8 | 0 | 7 | 0 | 10 | 63 | 0 |
| 3:30 PM | 0 | 0 | 0 | 0 | 0 | 0 | 95 | 9 | 0 | 16 | 0 | 11 | 0 | 9 | 79 | 0 |
| 3:45 PM | 0 | 0 | 0 | 0 | 0 | 0 | 107 | 8 | 0 | 15 | 0 | 12 | 0 | 6 | 61 | 0 |
| 4:00 PM | 0 | 0 | 0 | 0 | 0 | 0 | 123 | 11 | 0 | 8 | 0 | 18 | 0 | 7 | 73 | 0 |
| 4:15 PM | 0 | 0 | 0 | 0 | 0 | 0 | 120 | 22 | 0 | 19 | 0 | 18 | 0 | 8 | 86 | 0 |
| 4:30 PM | 0 | 0 | 0 | 0 | 0 | 0 | 116 | 8 | 1 | 17 | 0 | 12 | 0 | 15 | 81 | 0 |
| 4:45 PM | 0 | 0 | 0 | 0 | 0 | 0 | 105 | 12 | 0 | 14 | 0 | 8 | 0 | 13 | 66 | 0 |
| 5:00 PM | 0 | 0 | 0 | 0 | 0 | 0 | 119 | 11 | 0 | 5 | 0 | 21 | 0 | 13 | 81 | 0 |
| 5:15 PM | 0 | 0 | 0 | 0 | 0 | 0 | 118 | 16 | 0 | 7 | 0 | 13 | 0 | 8 | 87 | 0 |
| 5:30 PM | 0 | 0 | 0 | 0 | 0 | 0 | 85 | 12 | 0 | 11 | 0 | 15 | 0 | 17 | 64 | 0 |
| 5:45 PM | 0 | 0 | 0 | 0 | 0 | 0 | 113 | 8 | 0 | 9 | 0 | 13 | 0 | 9 | 75 | 0 |
| Totals | 0 | 0 | 0 | 0 | 0 | 0 | 1268 | 132 | 1 | 133 | 0 | 158 | 0 | 123 | 876 | 0 |

Quality Counts
TRANSPORTATION DATA COLLECTION SERVICES

7409 SW Tech Center Dr, Ste B150
Tigard, OR 97223
503-620-4242
www.qualitycounts.net

**Site Codes:** 10940813, 10940814
**Location:** IL 134 -- Porter Dr
**Date:** 5/1/13

**Single Unit Trucks**

| | IL 134 (Southbound) | | | | Porter Dr (Westbound) | | | | IL 134 (Northbound) | | | | Porter Dr (Eastbound) | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Time | U-Turns | Right | Thru | Left | U-Turns | Right | Thru | Left | U-Turns | Right | Thru | Left | U-Turns | Right | Thru | Left |
| 6:00 AM | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 1 | 0 | 1 | 0 | 2 | 1 | 0 |
| 6:15 AM | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 1 | 0 | 0 |
| 6:30 AM | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 |
| 6:45 AM | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 2 | 0 |
| 7:00 AM | 0 | 0 | 0 | 0 | 0 | 0 | 7 | 1 | 0 | 1 | 0 | 0 | 0 | 1 | 1 | 0 |
| 7:15 AM | 0 | 0 | 0 | 0 | 0 | 0 | 10 | 1 | 0 | 1 | 0 | 1 | 0 | 4 | 3 | 0 |
| 7:30 AM | 0 | 0 | 0 | 0 | 0 | 0 | 6 | 1 | 0 | 2 | 0 | 4 | 0 | 5 | 4 | 0 |
| 7:45 AM | 0 | 0 | 0 | 0 | 0 | 0 | 10 | 0 | 0 | 2 | 0 | 0 | 0 | 2 | 7 | 0 |
| 8:00 AM | 0 | 0 | 0 | 0 | 0 | 0 | 11 | 1 | 0 | 1 | 0 | 2 | 0 | 1 | 12 | 0 |
| 8:15 AM | 0 | 0 | 0 | 0 | 0 | 0 | 6 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 5 | 0 |
| 8:30 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 |
| 8:45 AM | 0 | 0 | 0 | 0 | 0 | 0 | 9 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 4 | 0 |
| Totals | 0 | 0 | 0 | 0 | 0 | 0 | 66 | 7 | 0 | 9 | 0 | 11 | 0 | 17 | 42 | 0 |

| | IL 134 (Southbound) | | | | Porter Dr (Westbound) | | | | IL 134 (Northbound) | | | | Porter Dr (Eastbound) | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Time | U-Turns | Right | Thru | Left | U-Turns | Right | Thru | Left | U-Turns | Right | Thru | Left | U-Turns | Right | Thru | Left |
| 3:00 PM | 0 | 0 | 0 | 0 | 0 | 0 | 9 | 3 | 0 | 1 | 0 | 1 | 0 | 1 | 3 | 0 |
| 3:15 PM | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 1 | 0 | 3 | 0 | 4 | 2 | 0 |
| 3:30 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 2 | 0 | 0 | 0 | 0 | 9 | 0 |
| 3:45 PM | 0 | 0 | 0 | 0 | 0 | 0 | 11 | 1 | 0 | 1 | 0 | 2 | 0 | 3 | 4 | 0 |
| 4:00 PM | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 4 | 0 |
| 4:15 PM | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 2 | 0 | 0 | 0 | 1 | 0 | 1 | 7 | 0 |
| 4:30 PM | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 1 | 0 | 1 | 0 | 2 | 3 | 0 |
| 4:45 PM | 0 | 0 | 0 | 0 | 0 | 0 | 6 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 0 |
| 5:00 PM | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 2 | 0 | 0 | 2 | 0 |
| 5:15 PM | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 |
| 5:30 PM | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 1 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 0 |
| 5:45 PM | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 1 | 0 | 1 | 0 | 0 | 0 | 1 | 6 | 0 |
| Totals | 0 | 0 | 0 | 0 | 0 | 0 | 44 | 11 | 0 | 9 | 0 | 11 | 0 | 12 | 45 | 0 |

Quality Counts
TRANSPORTATION DATA COLLECTION SERVICES

7409 SW Tech Center Dr, Ste B150
Tigard, OR 97223
503-620-4242
www.qualitycounts.net

**Site Codes:** 10940813, 10940814
**Location:** IL 134 -- Porter Dr
**Date:** 5/1/13

**Semi-Trailers**

| | IL 134 (Southbound) | | | | Porter Dr (Westbound) | | | | IL 134 (Northbound) | | | | Porter Dr (Eastbound) | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Time | U-Turns | Right | Thru | Left | U-Turns | Right | Thru | Left | U-Turns | Right | Thru | Left | U-Turns | Right | Thru | Left |
| 6:00 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 6:15 AM | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 |
| 6:30 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 6:45 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 7:00 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 1 | 0 |
| 7:15 AM | 0 | 0 | 0 | 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 | 0 | 1 | 0 |
| 7:45 AM | 0 | 0 | 0 | 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 | 0 | 1 | 0 |
| 8:15 AM | 0 | 0 | 0 | 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 | 0 | 0 | 0 |
| 8:45 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Totals | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 2 | 0 | 1 | 0 | 0 | 0 | 0 | 4 | 0 |

| | IL 134 (Southbound) | | | | Porter Dr (Westbound) | | | | IL 134 (Northbound) | | | | Porter Dr (Eastbound) | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Time | U-Turns | Right | Thru | Left | U-Turns | Right | Thru | Left | U-Turns | Right | Thru | Left | U-Turns | Right | Thru | Left |
| 3:00 PM | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 |
| 3:15 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 |
| 3:30 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 3:45 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 |
| 4:00 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 |
| 4:15 PM | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 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 | 0 | 0 | 0 |
| 4:45 PM | 0 | 0 | 0 | 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 | 0 | 0 | 0 |
| 5:15 PM | 0 | 0 | 0 | 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 | 0 | 0 | 0 |
| 5:45 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Totals | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 0 |

Quality Counts
TRANSPORTATION DATA COLLECTION SERVICES

7409 SW Tech Center Dr, Ste B150
Tigard, OR 97223
503-620-4242
www.qualitycounts.net

**Site Codes:** 10940813, 10940814
**Location:** IL 134 -- Porter Dr
**Date:** 5/1/13

**Other Multi Units**

| Time | IL 134 (Southbound) | | | | Porter Dr (Westbound) | | | | IL 134 (Northbound) | | | | Porter Dr (Eastbound) | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | U-Turns | Right | Thru | Left | U-Turns | Right | Thru | Left | U-Turns | Right | Thru | Left | U-Turns | Right | Thru | Left |
| 6:00 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 6:15 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 6:30 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 6:45 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 7:00 AM | 0 | 0 | 0 | 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 | 0 | 0 | 0 |
| 7:30 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 |
| 7:45 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 8:00 AM | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 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 | 0 | 0 | 0 |
| 8:30 AM | 0 | 0 | 0 | 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 | 0 | 0 | 0 |
| Totals | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 |

| Time | IL 134 (Southbound) | | | | Porter Dr (Westbound) | | | | IL 134 (Northbound) | | | | Porter Dr (Eastbound) | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | U-Turns | Right | Thru | Left | U-Turns | Right | Thru | Left | U-Turns | Right | Thru | Left | U-Turns | Right | Thru | Left |
| 3:00 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 3:15 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 3:30 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 3:45 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 4:00 PM | 0 | 0 | 0 | 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 | 0 | 0 | 0 |
| 4:30 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 4:45 PM | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 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 | 0 | 0 | 0 |
| 5:15 PM | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 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 | 0 | 0 | 0 |
| 5:45 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Totals | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

Round Lake Park, IL
Porter Dr and Timber Creek Dr
Tuesday April 30, 2013

Weather: Sunny and Warm
Semi Trailers Only

05/02/13
11:23:42

TURNS/TEAPAC[Ver 3.61.12] - 15-Minute Counts: All Vehicles - by Mvmt

Intersection # 3 porter/timber/semi

| Begin | N-Approach | | | E-Approach | | | S-Approach | | | W-Approach | | | Int |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Time | RT | TH | LT | RT | TH | LT | RT | TH | LT | RT | TH | LT | Total |
| 600 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 615 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 630 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| 645 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 700 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 715 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 730 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 745 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 800 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 815 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 830 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 845 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1500 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1515 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1530 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 |
| 1545 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1600 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1615 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1630 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1645 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1700 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1715 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1730 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1745 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Total | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 2 |

Round Lake Park, IL
Porter Dr and Timber Creek Dr
Tuesday April 30, 2013

Weather: Sunny and Warm
Single Unit Trucks Only

05/02/13
11:21:49

TURNS/TEAPAC[Ver 3.61.12] - 15-Minute Counts: All Vehicles - by Mvmt

Intersection # 2 porter/timber/single

| Begin | N-Approach | | | E-Approach | | | S-Approach | | | W-Approach | | | Int |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Time | RT | TH | LT | RT | TH | LT | RT | TH | LT | RT | TH | LT | Total |
| 600 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 1 | 1 | 0 | 4 |
| 615 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 |
| 630 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 2 | 0 | 0 | 3 |
| 645 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 3 | 0 | 4 |
| 700 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 3 | 2 | 0 | 7 |
| 715 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 2 |
| 730 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 3 |
| 745 | 0 | 0 | 0 | 0 | 2 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 3 |
| 800 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 2 | 0 | 1 | 0 | 4 |
| 815 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 2 |
| 830 | 0 | 0 | 0 | 0 | 3 | 1 | 2 | 0 | 0 | 2 | 1 | 0 | 9 |
| 845 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 0 | 1 | 0 | 3 | 0 | 7 |
| 1500 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 1 | 0 | 0 | 3 |
| 1515 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 2 | 1 | 0 | 5 |
| 1530 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 2 | 1 | 0 | 0 | 5 |
| 1545 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 1 | 0 | 0 | 3 |
| 1600 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 1 | 2 | 0 | 0 | 4 |
| 1615 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 1 |
| 1630 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 3 | 1 | 0 | 0 | 6 |
| 1645 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 2 |
| 1700 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 4 | 0 | 0 | 5 |
| 1715 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 2 |
| 1730 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 1 | 0 | 0 | 3 |
| 1745 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 1 |
| Total | 0 | 0 | 0 | 0 | 14 | 6 | 10 | 0 | 17 | 25 | 17 | 0 | 89 |

Round Lake Park, IL — Weather: Sunny and Warm — 05/02/13
Porter Dr and Timber Creek Dr — Passenger Vehicles Only — 11:18:16
Tuesday April 30, 2013

TURNS/TEAPAC[Ver 3.61.12] - 15-Minute Counts: All Vehicles - by Mvmt

Intersection # 1 porter/timber/cars

| Begin | N-Approach | | | E-Approach | | | S-Approach | | | W-Approach | | | Int |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Time | RT | TH | LT | RT | TH | LT | RT | TH | LT | RT | TH | LT | Total |
| 600 | 0 | 0 | 0 | 0 | 7 | 1 | 12 | 0 | 10 | 6 | 16 | 0 | 52 |
| 615 | 0 | 0 | 0 | 0 | 0 | 2 | 4 | 0 | 20 | 9 | 9 | 0 | 44 |
| 630 | 0 | 0 | 0 | 0 | 2 | 1 | 9 | 0 | 13 | 5 | 9 | 0 | 39 |
| 645 | 0 | 0 | 0 | 0 | 1 | 2 | 4 | 0 | 15 | 3 | 12 | 0 | 37 |
| 700 | 0 | 0 | 0 | 0 | 7 | 4 | 2 | 0 | 11 | 3 | 10 | 0 | 37 |
| 715 | 0 | 0 | 0 | 0 | 6 | 2 | 2 | 0 | 13 | 7 | 9 | 0 | 39 |
| 730 | 0 | 0 | 0 | 0 | 5 | 1 | 2 | 0 | 16 | 6 | 10 | 0 | 40 |
| 745 | 0 | 0 | 0 | 0 | 3 | 4 | 3 | 0 | 16 | 8 | 10 | 0 | 44 |
| 800 | 0 | 0 | 0 | 0 | 7 | 0 | 2 | 0 | 13 | 9 | 10 | 0 | 41 |
| 815 | 0 | 0 | 0 | 0 | 3 | 5 | 4 | 0 | 9 | 4 | 8 | 0 | 33 |
| 830 | 0 | 0 | 0 | 0 | 13 | 0 | 1 | 0 | 19 | 8 | 3 | 0 | 44 |
| 845 | 0 | 0 | 0 | 0 | 7 | 0 | 1 | 0 | 10 | 5 | 5 | 0 | 28 |
| 1500 | 0 | 0 | 0 | 0 | 14 | 6 | 4 | 0 | 12 | 12 | 10 | 0 | 58 |
| 1515 | 0 | 0 | 0 | 0 | 15 | 2 | 2 | 0 | 13 | 9 | 8 | 0 | 49 |
| 1530 | 0 | 0 | 0 | 0 | 16 | 5 | 0 | 0 | 19 | 14 | 3 | 0 | 57 |
| 1545 | 0 | 0 | 0 | 0 | 18 | 8 | 2 | 0 | 17 | 17 | 4 | 0 | 66 |
| 1600 | 0 | 0 | 0 | 0 | 20 | 7 | 2 | 0 | 17 | 29 | 4 | 0 | 79 |
| 1615 | 0 | 0 | 0 | 0 | 16 | 9 | 2 | 0 | 8 | 21 | 4 | 0 | 60 |
| 1630 | 0 | 0 | 0 | 0 | 12 | 6 | 0 | 0 | 18 | 19 | 3 | 0 | 58 |
| 1645 | 0 | 0 | 0 | 0 | 8 | 4 | 2 | 0 | 11 | 18 | 1 | 0 | 44 |
| 1700 | 0 | 0 | 0 | 0 | 12 | 3 | 2 | 0 | 16 | 11 | 1 | 0 | 45 |
| 1715 | 0 | 0 | 0 | 0 | 5 | 6 | 0 | 0 | 12 | 17 | 4 | 0 | 44 |
| 1730 | 0 | 0 | 0 | 0 | 7 | 8 | 0 | 0 | 24 | 17 | 2 | 0 | 58 |
| 1745 | 0 | 0 | 0 | 0 | 12 | 4 | 1 | 0 | 11 | 26 | 7 | 0 | 61 |
| Total | 0 | 0 | 0 | 0 | 216 | 90 | 63 | 0 | 343 | 283 | 162 | 0 | 1157 |

Round Lake Park, IL Weather: Sunny and Warm 05/16/13
Porter Dr and Groot North Driveway 12:38:13
Wednesday May 15, 2013 Semi Trailers Only

TURNS/TEAPAC[Ver 3.61.12] - 15-Minute Counts: All Vehicles - by Mvmt

Intersection # 3 porter/groot/north/semi

| Begin | N-Approach | | | E-Approach | | | S-Approach | | | W-Approach | | | Int |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Time | RT | TH | LT | RT | TH | LT | RT | TH | LT | RT | TH | LT | Total |
| 600 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 615 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 630 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 645 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 700 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 715 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 730 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 745 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 800 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 815 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 830 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 1 |
| 845 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1500 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1515 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1530 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1545 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1600 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1615 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1630 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1645 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1700 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1715 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1730 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1745 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Total | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 1 |

Round Lake Park, IL Weather: Sunny and Warm 05/16/13
Porter Dr and Groot North Driveway 12:36:31
Wednesday May 15, 2013 Single Unit Trucks Only

TURNS/TEAPAC[Ver 3.61.12] - 15-Minute Counts: All Vehicles - by Mvmt

Intersection # 2 porter/groot/single

| Begin | N-Approach | | | E-Approach | | | S-Approach | | | W-Approach | | | Int |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Time | RT | TH | LT | RT | TH | LT | RT | TH | LT | RT | TH | LT | Total |
| 600 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| 615 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 2 |
| 630 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| 645 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 |
| 700 | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 4 |
| 715 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5 | 0 | 0 | 0 | 0 | 5 |
| 730 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 1 |
| 745 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 800 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| 815 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 |
| 830 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 2 |
| 845 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 1 |
| 1500 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 2 |
| 1515 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| 1530 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1545 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 1 |
| 1600 | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 4 |
| 1615 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 2 |
| 1630 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 1 |
| 1645 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1700 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1715 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| 1730 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1745 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 1 |
| Total | 0 | 18 | 0 | 0 | 0 | 0 | 0 | 17 | 0 | 0 | 0 | 0 | 35 |

Round Lake Park, IL Weather: Sunny and Warm 05/16/13
Porter Dr and Groot North Driveway 12:34:30
Wednesday May 15, 2013 Passenger Vehicles Only

TURNS/TEAPAC[Ver 3.61.12] - 15-Minute Counts: All Vehicles - by Mvmt

Intersection # 1 porter/grootnorth/cars

| Begin | N-Approach | | | E-Approach | | | S-Approach | | | W-Approach | | | Int |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Time | RT | TH | LT | RT | TH | LT | RT | TH | LT | RT | TH | LT | Total |
| 600 | 0 | 21 | 0 | 0 | 0 | 0 | 0 | 5 | 0 | 0 | 0 | 0 | 26 |
| 615 | 0 | 24 | 0 | 0 | 0 | 0 | 0 | 6 | 0 | 0 | 0 | 0 | 30 |
| 630 | 0 | 23 | 0 | 0 | 0 | 0 | 0 | 7 | 0 | 0 | 0 | 0 | 30 |
| 645 | 0 | 10 | 0 | 0 | 0 | 0 | 0 | 12 | 0 | 0 | 0 | 0 | 22 |
| 700 | 0 | 6 | 0 | 0 | 0 | 0 | 0 | 5 | 0 | 0 | 0 | 0 | 11 |
| 715 | 0 | 9 | 0 | 0 | 0 | 0 | 0 | 6 | 3 | 0 | 0 | 0 | 18 |
| 730 | 1 | 11 | 0 | 0 | 0 | 0 | 0 | 13 | 1 | 0 | 0 | 0 | 26 |
| 745 | 1 | 10 | 0 | 0 | 0 | 0 | 0 | 20 | 1 | 0 | 0 | 0 | 32 |
| 800 | 1 | 9 | 0 | 0 | 0 | 0 | 0 | 10 | 0 | 0 | 0 | 1 | 21 |
| 815 | 0 | 6 | 0 | 0 | 0 | 0 | 0 | 13 | 0 | 1 | 0 | 0 | 20 |
| 830 | 0 | 6 | 0 | 0 | 0 | 0 | 0 | 8 | 0 | 0 | 0 | 0 | 14 |
| 845 | 0 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 |
| 1500 | 0 | 5 | 0 | 0 | 0 | 0 | 0 | 14 | 0 | 0 | 0 | 2 | 21 |
| 1515 | 1 | 6 | 0 | 0 | 0 | 0 | 0 | 7 | 0 | 0 | 0 | 3 | 17 |
| 1530 | 0 | 9 | 0 | 0 | 0 | 0 | 0 | 23 | 0 | 0 | 0 | 3 | 35 |
| 1545 | 0 | 8 | 0 | 0 | 0 | 0 | 0 | 17 | 0 | 0 | 0 | 0 | 25 |
| 1600 | 0 | 8 | 0 | 0 | 0 | 0 | 0 | 15 | 0 | 0 | 0 | 2 | 25 |
| 1615 | 0 | 6 | 0 | 0 | 0 | 0 | 0 | 20 | 0 | 0 | 0 | 2 | 28 |
| 1630 | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 19 | 0 | 0 | 0 | 2 | 24 |
| 1645 | 1 | 8 | 0 | 0 | 0 | 0 | 0 | 12 | 0 | 0 | 0 | 4 | 25 |
| 1700 | 0 | 10 | 0 | 0 | 0 | 0 | 0 | 10 | 0 | 0 | 0 | 0 | 20 |
| 1715 | 0 | 6 | 0 | 0 | 0 | 0 | 0 | 10 | 0 | 0 | 0 | 2 | 18 |
| 1730 | 0 | 6 | 0 | 0 | 0 | 0 | 0 | 10 | 0 | 0 | 0 | 1 | 17 |
| 1745 | 0 | 9 | 0 | 0 | 0 | 0 | 0 | 13 | 0 | 1 | 0 | 0 | 23 |
| Total | 5 | 223 | 0 | 0 | 0 | 0 | 0 | 275 | 5 | 2 | 0 | 22 | 532 |

Round Lake Park, IL Weather: Sunny and Warm 05/16/13
Porter Dr and Groot South Driveway 12:39:47
Wednesday May 15, 2013 Semi Trailers Only

TURNS/TEAPAC[Ver 3.61.12] - 15-Minute Counts: All Vehicles - by Mvmt

Intersection # 4 porter/groot/south/semi

| Begin | N-Approach | | | E-Approach | | | S-Approach | | | W-Approach | | | Int |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Time | RT | TH | LT | RT | TH | LT | RT | TH | LT | RT | TH | LT | Total |
| 600 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 615 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 630 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 645 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 700 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 715 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 730 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 745 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 800 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 815 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 830 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 845 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1500 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1515 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1530 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1545 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1600 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1615 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1630 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1645 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1700 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1715 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1730 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1745 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Total | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

Round Lake Park, IL Weather: Sunny and Warm 05/16/13
Porter Dr and Groot South Driveway 12:43:41
Wednesday May 15, 2013 Single Unit Trucks Only

TURNS/TEAPAC[Ver 3.61.12] - 15-Minute Counts: All Vehicles - by Mvmt

Intersection # 6 porter/groot/south/single

| Begin | N-Approach | | | E-Approach | | | S-Approach | | | W-Approach | | | Int |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Time | RT | TH | LT | RT | TH | LT | RT | TH | LT | RT | TH | LT | Total |
| 600 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 2 |
| 615 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 0 | 0 | 3 |
| 630 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 2 |
| 645 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 1 |
| 700 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 715 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 730 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 745 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 800 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 815 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 1 |
| 830 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 1 |
| 845 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 2 |
| 1500 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 1 | 0 | 0 | 4 |
| 1515 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 7 | 0 | 0 | 0 | 7 |
| 1530 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 6 | 0 | 0 | 0 | 6 |
| 1545 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 6 | 0 | 0 | 0 | 6 |
| 1600 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 6 | 0 | 0 | 1 | 9 |
| 1615 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 0 | 0 | 0 | 4 |
| 1630 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 |
| 1645 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 2 |
| 1700 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 1 |
| 1715 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 1 |
| 1730 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 1 |
| 1745 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Total | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 38 | 12 | 0 | 2 | 54 |

Round Lake Park, IL Weather: Sunny and Warm 05/16/13
Porter Dr and Groot South Driveway 12:41:25
Wednesday May 15, 2013 Passenger Vehicles Only

TURNS/TEAPAC[Ver 3.61.12] - 15-Minute Counts: All Vehicles - by Mvmt

Intersection # 5 porter/groot/south/cars

| Begin | N-Approach | | | E-Approach | | | S-Approach | | | W-Approach | | | Int |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Time | RT | TH | LT | RT | TH | LT | RT | TH | LT | RT | TH | LT | Total |
| 600 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 615 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 630 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 645 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 700 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 715 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 730 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 745 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 800 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 815 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 830 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 845 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 1 |
| 1500 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 0 | 0 | 4 |
| 1515 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 2 |
| 1530 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 0 | 0 | 4 |
| 1545 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 2 |
| 1600 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 7 | 0 | 2 | 9 |
| 1615 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 1 | 0 | 3 | 7 |
| 1630 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 2 | 4 |
| 1645 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 1 |
| 1700 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 0 | 0 | 3 |
| 1715 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1730 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1745 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 2 |
| Total | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 27 | 0 | 8 | 39 |

**LOCATION:** Porter Rd south of Groot facility
**SPECIFIC LOCATION:** 0 ft from
**CITY/STATE:** Round Lake, IL

**QC JOB #:** 10940816
**DIRECTION:** NB
**DATE:** Apr 30 2013

| Start Time | Motor-cycles | Cars & Trailer | 2 Axle Long | Buses | 2 Axle 6 Tire | 3 Axle Single | 4 Axle Single | <5 Axle Double | 5 Axle Double | >6 Axle Double | <6 Axle Multi | 6 Axle Multi | >6 Axle Multi | Not Classified | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 12:00 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 12:15 AM | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| 12:30 AM | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| 12:45 AM | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| 1:00 AM | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 |
| 1:15 AM | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 |
| 1:30 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1:45 AM | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| 2:00 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 2:15 AM | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| 2:30 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 2:45 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 3:00 AM | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| 3:15 AM | 0 | 2 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 |
| 3:30 AM | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| 3:45 AM | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| 4:00 AM | 0 | 2 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 |
| 4:15 AM | 0 | 5 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 7 |
| 4:30 AM | 0 | 6 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 7 |
| 4:45 AM | 0 | 3 | 2 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 7 |
| 5:00 AM | 0 | 1 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5 |
| 5:15 AM | 0 | 3 | 5 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 11 |
| 5:30 AM | 0 | 1 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 |
| 5:45 AM | 0 | 6 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 6 |
| Day Total | | | | | | | | | | | | | | | |
| Percent | | | | | | | | | | | | | | | |
| AM Peak Volume | | | | | | | | | | | | | | | |
| PM Peak Volume | | | | | | | | | | | | | | | |

*Comments:*

Quality Counts
TRANSPORTATION DATA COLLECTION

**LOCATION:** Porter Rd south of Groot facility
**SPECIFIC LOCATION:** 0 ft from
**CITY/STATE:** Round Lake, IL

**QC JOB #:** 10940816
**DIRECTION:** NB
**DATE:** Apr 30 2013

| Start Time | Motor-cycles | Cars & Trailer | 2 Axle Long | Buses | 2 Axle 6 Tire | 3 Axle Single | 4 Axle Single | <5 Axle Double | 5 Axle Double | >6 Axle Double | <6 Axle Multi | 6 Axle Multi | >6 Axle Multi | Not Classified | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 6:00 AM | 0 | 6 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 8 |
| 6:15 AM | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 3 |
| 6:30 AM | 0 | 3 | 1 | 0 | 2 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 7 |
| 6:45 AM | 0 | 3 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 |
| 7:00 AM | 1 | 4 | 4 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 10 |
| 7:15 AM | 1 | 5 | 4 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 11 |
| 7:30 AM | 0 | 3 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 |
| 7:45 AM | 0 | 5 | 3 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 10 |
| 8:00 AM | 1 | 2 | 3 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 7 |
| 8:15 AM | 0 | 6 | 3 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 12 |
| 8:30 AM | 0 | 6 | 7 | 0 | 3 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 17 |
| 8:45 AM | 0 | 5 | 2 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 10 |
| 9:00 AM | 0 | 3 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5 |
| 9:15 AM | 0 | 4 | 2 | 0 | 1 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 9 |
| 9:30 AM | 0 | 1 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 6 |
| 9:45 AM | 1 | 3 | 2 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 9 |
| 10:00 AM | 0 | 1 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 |
| 10:15 AM | 0 | 4 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 7 |
| 10:30 AM | 0 | 3 | 1 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 6 |
| 10:45 AM | 0 | 4 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 7 |
| 11:00 AM | 0 | 3 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5 |
| 11:15 AM | 0 | 4 | 4 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 10 |
| 11:30 AM | 0 | 6 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 7 |
| 11:45 AM | 1 | 4 | 2 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 9 |
| Day Total | | | | | | | | | | | | | | | |
| Percent | | | | | | | | | | | | | | | |
| AM Peak Volume | | | | | | | | | | | | | | | |
| PM Peak Volume | | | | | | | | | | | | | | | |

*Comments:*

Quality Counts
TRANSPORTATION DATA COLLECTION

**LOCATION:** Porter Rd south of Groot facility
**SPECIFIC LOCATION:** 0 ft from
**CITY/STATE:** Round Lake, IL

**QC JOB #:** 10940816
**DIRECTION:** NB
**DATE:** Apr 30 2013

| Start Time | Motor-cycles | Cars & Trailer | 2 Axle Long | Buses | 2 Axle 6 Tire | 3 Axle Single | 4 Axle Single | <5 Axle Double | 5 Axle Double | >6 Axle Double | <6 Axle Multi | 6 Axle Multi | >6 Axle Multi | Not Classified | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 12:00 PM | 0 | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 |
| 12:15 PM | 0 | 0 | 1 | 0 | 2 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 |
| 12:30 PM | 0 | 3 | 2 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 6 |
| 12:45 PM | 1 | 3 | 2 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 8 |
| 1:00 PM | 0 | 5 | 0 | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 8 |
| 1:15 PM | 0 | 3 | 4 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 9 |
| 1:30 PM | 0 | 3 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5 |
| 1:45 PM | 0 | 6 | 2 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 9 |
| 2:00 PM | 0 | 7 | 2 | 0 | 3 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 16 |
| 2:15 PM | 0 | 3 | 4 | 0 | 1 | 3 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 12 |
| 2:30 PM | 0 | 6 | 4 | 0 | 2 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 17 |
| 2:45 PM | 0 | 7 | 10 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 18 |
| 3:00 PM | 0 | 9 | 5 | 0 | 3 | 7 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 25 |
| 3:15 PM | 0 | 4 | 4 | 0 | 0 | 8 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 16 |
| 3:30 PM | 0 | 10 | 6 | 0 | 2 | 10 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 28 |
| 3:45 PM | 0 | 16 | 4 | 0 | 1 | 7 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 28 |
| 4:00 PM | 1 | 14 | 7 | 1 | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 26 |
| 4:15 PM | 0 | 8 | 7 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 17 |
| 4:30 PM | 0 | 10 | 5 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 17 |
| 4:45 PM | 1 | 6 | 3 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 11 |
| 5:00 PM | 1 | 6 | 3 | 0 | 0 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 14 |
| 5:15 PM | 0 | 9 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 10 |
| 5:30 PM | 0 | 7 | 6 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 13 |
| 5:45 PM | 1 | 9 | 2 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 13 |
| Day Total | | | | | | | | | | | | | | | |
| Percent | | | | | | | | | | | | | | | |
| AM Peak Volume | | | | | | | | | | | | | | | |
| PM Peak Volume | | | | | | | | | | | | | | | |

*Comments:*

Quality Counts
TRANSPORTATION DATA COLLECTION

**LOCATION:** Porter Rd south of Groot facility
**SPECIFIC LOCATION:** 0 ft from
**CITY/STATE:** Round Lake, IL

**QC JOB #:** 10940816
**DIRECTION:** NB
**DATE:** Apr 30 2013

| Start Time | Motor-cycles | Cars & Trailer | 2 Axle Long | Buses | 2 Axle 6 Tire | 3 Axle Single | 4 Axle Single | <5 Axle Double | 5 Axle Double | >6 Axle Double | <6 Axle Multi | 6 Axle Multi | >6 Axle Multi | Not Classified | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 6:00 PM | 1 | 7 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 10 |
| 6:15 PM | 1 | 6 | 6 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 14 |
| 6:30 PM | 0 | 8 | 2 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 11 |
| 6:45 PM | 0 | 5 | 2 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 8 |
| 7:00 PM | 0 | 7 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 11 |
| 7:15 PM | 0 | 4 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5 |
| 7:30 PM | 0 | 5 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 8 |
| 7:45 PM | 0 | 3 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5 |
| 8:00 PM | 0 | 4 | 2 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 7 |
| 8:15 PM | 0 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 |
| 8:30 PM | 0 | 4 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 7 |
| 8:45 PM | 0 | 11 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 14 |
| 9:00 PM | 0 | 2 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 |
| 9:15 PM | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 |
| 9:30 PM | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| 9:45 PM | 0 | 2 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 |
| 10:00 PM | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 |
| 10:15 PM | 0 | 6 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 8 |
| 10:30 PM | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 |
| 10:45 PM | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 |
| 11:00 PM | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| 11:15 PM | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 |
| 11:30 PM | 0 | 2 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 |
| 11:45 PM | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 4 |
| Day Total | 13 | 377 | 195 | 4 | 47 | 73 | 0 | 1 | 2 | 0 | 0 | 0 | 0 | 12 | 724 |
| Percent | 1.8% | 52.1% | 26.9% | 0.6% | 6.5% | 10.1% | 0.0% | 0.1% | 0.3% | 0.0% | 0.0% | 0.0% | 0.0% | 1.7% | |
| ADT 724 | | | | | | | | | | | | | | | |
| AM Peak Volume | 7:00 AM 1 | 4:30 AM 6 | 8:30 AM 7 | 7:15 AM 1 | 8:30 AM 3 | 10:30 AM 2 | | | 9:15 AM 1 | | | | | 8:15 AM 2 | 8:30 AM 17 |
| PM Peak Volume | 12:45 PM 1 | 3:45 PM 16 | 2:45 PM 10 | 4:00 PM 1 | 1:00 PM 3 | 3:30 PM 10 | | 2:15 PM 1 | 4:30 PM 1 | | | | | 3:00 PM 1 | 3:30 PM 28 |

*Comments:*

Quality Counts
TRANSPORTATION DATA COLLECTION

**LOCATION:** Porter Rd south of Groot facility
**SPECIFIC LOCATION:** 0 ft from
**CITY/STATE:** Round Lake, IL

**QC JOB #:** 10940816
**DIRECTION:** NB
**DATE:** May 01 2013

| Start Time | Motor-cycles | Cars & Trailer | 2 Axle Long | Buses | 2 Axle 6 Tire | 3 Axle Single | 4 Axle Single | <5 Axle Double | 5 Axle Double | >6 Axle Double | <6 Axle Multi | 6 Axle Multi | >6 Axle Multi | Not Classified | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 12:00 AM | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| 12:15 AM | 0 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 |
| 12:30 AM | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 |
| 12:45 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1:00 AM | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 |
| 1:15 AM | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 |
| 1:30 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1:45 AM | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| 2:00 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 2:15 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 2:30 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 2:45 AM | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 |
| 3:00 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 3:15 AM | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 |
| 3:30 AM | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 |
| 3:45 AM | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 |
| 4:00 AM | 0 | 1 | 2 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 |
| 4:15 AM | 0 | 5 | 2 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 8 |
| 4:30 AM | 0 | 6 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 7 |
| 4:45 AM | 0 | 1 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 |
| 5:00 AM | 0 | 5 | 6 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 11 |
| 5:15 AM | 0 | 3 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 7 |
| 5:30 AM | 0 | 1 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 |
| 5:45 AM | 0 | 2 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 |
| Day Total | | | | | | | | | | | | | | | |
| Percent | | | | | | | | | | | | | | | |
| AM Peak Volume | | | | | | | | | | | | | | | |
| PM Peak Volume | | | | | | | | | | | | | | | |

*Comments:*

Quality Counts
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| Start Time | Motor-cycles | Cars & Trailer | 2 Axle Long | Buses | 2 Axle 6 Tire | 3 Axle Single | 4 Axle Single | <5 Axle Double | 5 Axle Double | >6 Axle Double | <6 Axle Multi | 6 Axle Multi | >6 Axle Multi | Not Classified | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 6:00 AM | 0 | 2 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 5 |
| 6:15 AM | 0 | 2 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 |
| 6:30 AM | 0 | 5 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 9 |
| 6:45 AM | 0 | 7 | 3 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 12 |
| 7:00 AM | 0 | 4 | 3 | 0 | 1 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 10 |
| 7:15 AM | 0 | 7 | 1 | 1 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 12 |
| 7:30 AM | 0 | 6 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 8 |
| 7:45 AM | 0 | 4 | 2 | 0 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 11 |
| 8:00 AM | 0 | 6 | 8 | 0 | 2 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 17 |
| 8:15 AM | 0 | 4 | 3 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 9 |
| 8:30 AM | 0 | 2 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 |
| 8:45 AM | 0 | 3 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 |
| 9:00 AM | 0 | 5 | 1 | 0 | 2 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 10 |
| 9:15 AM | 0 | 4 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 6 |
| 9:30 AM | 0 | 2 | 2 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5 |
| 9:45 AM | 1 | 3 | 2 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 7 |
| 10:00 AM | 0 | 1 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 |
| 10:15 AM | 1 | 5 | 2 | 0 | 1 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 12 |
| 10:30 AM | 0 | 2 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 |
| 10:45 AM | 0 | 3 | 3 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 7 |
| 11:00 AM | 0 | 1 | 1 | 0 | 1 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5 |
| 11:15 AM | 0 | 6 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 10 |
| 11:30 AM | 0 | 7 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 9 |
| 11:45 AM | 0 | 4 | 2 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 8 |
| Day Total | | | | | | | | | | | | | | | |
| Percent | | | | | | | | | | | | | | | |
| AM Peak Volume | | | | | | | | | | | | | | | |
| PM Peak Volume | | | | | | | | | | | | | | | |

*Comments:*

Quality Counts
TRANSPORTATION DATA COLLECTION

**LOCATION:** Porter Rd south of Groot facility
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| Start Time | Motor-cycles | Cars & Trailer | 2 Axle Long | Buses | 2 Axle 6 Tire | 3 Axle Single | 4 Axle Single | <5 Axle Double | 5 Axle Double | >6 Axle Double | <6 Axle Multi | 6 Axle Multi | >6 Axle Multi | Not Classified | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 12:00 PM | 0 | 2 | 6 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 9 |
| 12:15 PM | 0 | 5 | 2 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 8 |
| 12:30 PM | 0 | 5 | 1 | 0 | 2 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 11 |
| 12:45 PM | 0 | 2 | 5 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 9 |
| 1:00 PM | 0 | 7 | 2 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 10 |
| 1:15 PM | 0 | 5 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 8 |
| 1:30 PM | 0 | 4 | 1 | 1 | 1 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 8 |
| 1:45 PM | 0 | 4 | 5 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 11 |
| 2:00 PM | 1 | 1 | 2 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 6 |
| 2:15 PM | 0 | 3 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 6 |
| 2:30 PM | 0 | 6 | 2 | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 11 |
| 2:45 PM | 0 | 3 | 8 | 0 | 1 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 16 |
| 3:00 PM | 0 | 7 | 4 | 0 | 1 | 6 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 18 |
| 3:15 PM | 0 | 7 | 4 | 0 | 1 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 18 |
| 3:30 PM | 0 | 9 | 6 | 0 | 2 | 9 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 27 |
| 3:45 PM | 0 | 14 | 5 | 1 | 2 | 7 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 29 |
| 4:00 PM | 1 | 7 | 6 | 0 | 2 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 17 |
| 4:15 PM | 1 | 14 | 6 | 0 | 2 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 26 |
| 4:30 PM | 0 | 11 | 1 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 14 |
| 4:45 PM | 0 | 13 | 2 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 17 |
| 5:00 PM | 1 | 2 | 3 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 8 |
| 5:15 PM | 1 | 10 | 4 | 1 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 18 |
| 5:30 PM | 0 | 9 | 4 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 14 |
| 5:45 PM | 0 | 7 | 1 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 9 |
| Day Total | | | | | | | | | | | | | | | |
| Percent | | | | | | | | | | | | | | | |
| AM Peak Volume | | | | | | | | | | | | | | | |
| PM Peak Volume | | | | | | | | | | | | | | | |

*Comments:*

Quality Counts
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| Start Time | Motor-cycles | Cars & Trailer | 2 Axle Long | Buses | 2 Axle 6 Tire | 3 Axle Single | 4 Axle Single | <5 Axle Double | 5 Axle Double | >6 Axle Double | <6 Axle Multi | 6 Axle Multi | >6 Axle Multi | Not Classified | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 6:00 PM | 1 | 6 | 2 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 10 |
| 6:15 PM | 0 | 15 | 1 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 18 |
| 6:30 PM | 0 | 13 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 14 |
| 6:45 PM | 0 | 9 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 11 |
| 7:00 PM | 1 | 9 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 11 |
| 7:15 PM | 0 | 8 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 9 |
| 7:30 PM | 0 | 3 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 9 |
| 7:45 PM | 0 | 6 | 3 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 11 |
| 8:00 PM | 0 | 6 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 7 |
| 8:15 PM | 0 | 3 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5 |
| 8:30 PM | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| 8:45 PM | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 |
| 9:00 PM | 0 | 5 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 7 |
| 9:15 PM | 0 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5 |
| 9:30 PM | 0 | 3 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 |
| 9:45 PM | 0 | 3 | 1 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 6 |
| 10:00 PM | 0 | 5 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 6 |
| 10:15 PM | 0 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5 |
| 10:30 PM | 0 | 4 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5 |
| 10:45 PM | 0 | 2 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 |
| 11:00 PM | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 |
| 11:15 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 11:30 PM | 0 | 2 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 |
| 11:45 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Day Total | 9 | 408 | 187 | 7 | 56 | 61 | 0 | 2 | 3 | 2 | 0 | 0 | 0 | 6 | 741 |
| Percent | 1.2% | 55.1% | 25.2% | 0.9% | 7.6% | 8.2% | 0.0% | 0.3% | 0.4% | 0.3% | 0.0% | 0.0% | 0.0% | 0.8% | |
| ADT 741 | | | | | | | | | | | | | | | |
| AM Peak Volume | 9:45 AM 1 | 6:45 AM 7 | 8:00 AM 8 | 7:15 AM 1 | 7:45 AM 5 | 10:15 AM 3 | | | 6:45 AM 1 | 6:30 AM 2 | | | | 4:30 AM 1 | 8:00 AM 17 |
| PM Peak Volume | 2:00 PM 1 | 6:15 PM 15 | 2:45 PM 8 | 1:30 PM 1 | 2:30 PM 3 | 3:30 PM 9 | | 5:45 PM 1 | 1:30 PM 1 | | | | | 3:15 PM 1 | 3:45 PM 29 |

*Comments:*

Quality Counts
TRANSPORTATION DATA COLLECTION

**LOCATION:** Porter Rd south of Groot facility
**SPECIFIC LOCATION:** 0 ft from
**CITY/STATE:** Round Lake, IL

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| Start Time | Motor-cycles | Cars & Trailer | 2 Axle Long | Buses | 2 Axle 6 Tire | 3 Axle Single | 4 Axle Single | <5 Axle Double | 5 Axle Double | >6 Axle Double | <6 Axle Multi | 6 Axle Multi | >6 Axle Multi | Not Classified | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 12:00 AM | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| 12:15 AM | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 |
| 12:30 AM | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 |
| 12:45 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1:00 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1:15 AM | 0 | 4 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5 |
| 1:30 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1:45 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 2:00 AM | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| 2:15 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 2:30 AM | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| 2:45 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 3:00 AM | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| 3:15 AM | 0 | 3 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 |
| 3:30 AM | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| 3:45 AM | 0 | 2 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 |
| 4:00 AM | 0 | 2 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 6 |
| 4:15 AM | 0 | 8 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 9 |
| 4:30 AM | 0 | 6 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 10 |
| 4:45 AM | 0 | 1 | 5 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 9 |
| 5:00 AM | 0 | 5 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 9 |
| 5:15 AM | 0 | 4 | 2 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 9 |
| 5:30 AM | 0 | 1 | 2 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 |
| 5:45 AM | 0 | 2 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 |
| Day Total | | | | | | | | | | | | | | | |
| Percent | | | | | | | | | | | | | | | |
| AM Peak Volume | | | | | | | | | | | | | | | |
| PM Peak Volume | | | | | | | | | | | | | | | |

*Comments:*

Quality Counts
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|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 6:00 AM | 0 | 3 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 |
| 6:15 AM | 0 | 1 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 |
| 6:30 AM | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 |
| 6:45 AM | 0 | 5 | 1 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 8 |
| 7:00 AM | 0 | 5 | 1 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 8 |
| 7:15 AM | 0 | 5 | 2 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 8 |
| 7:30 AM | 0 | 5 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 7 |
| 7:45 AM | 0 | 2 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5 |
| 8:00 AM | 0 | 6 | 3 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 11 |
| 8:15 AM | 0 | 9 | 3 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 13 |
| 8:30 AM | 0 | 2 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5 |
| 8:45 AM | 0 | 8 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 12 |
| 9:00 AM | 0 | 11 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 14 |
| 9:15 AM | 0 | 1 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 3 |
| 9:30 AM | 0 | 7 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 9 |
| 9:45 AM | 0 | 3 | 3 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 7 |
| 10:00 AM | 0 | 5 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 7 |
| 10:15 AM | 1 | 2 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 7 |
| 10:30 AM | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 |
| 10:45 AM | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 |
| 11:00 AM | 0 | 2 | 2 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5 |
| 11:15 AM | 0 | 1 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 4 |
| 11:30 AM | 0 | 2 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 |
| 11:45 AM | 0 | 5 | 2 | 0 | 2 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 10 |
| Day Total | | | | | | | | | | | | | | | |
| Percent | | | | | | | | | | | | | | | |
| AM Peak Volume | | | | | | | | | | | | | | | |
| PM Peak Volume | | | | | | | | | | | | | | | |

*Comments:*

Quality Counts
TRANSPORTATION DATA COLLECTION

**LOCATION:** Porter Rd south of Groot facility
**SPECIFIC LOCATION:** 0 ft from
**CITY/STATE:** Round Lake, IL

**QC JOB #:** 10940816
**DIRECTION:** NB
**DATE:** May 02 2013

| Start Time | Motor-cycles | Cars & Trailer | 2 Axle Long | Buses | 2 Axle 6 Tire | 3 Axle Single | 4 Axle Single | <5 Axle Double | 5 Axle Double | >6 Axle Double | <6 Axle Multi | 6 Axle Multi | >6 Axle Multi | Not Classified | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 12:00 PM | 0 | 4 | 6 | 0 | 1 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 1 | 13 |
| 12:15 PM | 0 | 5 | 1 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 2 | 9 |
| 12:30 PM | 0 | 2 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 7 |
| 12:45 PM | 0 | 3 | 2 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 6 |
| 1:00 PM | 0 | 4 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 6 |
| 1:15 PM | 0 | 2 | 2 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5 |
| 1:30 PM | 0 | 2 | 1 | 0 | 1 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 6 |
| 1:45 PM | 0 | 5 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 8 |
| 2:00 PM | 0 | 5 | 1 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 8 |
| 2:15 PM | 0 | 4 | 1 | 0 | 1 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 8 |
| 2:30 PM | 0 | 5 | 2 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 9 |
| 2:45 PM | 0 | 8 | 3 | 0 | 1 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 17 |
| 3:00 PM | 0 | 9 | 3 | 0 | 1 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 15 |
| 3:15 PM | 0 | 6 | 4 | 0 | 0 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 14 |
| 3:30 PM | 0 | 9 | 5 | 0 | 4 | 8 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 27 |
| 3:45 PM | 0 | 12 | 1 | 0 | 0 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 18 |
| 4:00 PM | 0 | 9 | 6 | 0 | 0 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 19 |
| 4:15 PM | 0 | 12 | 9 | 0 | 3 | 8 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 33 |
| 4:30 PM | 0 | 10 | 3 | 0 | 2 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 19 |
| 4:45 PM | 0 | 9 | 4 | 0 | 0 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 17 |
| 5:00 PM | 0 | 9 | 2 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 12 |
| 5:15 PM | 0 | 10 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 10 |
| 5:30 PM | 0 | 7 | 8 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 15 |
| 5:45 PM | 0 | 4 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 8 |
| Day Total | | | | | | | | | | | | | | | |
| Percent | | | | | | | | | | | | | | | |
| AM Peak Volume | | | | | | | | | | | | | | | |
| PM Peak Volume | | | | | | | | | | | | | | | |

*Comments:*

Quality Counts
TRANSPORTATION DATA COLLECTION

**LOCATION:** Porter Rd south of Groot facility
**SPECIFIC LOCATION:** 0 ft from
**CITY/STATE:** Round Lake, IL

**QC JOB #:** 10940816
**DIRECTION:** NB
**DATE:** May 02 2013

| Start Time | Motor-cycles | Cars & Trailer | 2 Axle Long | Buses | 2 Axle 6 Tire | 3 Axle Single | 4 Axle Single | <5 Axle Double | 5 Axle Double | >6 Axle Double | <6 Axle Multi | 6 Axle Multi | >6 Axle Multi | Not Classified | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 6:00 PM | 0 | 6 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 9 |
| 6:15 PM | 0 | 7 | 2 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 10 |
| 6:30 PM | 0 | 11 | 3 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 15 |
| 6:45 PM | 0 | 8 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 11 |
| 7:00 PM | 0 | 5 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 9 |
| 7:15 PM | 0 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 |
| 7:30 PM | 0 | 6 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 11 |
| 7:45 PM | 0 | 7 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 9 |
| 8:00 PM | 0 | 3 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 |
| 8:15 PM | 0 | 7 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 8 |
| 8:30 PM | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 |
| 8:45 PM | 0 | 2 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 |
| 9:00 PM | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 |
| 9:15 PM | 0 | 3 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 |
| 9:30 PM | 0 | 2 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 |
| 9:45 PM | 0 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 |
| 10:00 PM | 0 | 6 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 7 |
| 10:15 PM | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 |
| 10:30 PM | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 2 |
| 10:45 PM | 0 | 2 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 |
| 11:00 PM | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| 11:15 PM | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 |
| 11:30 PM | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 |
| 11:45 PM | 0 | 2 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 |
| Day Total | 1 | 393 | 170 | 2 | 31 | 58 | 0 | 3 | 1 | 2 | 0 | 0 | 0 | 22 | 683 |
| Percent | 0.1% | 57.5% | 24.9% | 0.3% | 4.5% | 8.5% | 0.0% | 0.4% | 0.1% | 0.3% | 0.0% | 0.0% | 0.0% | 3.2% | |
| ADT 683 | | | | | | | | | | | | | | | |
| AM Peak Volume | 10:15 AM 1 | 9:00 AM 11 | 4:45 AM 5 | 7:15 AM 1 | 5:15 AM 2 | 11:15 AM 2 | | | | 11:15 AM 1 | | | | 4:30 AM 4 | 9:00 AM 14 |
| PM Peak Volume | | 3:45 PM 12 | 4:15 PM 9 | | 3:30 PM 4 | 3:30 PM 8 | | 12:15 PM 1 | 2:15 PM 1 | 12:00 PM 1 | | | | 12:15 PM 2 | 4:15 PM 33 |

*Comments:*

Quality Counts
TRANSPORTATION DATA COLLECTION

## SUMMARY - Tube Count - Vehicle Classification Data



**LOCATION:** Porter Rd south of Groot facility
**SPECIFIC LOCATION:** 0 ft from
**CITY/STATE:** Round Lake, IL

**QC JOB #:** 10940816
**DIRECTION:** NB
**DATE:** Apr 30 2013 - May 02 2013

| Start Time | Motor-cycles | Cars & Trailer | 2 Axle Long | Buses | 2 Axle 6 Tire | 3 Axle Single | 4 Axle Single | <5 Axle Double | 5 Axle Double | >6 Axle Double | <6 Axle Multi | 6 Axle Multi | >6 Axle Multi | Not Classified | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Grand Total | 23 | 1178 | 552 | 13 | 134 | 192 | 0 | 6 | 6 | 4 | 0 | 0 | 0 | 40 | 2148 |
| Percent | 1.1% | 54.8% | 25.7% | 0.6% | 6.2% | 8.9% | 0.0% | 0.3% | 0.3% | 0.2% | 0.0% | 0.0% | 0.0% | 1.9% | |

ADT
716

*Comments:*

Report generated on 5/8/2013 6:30 AM

SOURCE: Quality Counts, LLC (http://www.qualitycounts.net)

Quality Counts
TRANSPORTATION DATA COLLECTION

**LOCATION:** Porter Rd south of Groot facility
**SPECIFIC LOCATION:** 0 ft from
**CITY/STATE:** Round Lake, IL

**QC JOB #:** 10940816
**DIRECTION:** SB
**DATE:** Apr 30 2013

| Start Time | Motor-cycles | Cars & Trailer | 2 Axle Long | Buses | 2 Axle 6 Tire | 3 Axle Single | 4 Axle Single | <5 Axle Double | 5 Axle Double | >6 Axle Double | <6 Axle Multi | 6 Axle Multi | >6 Axle Multi | Not Classified | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 12:00 AM | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| 12:15 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 12:30 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 12:45 AM | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| 1:00 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1:15 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1:30 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1:45 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 2:00 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 2:15 AM | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| 2:30 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 2:45 AM | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| 3:00 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 3:15 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 3:30 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 3 |
| 3:45 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 |
| 4:00 AM | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 |
| 4:15 AM | 0 | 1 | 1 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 5 |
| 4:30 AM | 0 | 3 | 1 | 0 | 0 | 7 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 12 |
| 4:45 AM | 0 | 3 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 |
| 5:00 AM | 0 | 6 | 2 | 0 | 0 | 7 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 15 |
| 5:15 AM | 0 | 11 | 1 | 0 | 2 | 6 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 20 |
| 5:30 AM | 0 | 13 | 0 | 0 | 0 | 9 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 23 |
| 5:45 AM | 0 | 16 | 4 | 1 | 3 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 27 |
| Day Total | | | | | | | | | | | | | | | |
| Percent | | | | | | | | | | | | | | | |
| AM Peak Volume | | | | | | | | | | | | | | | |
| PM Peak Volume | | | | | | | | | | | | | | | |

*Comments:*

Quality Counts
TRANSPORTATION DATA COLLECTION

**LOCATION:** Porter Rd south of Groot facility
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**CITY/STATE:** Round Lake, IL

**QC JOB #:** 10940816
**DIRECTION:** SB
**DATE:** Apr 30 2013

| Start Time | Motor-cycles | Cars & Trailer | 2 Axle Long | Buses | 2 Axle 6 Tire | 3 Axle Single | 4 Axle Single | <5 Axle Double | 5 Axle Double | >6 Axle Double | <6 Axle Multi | 6 Axle Multi | >6 Axle Multi | Not Classified | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 6:00 AM | 1 | 19 | 4 | 0 | 4 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 31 |
| 6:15 AM | 0 | 11 | 3 | 0 | 0 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 18 |
| 6:30 AM | 0 | 16 | 1 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 19 |
| 6:45 AM | 0 | 7 | 5 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 13 |
| 7:00 AM | 0 | 11 | 2 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 15 |
| 7:15 AM | 0 | 7 | 3 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 11 |
| 7:30 AM | 0 | 10 | 3 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 14 |
| 7:45 AM | 0 | 12 | 0 | 0 | 2 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 16 |
| 8:00 AM | 0 | 6 | 2 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 9 |
| 8:15 AM | 0 | 8 | 3 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 12 |
| 8:30 AM | 0 | 0 | 3 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 6 |
| 8:45 AM | 0 | 4 | 3 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 9 |
| 9:00 AM | 0 | 4 | 2 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 7 |
| 9:15 AM | 0 | 3 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 |
| 9:30 AM | 0 | 3 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 9 |
| 9:45 AM | 0 | 3 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 |
| 10:00 AM | 0 | 5 | 3 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 10 |
| 10:15 AM | 0 | 6 | 2 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 10 |
| 10:30 AM | 0 | 5 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 6 |
| 10:45 AM | 0 | 4 | 3 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 8 |
| 11:00 AM | 0 | 6 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 11 |
| 11:15 AM | 1 | 6 | 0 | 0 | 0 | 2 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 10 |
| 11:30 AM | 0 | 4 | 3 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 9 |
| 11:45 AM | 0 | 6 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 1 | 9 |
| Day Total | | | | | | | | | | | | | | | |
| Percent | | | | | | | | | | | | | | | |
| AM Peak Volume | | | | | | | | | | | | | | | |
| PM Peak Volume | | | | | | | | | | | | | | | |

*Comments:*

Quality Counts
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|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 12:00 PM | 0 | 4 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 8 |
| 12:15 PM | 0 | 4 | 2 | 0 | 1 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 9 |
| 12:30 PM | 0 | 3 | 2 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 7 |
| 12:45 PM | 0 | 4 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 7 |
| 1:00 PM | 1 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 4 |
| 1:15 PM | 0 | 4 | 5 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 11 |
| 1:30 PM | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| 1:45 PM | 0 | 5 | 1 | 0 | 1 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 9 |
| 2:00 PM | 0 | 3 | 3 | 0 | 1 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 8 |
| 2:15 PM | 0 | 5 | 4 | 0 | 3 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 14 |
| 2:30 PM | 0 | 3 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 |
| 2:45 PM | 0 | 5 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 6 |
| 3:00 PM | 0 | 9 | 5 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 17 |
| 3:15 PM | 1 | 11 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 15 |
| 3:30 PM | 0 | 4 | 2 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 7 |
| 3:45 PM | 0 | 8 | 3 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 12 |
| 4:00 PM | 1 | 8 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 13 |
| 4:15 PM | 0 | 7 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 8 |
| 4:30 PM | 0 | 5 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 6 |
| 4:45 PM | 0 | 2 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 |
| 5:00 PM | 0 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 |
| 5:15 PM | 0 | 6 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 8 |
| 5:30 PM | 0 | 5 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 6 |
| 5:45 PM | 0 | 7 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 8 |
| Day Total | | | | | | | | | | | | | | | |
| Percent | | | | | | | | | | | | | | | |
| AM Peak Volume | | | | | | | | | | | | | | | |
| PM Peak Volume | | | | | | | | | | | | | | | |

*Comments:*

Quality Counts
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|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 6:00 PM | 0 | 4 | 2 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 7 |
| 6:15 PM | 1 | 11 | 2 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 16 |
| 6:30 PM | 0 | 13 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 13 |
| 6:45 PM | 0 | 14 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 14 |
| 7:00 PM | 0 | 6 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 6 |
| 7:15 PM | 0 | 9 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 11 |
| 7:30 PM | 0 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 |
| 7:45 PM | 0 | 3 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 |
| 8:00 PM | 0 | 3 | 1 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 7 |
| 8:15 PM | 0 | 4 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 7 |
| 8:30 PM | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 |
| 8:45 PM | 0 | 2 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 |
| 9:00 PM | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| 9:15 PM | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| 9:30 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 |
| 9:45 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 4 |
| 10:00 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 2 |
| 10:15 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 2 |
| 10:30 PM | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 5 |
| 10:45 PM | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| 11:00 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 11:15 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 2 |
| 11:30 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 11:45 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 |
| Day Total | 6 | 418 | 123 | 5 | 35 | 60 | 0 | 3 | 5 | 1 | 0 | 0 | 0 | 40 | 696 |
| Percent | 0.9% | 60.1% | 17.7% | 0.7% | 5.0% | 8.6% | 0.0% | 0.4% | 0.7% | 0.1% | 0.0% | 0.0% | 0.0% | 5.7% | |
| ADT 696 | | | | | | | | | | | | | | | |
| AM Peak Volume | 6:00 AM 1 | 6:00 AM 19 | 6:45 AM 5 | 5:45 AM 1 | 6:00 AM 4 | 5:30 AM 9 | | 7:45 AM 1 | 11:45 AM 1 | | | | | 3:30 AM 3 | 6:00 AM 31 |
| PM Peak Volume | 1:00 PM 1 | 6:45 PM 14 | 1:15 PM 5 | 12:30 PM 1 | 2:15 PM 3 | 12:15 PM 2 | | | 2:00 PM 1 | 8:15 PM 1 | | | | 9:45 PM 4 | 3:00 PM 17 |

*Comments:*

Quality Counts
TRANSPORTATION DATA COLLECTION

**LOCATION:** Porter Rd south of Groot facility
**SPECIFIC LOCATION:** 0 ft from
**CITY/STATE:** Round Lake, IL

**QC JOB #:** 10940816
**DIRECTION:** SB
**DATE:** May 01 2013

| Start Time | Motor-cycles | Cars & Trailer | 2 Axle Long | Buses | 2 Axle 6 Tire | 3 Axle Single | 4 Axle Single | <5 Axle Double | 5 Axle Double | >6 Axle Double | <6 Axle Multi | 6 Axle Multi | >6 Axle Multi | Not Classified | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 12:00 AM | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| 12:15 AM | 0 | 2 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 |
| 12:30 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 12:45 AM | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| 1:00 AM | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| 1:15 AM | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| 1:30 AM | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| 1:45 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 2:00 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 2:15 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 2:30 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 2:45 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 |
| 3:00 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 3:15 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 3:30 AM | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 4 |
| 3:45 AM | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 |
| 4:00 AM | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| 4:15 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 3 |
| 4:30 AM | 0 | 1 | 0 | 0 | 2 | 10 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 15 |
| 4:45 AM | 0 | 5 | 1 | 0 | 1 | 8 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 15 |
| 5:00 AM | 0 | 7 | 1 | 0 | 0 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 12 |
| 5:15 AM | 0 | 9 | 1 | 0 | 2 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 18 |
| 5:30 AM | 0 | 19 | 2 | 0 | 1 | 6 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 28 |
| 5:45 AM | 0 | 10 | 2 | 1 | 3 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 20 |
| Day Total | | | | | | | | | | | | | | | |
| Percent | | | | | | | | | | | | | | | |
| AM Peak Volume | | | | | | | | | | | | | | | |
| PM Peak Volume | | | | | | | | | | | | | | | |

*Comments:*

Quality Counts
TRANSPORTATION DATA COLLECTION

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**CITY/STATE:** Round Lake, IL

**QC JOB #:** 10940816
**DIRECTION:** SB
**DATE:** May 01 2013

| Start Time | Motor-cycles | Cars & Trailer | 2 Axle Long | Buses | 2 Axle 6 Tire | 3 Axle Single | 4 Axle Single | <5 Axle Double | 5 Axle Double | >6 Axle Double | <6 Axle Multi | 6 Axle Multi | >6 Axle Multi | Not Classified | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 6:00 AM | 0 | 22 | 2 | 0 | 1 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 27 |
| 6:15 AM | 0 | 7 | 3 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 11 |
| 6:30 AM | 0 | 19 | 1 | 0 | 3 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 25 |
| 6:45 AM | 0 | 14 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 17 |
| 7:00 AM | 1 | 5 | 1 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 9 |
| 7:15 AM | 0 | 6 | 2 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 11 |
| 7:30 AM | 0 | 10 | 5 | 0 | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 17 |
| 7:45 AM | 0 | 8 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 10 |
| 8:00 AM | 0 | 8 | 1 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 11 |
| 8:15 AM | 0 | 7 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 9 |
| 8:30 AM | 0 | 5 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 7 |
| 8:45 AM | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 3 |
| 9:00 AM | 0 | 4 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 7 |
| 9:15 AM | 0 | 4 | 1 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 8 |
| 9:30 AM | 0 | 8 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 8 |
| 9:45 AM | 0 | 4 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 6 |
| 10:00 AM | 0 | 3 | 2 | 1 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 7 |
| 10:15 AM | 0 | 3 | 3 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 7 |
| 10:30 AM | 0 | 3 | 1 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 7 |
| 10:45 AM | 0 | 6 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 8 |
| 11:00 AM | 0 | 4 | 1 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 7 |
| 11:15 AM | 0 | 5 | 4 | 0 | 0 | 3 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 13 |
| 11:30 AM | 0 | 11 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 15 |
| 11:45 AM | 0 | 4 | 3 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 8 |
| Day Total | | | | | | | | | | | | | | | |
| Percent | | | | | | | | | | | | | | | |
| AM Peak Volume | | | | | | | | | | | | | | | |
| PM Peak Volume | | | | | | | | | | | | | | | |

*Comments:*

Quality Counts
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| Start Time | Motor-cycles | Cars & Trailer | 2 Axle Long | Buses | 2 Axle 6 Tire | 3 Axle Single | 4 Axle Single | <5 Axle Double | 5 Axle Double | >6 Axle Double | <6 Axle Multi | 6 Axle Multi | >6 Axle Multi | Not Classified | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 12:00 PM | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| 12:15 PM | 0 | 6 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 9 |
| 12:30 PM | 0 | 5 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 7 |
| 12:45 PM | 0 | 5 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 7 |
| 1:00 PM | 0 | 5 | 4 | 0 | 0 | 1 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 12 |
| 1:15 PM | 0 | 4 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 9 |
| 1:30 PM | 0 | 2 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 |
| 1:45 PM | 1 | 5 | 4 | 0 | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 13 |
| 2:00 PM | 0 | 4 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 6 |
| 2:15 PM | 0 | 3 | 1 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 6 |
| 2:30 PM | 0 | 4 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 6 |
| 2:45 PM | 0 | 3 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 |
| 3:00 PM | 0 | 11 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 13 |
| 3:15 PM | 0 | 8 | 3 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 13 |
| 3:30 PM | 1 | 11 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 14 |
| 3:45 PM | 0 | 4 | 5 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 10 |
| 4:00 PM | 1 | 6 | 2 | 1 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 12 |
| 4:15 PM | 0 | 12 | 4 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 17 |
| 4:30 PM | 0 | 3 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5 |
| 4:45 PM | 0 | 2 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 5 |
| 5:00 PM | 0 | 7 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 7 |
| 5:15 PM | 0 | 3 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 |
| 5:30 PM | 0 | 7 | 2 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 11 |
| 5:45 PM | 0 | 5 | 2 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 8 |
| Day Total | | | | | | | | | | | | | | | |
| Percent | | | | | | | | | | | | | | | |
| AM Peak Volume | | | | | | | | | | | | | | | |
| PM Peak Volume | | | | | | | | | | | | | | | |

*Comments:*

Quality Counts
TRANSPORTATION DATA COLLECTION

**LOCATION:** Porter Rd south of Groot facility
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**QC JOB #:** 10940816
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| Start Time | Motor-cycles | Cars & Trailer | 2 Axle Long | Buses | 2 Axle 6 Tire | 3 Axle Single | 4 Axle Single | <5 Axle Double | 5 Axle Double | >6 Axle Double | <6 Axle Multi | 6 Axle Multi | >6 Axle Multi | Not Classified | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 6:00 PM | 0 | 6 | 1 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 9 |
| 6:15 PM | 1 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 6 |
| 6:30 PM | 0 | 9 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 10 |
| 6:45 PM | 0 | 5 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 7 |
| 7:00 PM | 0 | 7 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 7 |
| 7:15 PM | 0 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 |
| 7:30 PM | 0 | 3 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 |
| 7:45 PM | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 3 |
| 8:00 PM | 0 | 7 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 7 |
| 8:15 PM | 0 | 2 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 |
| 8:30 PM | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| 8:45 PM | 0 | 2 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 |
| 9:00 PM | 0 | 2 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 |
| 9:15 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 |
| 9:30 PM | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| 9:45 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 10:00 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 4 |
| 10:15 PM | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 |
| 10:30 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 3 |
| 10:45 PM | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 4 |
| 11:00 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 11:15 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 |
| 11:30 PM | 0 | 2 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 5 |
| 11:45 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Day Total | 5 | 419 | 109 | 7 | 30 | 56 | 0 | 2 | 10 | 1 | 0 | 0 | 0 | 37 | 676 |
| Percent | 0.7% | 62.0% | 16.1% | 1.0% | 4.4% | 8.3% | 0.0% | 0.3% | 1.5% | 0.1% | 0.0% | 0.0% | 0.0% | 5.5% | |
| ADT 676 | | | | | | | | | | | | | | | |
| AM Peak Volume | 7:00 AM 1 | 6:00 AM 22 | 7:30 AM 5 | 5:45 AM 1 | 5:45 AM 3 | 4:30 AM 10 | | 7:30 AM 1 | 8:45 AM 1 | | | | | 4:15 AM 3 | 5:30 AM 28 |
| PM Peak Volume | 1:45 PM 1 | 4:15 PM 12 | 3:45 PM 5 | 3:45 PM 1 | 12:15 PM 1 | 12:30 PM 1 | | 1:45 PM 1 | 1:00 PM 2 | 6:15 PM 1 | | | | 10:00 PM 4 | 4:15 PM 17 |

*Comments:*

Quality Counts
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|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 12:00 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 12:15 AM | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| 12:30 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 12:45 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1:00 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1:15 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 |
| 1:30 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1:45 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 |
| 2:00 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 |
| 2:15 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 2:30 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 2:45 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 3:00 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 |
| 3:15 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 |
| 3:30 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 |
| 3:45 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 |
| 4:00 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 4 |
| 4:15 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 4 |
| 4:30 AM | 0 | 0 | 1 | 0 | 4 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 13 |
| 4:45 AM | 0 | 3 | 2 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 10 |
| 5:00 AM | 0 | 4 | 0 | 0 | 2 | 9 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 15 |
| 5:15 AM | 0 | 9 | 1 | 0 | 1 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 14 |
| 5:30 AM | 0 | 17 | 0 | 0 | 2 | 9 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 28 |
| 5:45 AM | 0 | 7 | 8 | 1 | 2 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 22 |
| Day Total | | | | | | | | | | | | | | | |
| Percent | | | | | | | | | | | | | | | |
| AM Peak Volume | | | | | | | | | | | | | | | |
| PM Peak Volume | | | | | | | | | | | | | | | |

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|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 6:00 AM | 0 | 18 | 1 | 0 | 1 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 24 |
| 6:15 AM | 0 | 15 | 2 | 0 | 1 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 22 |
| 6:30 AM | 0 | 15 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 18 |
| 6:45 AM | 0 | 8 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 12 |
| 7:00 AM | 0 | 9 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 11 |
| 7:15 AM | 0 | 4 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5 |
| 7:30 AM | 0 | 7 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 8 |
| 7:45 AM | 0 | 4 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5 |
| 8:00 AM | 0 | 6 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 11 |
| 8:15 AM | 0 | 7 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 11 |
| 8:30 AM | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 2 |
| 8:45 AM | 0 | 6 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 8 |
| 9:00 AM | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 3 |
| 9:15 AM | 0 | 3 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 5 |
| 9:30 AM | 0 | 6 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 9 |
| 9:45 AM | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 |
| 10:00 AM | 0 | 6 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 10 |
| 10:15 AM | 0 | 8 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 9 |
| 10:30 AM | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 |
| 10:45 AM | 0 | 2 | 2 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5 |
| 11:00 AM | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 |
| 11:15 AM | 0 | 7 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 10 |
| 11:30 AM | 0 | 2 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 4 |
| 11:45 AM | 0 | 4 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5 |
| Day Total | | | | | | | | | | | | | | | |
| Percent | | | | | | | | | | | | | | | |
| AM Peak Volume | | | | | | | | | | | | | | | |
| PM Peak Volume | | | | | | | | | | | | | | | |

*Comments:*

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|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 12:00 PM | 0 | 3 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 7 |
| 12:15 PM | 0 | 2 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5 | 9 |
| 12:30 PM | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 4 |
| 12:45 PM | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 3 |
| 1:00 PM | 0 | 3 | 3 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 9 |
| 1:15 PM | 0 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 5 |
| 1:30 PM | 0 | 4 | 1 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 9 |
| 1:45 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 2 |
| 2:00 PM | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 4 |
| 2:15 PM | 0 | 5 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 7 |
| 2:30 PM | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 3 |
| 2:45 PM | 0 | 2 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 7 |
| 3:00 PM | 0 | 4 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 9 |
| 3:15 PM | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 9 | 10 |
| 3:30 PM | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 6 |
| 3:45 PM | 0 | 9 | 2 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 14 |
| 4:00 PM | 0 | 2 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 10 | 13 |
| 4:15 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5 | 5 |
| 4:30 PM | 0 | 1 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5 | 8 |
| 4:45 PM | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 5 |
| 5:00 PM | 0 | 10 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 12 |
| 5:15 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 2 |
| 5:30 PM | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 3 |
| 5:45 PM | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 4 |
| Day Total | | | | | | | | | | | | | | | |
| Percent | | | | | | | | | | | | | | | |
| AM Peak Volume | | | | | | | | | | | | | | | |
| PM Peak Volume | | | | | | | | | | | | | | | |

*Comments:*

Quality Counts
TRANSPORTATION DATA COLLECTION

**LOCATION:** Porter Rd south of Groot facility
**SPECIFIC LOCATION:** 0 ft from
**CITY/STATE:** Round Lake, IL

**QC JOB #:** 10940816
**DIRECTION:** SB
**DATE:** May 02 2013

| Start Time | Motor-cycles | Cars & Trailer | 2 Axle Long | Buses | 2 Axle 6 Tire | 3 Axle Single | 4 Axle Single | <5 Axle Double | 5 Axle Double | >6 Axle Double | <6 Axle Multi | 6 Axle Multi | >6 Axle Multi | Not Classified | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 6:00 PM | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 5 |
| 6:15 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 8 | 8 |
| 6:30 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 4 |
| 6:45 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 3 |
| 7:00 PM | 0 | 4 | 0 | 0 | 1 | 1 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 1 | 9 |
| 7:15 PM | 0 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5 |
| 7:30 PM | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 |
| 7:45 PM | 0 | 3 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 |
| 8:00 PM | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 |
| 8:15 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 8:30 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 3 |
| 8:45 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 |
| 9:00 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 9:15 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 4 |
| 9:30 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 2 |
| 9:45 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 2 |
| 10:00 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 4 |
| 10:15 PM | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 3 |
| 10:30 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 2 | 3 |
| 10:45 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 |
| 11:00 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 11:15 PM | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 2 |
| 11:30 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 2 |
| 11:45 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 2 |
| Day Total | 0 | 264 | 58 | 3 | 30 | 38 | 0 | 5 | 1 | 0 | 0 | 0 | 0 | 153 | 552 |
| Percent | 0.0% | 47.8% | 10.5% | 0.5% | 5.4% | 6.9% | 0.0% | 0.9% | 0.2% | 0.0% | 0.0% | 0.0% | 0.0% | 27.7% | |
| ADT 552 | | | | | | | | | | | | | | | |
| AM Peak Volume | | 6:00 AM 18 | 5:45 AM 8 | 5:45 AM 1 | 4:30 AM 4 | 5:00 AM 9 | | 8:30 AM 1 | | | | | | 4:00 AM 4 | 5:30 AM 28 |
| PM Peak Volume | | 5:00 PM 10 | 1:00 PM 3 | 3:45 PM 1 | 12:00 PM 1 | 1:00 PM 1 | | 7:00 PM 1 | 7:00 PM 1 | | | | | 4:00 PM 10 | 3:45 PM 14 |

*Comments:*

Quality Counts
TRANSPORTATION DATA COLLECTION

## SUMMARY - Tube Count - Vehicle Classification Data



**LOCATION:** Porter Rd south of Groot facility
**SPECIFIC LOCATION:** 0 ft from
**CITY/STATE:** Round Lake, IL

**QC JOB #:** 10940816
**DIRECTION:** SB
**DATE:** Apr 30 2013 - May 02 2013

| Start Time | Motor-cycles | Cars & Trailer | 2 Axle Long | Buses | 2 Axle 6 Tire | 3 Axle Single | 4 Axle Single | <5 Axle Double | 5 Axle Double | >6 Axle Double | <6 Axle Multi | 6 Axle Multi | >6 Axle Multi | Not Classified | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Grand Total | 11 | 1101 | 290 | 15 | 95 | 154 | 0 | 10 | 16 | 2 | 0 | 0 | 0 | 230 | 1924 |
| Percent | 0.6% | 57.2% | 15.1% | 0.8% | 4.9% | 8.0% | 0.0% | 0.5% | 0.8% | 0.1% | 0.0% | 0.0% | 0.0% | 12.0% | |

ADT
641

*Comments:*

Report generated on 5/8/2013 6:30 AM

SOURCE: Quality Counts, LLC (http://www.qualitycounts.net)

Quality Counts
TRANSPORTATION DATA COLLECTION

KLOA
Kenig, Lindgren, O'Hara, Aboona, Inc.

File Name : Porter Dr & IL 120 - AM Peak Period
Site Code : 00000000
Start Date : 5/1/2013
Page No : 1

WESTBOUND 120

Directions Printed: Direction 1

| Start Time | Volume | 2 - 3 | 4 - 5 | 6 - 7 | 8 - 9 | 10 - 11 | 12 - 13 | 14 - 15 | 16 - 17 | 18 - 19 | 20 - 21 | 22 - 23 | 24 - 25 | 26 - 27 | 28 - 29 | >29 | Int. Total | Average |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 06:00 AM | 0 | 0 | 0 | 6 | 2 | 1 | 3 | 1 | 1 | 2 | 3 | 0 | 2 | 0 | 1 | 9 | 31 | 18 - 19 |
| 06:15 AM | 0 | 3 | 2 | 7 | 1 | 2 | 4 | 0 | 2 | 3 | 1 | 1 | 1 | 1 | 1 | 4 | 33 | 12 - 13 |
| 06:30 AM | 0 | 0 | 1 | 4 | 3 | 5 | 2 | 3 | 0 | 4 | 1 | 2 | 1 | 1 | 2 | 4 | 33 | 14 - 15 |
| 06:45 AM | 0 | 0 | 0 | 6 | 3 | 4 | 1 | 1 | 2 | 0 | 1 | 1 | 2 | 0 | 0 | 7 | 28 | 14 - 15 |
| Total | 0 | 3 | 3 | 23 | 9 | 12 | 10 | 5 | 5 | 9 | 6 | 4 | 6 | 2 | 4 | 24 | 125 | 14 - 15 |
| 07:00 AM | 0 | 0 | 1 | 4 | 3 | 3 | 0 | 1 | 1 | 0 | 3 | 1 | 1 | 0 | 0 | 6 | 24 | 16 - 17 |
| 07:15 AM | 0 | 0 | 2 | 6 | 3 | 4 | 1 | 1 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 7 | 26 | 10 - 11 |
| 07:30 AM | 0 | 0 | 1 | 3 | 3 | 1 | 3 | 1 | 7 | 1 | 0 | 0 | 0 | 0 | 0 | 5 | 25 | 16 - 17 |
| 07:45 AM | 0 | 0 | 1 | 6 | 2 | 2 | 1 | 1 | 2 | 1 | 1 | 1 | 2 | 1 | 0 | 6 | 27 | 16 - 17 |
| Total | 0 | 0 | 5 | 19 | 11 | 10 | 5 | 4 | 11 | 2 | 5 | 2 | 3 | 1 | 0 | 24 | 102 | 14 - 15 |
| 08:00 AM | 0 | 1 | 5 | 5 | 3 | 3 | 3 | 0 | 2 | 1 | 0 | 0 | 0 | 0 | 1 | 6 | 30 | 10 - 11 |
| 08:15 AM | 0 | 0 | 1 | 3 | 3 | 3 | 2 | 2 | 2 | 1 | 0 | 0 | 2 | 1 | 1 | 6 | 27 | 14 - 15 |
| 08:30 AM | 0 | 0 | 2 | 1 | 4 | 4 | 1 | 2 | 3 | 0 | 1 | 0 | 0 | 0 | 1 | 6 | 25 | 14 - 15 |
| 08:45 AM | 0 | 0 | 2 | 6 | 5 | 2 | 2 | 2 | 3 | 1 | 0 | 0 | 2 | 0 | 0 | 7 | 32 | 12 - 13 |
| Total | 0 | 1 | 10 | 15 | 15 | 12 | 8 | 6 | 10 | 3 | 1 | 0 | 4 | 1 | 3 | 25 | 114 | 12 - 13 |
| Grand Total | 0 | 4 | 18 | 57 | 35 | 34 | 23 | 15 | 26 | 14 | 12 | 6 | 13 | 4 | 7 | 73 | 341 | 12 - 13 |
| Total % | | 1.2 | 5.3 | 16.7 | 10.3 | 10.0 | 6.7 | 4.4 | 7.6 | 4.1 | 3.5 | 1.8 | 3.8 | 1.2 | 2.1 | 21.4 | | |

File Name : Porter Dr & IL 120 - AM Peak Period
Site Code : 00000000
Start Date : 5/1/2013
Page No : 1

Directions Printed: Combined

| Start Time | Volume | 2 - 3 | 4 - 5 | 6 - 7 | 8 - 9 | 10 - 11 | 12 - 13 | 14 - 15 | 16 - 17 | 18 - 19 | 20 - 21 | 22 - 23 | 24 - 25 | 26 - 27 | 28 - 29 | >29 | Int. Total | Average |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 06:00 AM | 0 | 1 | 4 | 13 | 7 | 2 | 3 | 0 | 2 | 2 | 2 | 0 | 0 | 0 | 0 | 3 | 39 | 8 - 9 |
| 06:15 AM | 0 | 2 | 7 | 4 | 4 | 4 | 6 | 7 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 36 | 10 - 11 |
| 06:30 AM | 0 | 6 | 4 | 6 | 7 | 5 | 1 | 0 | 2 | 2 | 1 | 1 | 0 | 0 | 0 | 0 | 35 | 8 - 9 |
| 06:45 AM | 0 | 2 | 2 | 2 | 1 | 2 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 10 | 6 - 7 |
| Total | 0 | 11 | 17 | 25 | 19 | 13 | 11 | 7 | 6 | 4 | 3 | 1 | 0 | 0 | 0 | 3 | 120 | 8 - 9 |
| *** BREAK *** | | | | | | | | | | | | | | | | | | |
| 08:15 AM | 0 | 3 | 5 | 4 | 2 | 2 | 0 | 2 | 0 | 1 | 1 | 1 | 1 | 0 | 0 | 1 | 23 | 6 - 7 |
| 08:30 AM | 0 | 3 | 8 | 5 | 6 | 6 | 1 | 4 | 0 | 0 | 0 | 0 | 2 | 0 | 1 | 0 | 36 | 8 - 9 |
| 08:45 AM | 0 | 5 | 4 | 10 | 6 | 5 | 0 | 2 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 1 | 35 | 6 - 7 |
| Total | 0 | 11 | 17 | 19 | 14 | 13 | 1 | 8 | 0 | 1 | 2 | 1 | 3 | 1 | 1 | 2 | 94 | 8 - 9 |
| Grand Total | 0 | 22 | 34 | 44 | 33 | 26 | 12 | 15 | 6 | 5 | 5 | 2 | 3 | 1 | 1 | 5 | 214 | 8 - 9 |
| Total % | | 10.3 | 15.9 | 20.6 | 15.4 | 12.1 | 5.6 | 7.0 | 2.8 | 2.3 | 2.3 | 0.9 | 1.4 | 0.5 | 0.5 | 2.3 | | |

KLOA
Kenig, Lindgren, O'Hara, Aboona, Inc.

File Name : Porter Dr & IL 120 - PM Peak Period
Site Code : 00000000
Start Date : 5/1/2013
Page No : 1

WESTBOUND 120

Directions Printed: Direction 1

| Start Time | Volume | 2 - 3 | 4 - 5 | 6 - 7 | 8 - 9 | 10 - 11 | 12 - 13 | 14 - 15 | 16 - 17 | 18 - 19 | 20 - 21 | 22 - 23 | 24 - 25 | 26 - 27 | 28 - 29 | >29 | Int. Total | Average |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 03:00 PM | 0 | 0 | 1 | 6 | 5 | 4 | 3 | 1 | 1 | 2 | 1 | 0 | 0 | 3 | 1 | 3 | 31 | 10 - 11 |
| 03:15 PM | 0 | 0 | 3 | 5 | 6 | 2 | 1 | 4 | 3 | 2 | 1 | 1 | 3 | 0 | 0 | 2 | 33 | 12 - 13 |
| 03:30 PM | 0 | 2 | 4 | 3 | 5 | 5 | 3 | 4 | 1 | 0 | 2 | 2 | 0 | 1 | 0 | 4 | 36 | 10 - 11 |
| 03:45 PM | 0 | 0 | 5 | 2 | 9 | 2 | 0 | 5 | 0 | 2 | 0 | 0 | 0 | 2 | 0 | 5 | 32 | 10 - 11 |
| Total | 0 | 2 | 13 | 16 | 25 | 13 | 7 | 14 | 5 | 6 | 4 | 3 | 3 | 6 | 1 | 14 | 132 | 10 - 11 |
| 04:00 PM | 0 | 0 | 3 | 4 | 3 | 3 | 3 | 3 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 5 | 26 | 12 - 13 |
| 04:15 PM | 0 | 0 | 6 | 7 | 4 | 7 | 3 | 0 | 0 | 2 | 3 | 0 | 1 | 0 | 1 | 3 | 37 | 10 - 11 |
| 04:30 PM | 0 | 1 | 5 | 9 | 4 | 8 | 3 | 1 | 0 | 2 | 0 | 0 | 0 | 2 | 0 | 4 | 39 | 10 - 11 |
| 04:45 PM | 0 | 0 | 8 | 11 | 6 | 3 | 0 | 3 | 1 | 2 | 1 | 0 | 1 | 0 | 0 | 3 | 39 | 8 - 9 |
| Total | 0 | 1 | 22 | 31 | 17 | 21 | 9 | 7 | 2 | 6 | 5 | 0 | 2 | 2 | 1 | 15 | 141 | 8 - 9 |
| 05:00 PM | 0 | 0 | 3 | 4 | 3 | 0 | 0 | 2 | 1 | 0 | 1 | 0 | 0 | 1 | 1 | 6 | 22 | 14 - 15 |
| 05:15 PM | 0 | 0 | 2 | 9 | 3 | 2 | 2 | 1 | 2 | 4 | 0 | 0 | 1 | 1 | 1 | 4 | 32 | 12 - 13 |
| 05:30 PM | 0 | 0 | 1 | 7 | 5 | 7 | 2 | 2 | 1 | 0 | 0 | 2 | 0 | 0 | 0 | 4 | 31 | 10 - 11 |
| 05:45 PM | 0 | 0 | 4 | 10 | 7 | 5 | 1 | 4 | 1 | 1 | 2 | 1 | 0 | 2 | 1 | 2 | 41 | 8 - 9 |
| Total | 0 | 0 | 10 | 30 | 18 | 14 | 5 | 9 | 5 | 5 | 3 | 3 | 1 | 4 | 3 | 16 | 126 | 10 - 11 |
| Grand Total | 0 | 3 | 45 | 77 | 60 | 48 | 21 | 30 | 12 | 17 | 12 | 6 | 6 | 12 | 5 | 45 | 399 | 10 - 11 |
| Total % | | 0.8 | 11.3 | 19.3 | 15.0 | 12.0 | 5.3 | 7.5 | 3.0 | 4.3 | 3.0 | 1.5 | 1.5 | 3.0 | 1.3 | 11.3 | | |

File Name : Porter Dr & IL 120 - PM Peak Period
Site Code : 00000000
Start Date : 5/1/2013
Page No : 1

Directions Printed: Combined

| Start Time | Volume | 2 - 3 | 4 - 5 | 6 - 7 | 8 - 9 | 10 - 11 | 12 - 13 | 14 - 15 | 16 - 17 | 18 - 19 | 20 - 21 | 22 - 23 | 24 - 25 | 26 - 27 | 28 - 29 | >29 | Int. Total | Average |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 03:00 PM | 0 | 6 | 5 | 9 | 4 | 1 | 2 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 30 | 6 - 7 |
| 03:15 PM | 0 | 2 | 13 | 1 | 5 | 0 | 1 | 3 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 27 | 4 - 5 |
| 03:30 PM | 0 | 9 | 7 | 4 | 6 | 2 | 1 | 0 | 3 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 33 | 6 - 7 |
| 03:45 PM | 0 | 5 | 9 | 7 | 0 | 1 | 1 | 2 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 26 | 4 - 5 |
| Total | 0 | 22 | 34 | 21 | 15 | 4 | 5 | 6 | 4 | 2 | 2 | 0 | 0 | 0 | 0 | 1 | 116 | 6 - 7 |
| 04:00 PM | 0 | 3 | 6 | 0 | 3 | 0 | 2 | 1 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 16 | 4 - 5 |
| 04:15 PM | 0 | 4 | 7 | 4 | 2 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 23 | 6 - 7 |
| 04:30 PM | 0 | 4 | 11 | 11 | 4 | 1 | 2 | 1 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 36 | 6 - 7 |
| 04:45 PM | 0 | 6 | 14 | 11 | 2 | 1 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 36 | 4 - 5 |
| Total | 0 | 17 | 38 | 26 | 11 | 3 | 4 | 4 | 3 | 1 | 2 | 2 | 0 | 0 | 0 | 0 | 111 | 6 - 7 |
| 05:00 PM | 0 | 2 | 6 | 9 | 2 | 1 | 4 | 1 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 26 | 6 - 7 |
| 05:15 PM | 0 | 4 | 2 | 18 | 4 | 0 | 0 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 32 | 6 - 7 |
| 05:30 PM | 0 | 4 | 6 | 5 | 6 | 6 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 28 | 6 - 7 |
| 05:45 PM | 0 | 10 | 6 | 15 | 6 | 2 | 1 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 42 | 6 - 7 |
| Total | 0 | 20 | 20 | 47 | 18 | 9 | 5 | 3 | 2 | 2 | 1 | 0 | 1 | 0 | 0 | 0 | 128 | 6 - 7 |
| Grand Total | 0 | 59 | 92 | 94 | 44 | 16 | 14 | 13 | 9 | 5 | 5 | 2 | 1 | 0 | 0 | 1 | 355 | 6 - 7 |
| Total % | | 16.6 | 25.9 | 26.5 | 12.4 | 4.5 | 3.9 | 3.7 | 2.5 | 1.4 | 1.4 | 0.6 | 0.3 | 0.0 | 0.0 | 0.3 | | |

KLOA
Kenig, Lindgren, O'Hara, Aboona, Inc.

File Name : Porter Dr & IL 120 - Mid-morning
Site Code : 00000000
Start Date : 5/9/2013
Page No : 1

WESTBOUND 120

Directions Printed: Direction 1

| Start Time | Volume | 2 - 3 | 4 - 5 | 6 - 7 | 8 - 9 | 10 - 11 | 12 - 13 | 14 - 15 | 16 - 17 | 18 - 19 | 20 - 21 | 22 - 23 | 24 - 25 | 26 - 27 | 28 - 29 | >29 | Int. Total | Average |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 09:00 AM | 0 | 0 | 2 | 5 | 1 | 3 | 1 | 4 | 3 | 4 | 1 | 0 | 0 | 0 | 0 | 8 | 32 | 16 - 17 |
| 09:15 AM | 0 | 0 | 4 | 3 | 8 | 3 | 2 | 0 | 3 | 0 | 2 | 1 | 1 | 0 | 0 | 8 | 35 | 10 - 11 |
| 09:30 AM | 0 | 0 | 1 | 5 | 4 | 1 | 2 | 2 | 3 | 1 | 1 | 1 | 2 | 2 | 0 | 9 | 34 | 16 - 17 |
| 09:45 AM | 0 | 2 | 2 | 3 | 4 | 3 | 2 | 3 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 7 | 35 | 14 - 15 |
| Total | 0 | 2 | 9 | 16 | 17 | 10 | 7 | 9 | 10 | 6 | 5 | 3 | 4 | 4 | 2 | 32 | 136 | 14 - 15 |
| 10:00 AM | 0 | 0 | 0 | 7 | 2 | 5 | 6 | 1 | 3 | 0 | 1 | 0 | 0 | 1 | 1 | 7 | 34 | 12 - 13 |
| 10:15 AM | 0 | 0 | 0 | 8 | 6 | 2 | 3 | 3 | 1 | 0 | 0 | 1 | 0 | 1 | 0 | 9 | 34 | 12 - 13 |
| 10:30 AM | 0 | 0 | 2 | 3 | 3 | 7 | 2 | 2 | 1 | 3 | 1 | 1 | 1 | 0 | 0 | 8 | 34 | 14 - 15 |
| 10:45 AM | 0 | 0 | 1 | 2 | 9 | 3 | 1 | 0 | 1 | 1 | 2 | 1 | 0 | 1 | 1 | 8 | 31 | 12 - 13 |
| Total | 0 | 0 | 3 | 20 | 20 | 17 | 12 | 6 | 6 | 4 | 4 | 3 | 1 | 3 | 2 | 32 | 133 | 12 - 13 |
| 11:00 AM | 0 | 0 | 1 | 8 | 9 | 3 | 5 | 2 | 3 | 0 | 0 | 0 | 1 | 1 | 0 | 7 | 40 | 10 - 11 |
| 11:15 AM | 0 | 0 | 2 | 6 | 6 | 4 | 2 | 2 | 4 | 1 | 0 | 0 | 1 | 1 | 1 | 7 | 37 | 12 - 13 |
| 11:30 AM | 0 | 0 | 0 | 2 | 5 | 5 | 6 | 0 | 0 | 1 | 2 | 0 | 0 | 1 | 1 | 7 | 30 | 12 - 13 |
| 11:45 AM | 0 | 0 | 0 | 6 | 8 | 4 | 7 | 2 | 1 | 1 | 0 | 1 | 0 | 0 | 1 | 7 | 38 | 12 - 13 |
| Total | 0 | 0 | 3 | 22 | 28 | 16 | 20 | 6 | 8 | 3 | 2 | 1 | 2 | 3 | 3 | 28 | 145 | 12 - 13 |
| 12:00 PM | 0 | 0 | 2 | 9 | 5 | 2 | 0 | 1 | 0 | 3 | 1 | 1 | 0 | 2 | 0 | 8 | 34 | 10 - 11 |
| 12:15 PM | 0 | 0 | 2 | 2 | 7 | 3 | 3 | 1 | 2 | 2 | 1 | 0 | 0 | 0 | 1 | 8 | 32 | 12 - 13 |
| 12:30 PM | 0 | 0 | 5 | 12 | 2 | 5 | 5 | 3 | 1 | 0 | 1 | 1 | 1 | 0 | 1 | 5 | 42 | 10 - 11 |
| 12:45 PM | 0 | 0 | 2 | 2 | 9 | 4 | 4 | 3 | 1 | 1 | 0 | 0 | 0 | 1 | 0 | 8 | 35 | 12 - 13 |
| Total | 0 | 0 | 11 | 25 | 23 | 14 | 12 | 8 | 4 | 6 | 3 | 2 | 1 | 3 | 2 | 29 | 143 | 10 - 11 |
| Grand Total | 0 | 2 | 26 | 83 | 88 | 57 | 51 | 29 | 28 | 19 | 14 | 9 | 8 | 13 | 9 | 121 | 557 | 12 - 13 |
| Total % | | 0.4 | 4.7 | 14.9 | 15.8 | 10.2 | 9.2 | 5.2 | 5.0 | 3.4 | 2.5 | 1.6 | 1.4 | 2.3 | 1.6 | 21.7 | | |

KLOA
Kenig, Lindgren, O'Hara, Aboona, Inc.

File Name : Porter Dr & IL 120 - Mid-morning
Site Code : 00000000
Start Date : 5/9/2013
Page No : 1

Directions Printed: Combined

| Start Time | Volume | 2 - 3 | 4 - 5 | 6 - 7 | 8 - 9 | 10 - 11 | 12 - 13 | 14 - 15 | 16 - 17 | 18 - 19 | 20 - 21 | 22 - 23 | 24 - 25 | 26 - 27 | 28 - 29 | >29 | Int. Total | Average |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 09:00 AM | 0 | 6 | 10 | 9 | 7 | 6 | 3 | 0 | 2 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 44 | 6 - 7 |
| 09:15 AM | 0 | 7 | 10 | 15 | 6 | 5 | 3 | 1 | 0 | 1 | 0 | 0 | 1 | 0 | 1 | 2 | 52 | 6 - 7 |
| 09:30 AM | 0 | 4 | 10 | 18 | 1 | 4 | 4 | 1 | 2 | 4 | 0 | 0 | 0 | 1 | 0 | 0 | 49 | 6 - 7 |
| 09:45 AM | 0 | 8 | 5 | 10 | 6 | 4 | 3 | 3 | 2 | 1 | 1 | 2 | 0 | 1 | 1 | 0 | 47 | 8 - 9 |
| Total | 0 | 25 | 35 | 52 | 20 | 19 | 13 | 5 | 6 | 6 | 1 | 2 | 2 | 2 | 2 | 2 | 192 | 6 - 7 |
| 10:00 AM | 0 | 5 | 6 | 12 | 9 | 8 | 2 | 0 | 0 | 1 | 1 | 0 | 2 | 1 | 1 | 2 | 50 | 8 - 9 |
| 10:15 AM | 0 | 3 | 4 | 13 | 9 | 4 | 1 | 3 | 1 | 0 | 1 | 3 | 0 | 2 | 0 | 1 | 45 | 8 - 9 |
| 10:30 AM | 0 | 9 | 7 | 11 | 5 | 6 | 4 | 3 | 1 | 0 | 1 | 0 | 1 | 1 | 0 | 0 | 49 | 6 - 7 |
| 10:45 AM | 0 | 4 | 3 | 11 | 4 | 4 | 3 | 0 | 2 | 2 | 1 | 0 | 0 | 1 | 0 | 2 | 37 | 8 - 9 |
| Total | 0 | 21 | 20 | 47 | 27 | 22 | 10 | 6 | 4 | 3 | 4 | 3 | 3 | 5 | 1 | 5 | 181 | 8 - 9 |
| 11:00 AM | 0 | 8 | 8 | 8 | 6 | 5 | 5 | 2 | 2 | 1 | 1 | 0 | 1 | 0 | 1 | 0 | 48 | 8 - 9 |
| 11:15 AM | 0 | 13 | 10 | 12 | 5 | 4 | 2 | 3 | 2 | 2 | 1 | 0 | 0 | 1 | 0 | 1 | 56 | 6 - 7 |
| 11:30 AM | 0 | 3 | 9 | 8 | 9 | 7 | 5 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 44 | 8 - 9 |
| 11:45 AM | 0 | 3 | 10 | 8 | 9 | 6 | 3 | 1 | 2 | 1 | 0 | 2 | 0 | 1 | 0 | 0 | 46 | 8 - 9 |
| Total | 0 | 27 | 37 | 36 | 29 | 22 | 15 | 7 | 7 | 4 | 2 | 2 | 1 | 2 | 1 | 2 | 194 | 6 - 7 |
| 12:00 PM | 0 | 8 | 8 | 19 | 4 | 1 | 3 | 4 | 0 | 2 | 1 | 0 | 2 | 1 | 0 | 1 | 54 | 6 - 7 |
| 12:15 PM | 0 | 9 | 10 | 7 | 7 | 4 | 3 | 1 | 2 | 0 | 2 | 1 | 0 | 0 | 0 | 3 | 49 | 6 - 7 |
| 12:30 PM | 0 | 6 | 12 | 8 | 7 | 6 | 0 | 2 | 2 | 0 | 1 | 0 | 0 | 0 | 1 | 0 | 45 | 6 - 7 |
| 12:45 PM | 0 | 8 | 9 | 12 | 8 | 2 | 4 | 3 | 1 | 1 | 0 | 0 | 0 | 1 | 1 | 1 | 51 | 6 - 7 |
| Total | 0 | 31 | 39 | 46 | 26 | 13 | 10 | 10 | 5 | 3 | 4 | 1 | 2 | 2 | 2 | 5 | 199 | 6 - 7 |
| Grand Total | 0 | 104 | 131 | 181 | 102 | 76 | 48 | 28 | 22 | 16 | 11 | 8 | 8 | 11 | 6 | 14 | 766 | 6 - 7 |
| Total % | | 13.6 | 17.1 | 23.6 | 13.3 | 9.9 | 6.3 | 3.7 | 2.9 | 2.1 | 1.4 | 1.0 | 1.0 | 1.4 | 0.8 | 1.8 | | |

KLOA
Kenig, Lindgren, O'Hara, Aboona, Inc.

File Name : Porter Dr & IL 120 - Afternoon 1
Site Code : 00000000
Start Date : 5/14/2013
Page No : 1

WESTBOUND 120

Directions Printed: Direction 1

| Start Time | Volume | 2 - 3 | 4 - 5 | 6 - 7 | 8 - 9 | 10 - 11 | 12 - 13 | 14 - 15 | 16 - 17 | 18 - 19 | 20 - 21 | 22 - 23 | 24 - 25 | 26 - 27 | 28 - 29 | >29 | Int. Total | Average |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 01:00 PM | 0 | 0 | 2 | 4 | 8 | 4 | 2 | 4 | 0 | 0 | 0 | 1 | 0 | 1 | 1 | 8 | 35 | 10 - 11 |
| 01:15 PM | 0 | 0 | 2 | 7 | 3 | 1 | 0 | 3 | 2 | 4 | 0 | 0 | 1 | 1 | 1 | 7 | 32 | 16 - 17 |
| 01:30 PM | 0 | 0 | 7 | 8 | 4 | 5 | 5 | 0 | 1 | 1 | 0 | 2 | 0 | 1 | 1 | 6 | 41 | 10 - 11 |
| 01:45 PM | 0 | 0 | 0 | 7 | 5 | 6 | 1 | 0 | 2 | 1 | 0 | 1 | 0 | 2 | 1 | 8 | 34 | 10 - 11 |
| Total | 0 | 0 | 11 | 26 | 20 | 16 | 8 | 7 | 5 | 6 | 0 | 4 | 1 | 5 | 4 | 29 | 142 | 10 - 11 |
| Grand Total | 0 | 0 | 11 | 26 | 20 | 16 | 8 | 7 | 5 | 6 | 0 | 4 | 1 | 5 | 4 | 29 | 142 | 10 - 11 |
| Total % | | 0.0 | 7.7 | 18.3 | 14.1 | 11.3 | 5.6 | 4.9 | 3.5 | 4.2 | 0.0 | 2.8 | 0.7 | 3.5 | 2.8 | 20.4 | | |

KLOA
Kenig, Lindgren, O'Hara, Aboona, Inc.

File Name : Porter Dr & IL 120 - Afternoon 1
Site Code : 00000000
Start Date : 5/14/2013
Page No : 1

Directions Printed: Combined

| Start Time | Volume | 2 - 3 | 4 - 5 | 6 - 7 | 8 - 9 | 10 - 11 | 12 - 13 | 14 - 15 | 16 - 17 | 18 - 19 | 20 - 21 | 22 - 23 | 24 - 25 | 26 - 27 | 28 - 29 | >29 | Int. Total | Average |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 01:00 PM | 0 | 7 | 7 | 12 | 5 | 8 | 0 | 2 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 1 | 43 | 6 - 7 |
| 01:15 PM | 0 | 6 | 8 | 14 | 3 | 4 | 1 | 0 | 1 | 1 | 2 | 0 | 0 | 0 | 0 | 3 | 43 | 6 - 7 |
| 01:30 PM | 0 | 10 | 13 | 16 | 2 | 4 | 1 | 1 | 0 | 1 | 0 | 0 | 0 | 1 | 1 | 1 | 51 | 6 - 7 |
| 01:45 PM | 0 | 4 | 9 | 12 | 9 | 2 | 0 | 2 | 3 | 3 | 0 | 3 | 1 | 0 | 0 | 0 | 48 | 6 - 7 |
| Total | 0 | 27 | 37 | 54 | 19 | 18 | 2 | 5 | 4 | 5 | 3 | 3 | 1 | 1 | 1 | 5 | 185 | 6 - 7 |
| Grand Total | 0 | 27 | 37 | 54 | 19 | 18 | 2 | 5 | 4 | 5 | 3 | 3 | 1 | 1 | 1 | 5 | 185 | 6 - 7 |
| Total % | | 14.6 | 20.0 | 29.2 | 10.3 | 9.7 | 1.1 | 2.7 | 2.2 | 2.7 | 1.6 | 1.6 | 0.5 | 0.5 | 0.5 | 2.7 | | |

KLOA
Kenig, Lindgren, O'Hara, Aboona, Inc.

File Name : Porter Dr & IL 120 - Afternoon
Site Code : 00000000
Start Date : 5/9/2013
Page No : 1

WESTBOUND 120

Directions Printed: Direction 1

| Start Time | Volume | 2 - 3 | 4 - 5 | 6 - 7 | 8 - 9 | 10 - 11 | 12 - 13 | 14 - 15 | 16 - 17 | 18 - 19 | 20 - 21 | 22 - 23 | 24 - 25 | 26 - 27 | 28 - 29 | >29 | Int. Total | Average |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 01:45 PM | 0 | 0 | 5 | 1 | 6 | 5 | 3 | 1 | 3 | 1 | 3 | 1 | 0 | 1 | 0 | 6 | 36 | 12 - 13 |
| Total | 0 | 0 | 5 | 1 | 6 | 5 | 3 | 1 | 3 | 1 | 3 | 1 | 0 | 1 | 0 | 6 | 36 | 12 - 13 |
| 02:00 PM | 0 | 0 | 2 | 4 | 5 | 1 | 2 | 3 | 1 | 1 | 1 | 1 | 2 | 1 | 0 | 7 | 31 | 14 - 15 |
| 02:15 PM | 0 | 0 | 4 | 8 | 6 | 6 | 2 | 1 | 2 | 0 | 0 | 1 | 0 | 0 | 0 | 7 | 37 | 10 - 11 |
| 02:30 PM | 0 | 1 | 0 | 4 | 7 | 5 | 1 | 2 | 1 | 3 | 1 | 2 | 2 | 0 | 0 | 5 | 34 | 12 - 13 |
| 02:45 PM | 0 | 1 | 1 | 5 | 1 | 3 | 1 | 2 | 3 | 2 | 1 | 0 | 1 | 2 | 1 | 5 | 29 | 16 - 17 |
| Total | 0 | 2 | 7 | 21 | 19 | 15 | 6 | 8 | 7 | 6 | 3 | 4 | 5 | 3 | 1 | 24 | 131 | 12 - 13 |
| Grand Total | 0 | 2 | 12 | 22 | 25 | 20 | 9 | 9 | 10 | 7 | 6 | 5 | 5 | 4 | 1 | 30 | 167 | 12 - 13 |
| Total % | | 1.2 | 7.2 | 13.2 | 15.0 | 12.0 | 5.4 | 5.4 | 6.0 | 4.2 | 3.6 | 3.0 | 3.0 | 2.4 | 0.6 | 18.0 | | |

KLOA
Kenig, Lindgren, O'Hara, Aboona, Inc.

File Name : Porter Dr & IL 120 - Afternoon
Site Code : 00000000
Start Date : 5/9/2013
Page No : 1

Directions Printed: Combined

| Start Time | Volume | 2 - 3 | 4 - 5 | 6 - 7 | 8 - 9 | 10 - 11 | 12 - 13 | 14 - 15 | 16 - 17 | 18 - 19 | 20 - 21 | 22 - 23 | 24 - 25 | 26 - 27 | 28 - 29 | >29 | Int. Total | Average |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 01:45 PM | 0 | 5 | 9 | 9 | 9 | 4 | 3 | 2 | 1 | 2 | 0 | 2 | 1 | 1 | 0 | 0 | 48 | 8 - 9 |
| Total | 0 | 5 | 9 | 9 | 9 | 4 | 3 | 2 | 1 | 2 | 0 | 2 | 1 | 1 | 0 | 0 | 48 | 8 - 9 |
| 02:00 PM | 0 | 9 | 6 | 10 | 9 | 4 | 2 | 1 | 0 | 1 | 1 | 1 | 0 | 0 | 0 | 2 | 46 | 6 - 7 |
| 02:15 PM | 0 | 6 | 8 | 10 | 4 | 4 | 3 | 2 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 2 | 40 | 6 - 7 |
| 02:30 PM | 0 | 9 | 8 | 10 | 5 | 3 | 2 | 0 | 2 | 1 | 1 | 1 | 0 | 0 | 0 | 2 | 44 | 6 - 7 |
| 02:45 PM | 0 | 3 | 7 | 10 | 5 | 3 | 1 | 1 | 1 | 0 | 0 | 0 | 1 | 0 | 1 | 2 | 35 | 6 - 7 |
| Total | 0 | 27 | 29 | 40 | 23 | 14 | 8 | 4 | 3 | 2 | 3 | 2 | 1 | 0 | 1 | 8 | 165 | 6 - 7 |
| Grand Total | 0 | 32 | 38 | 49 | 32 | 18 | 11 | 6 | 4 | 4 | 3 | 4 | 2 | 1 | 1 | 8 | 213 | 6 - 7 |
| Total % | | 15.0 | 17.8 | 23.0 | 15.0 | 8.5 | 5.2 | 2.8 | 1.9 | 1.9 | 1.4 | 1.9 | 0.9 | 0.5 | 0.5 | 3.8 | | |

# Capacity Analyses
# Existing Conditions

HCS+: Signalized Intersections Release 5.5

Analyst: JM
Agency: KLOA, Inc.
Date: 10/18/2012
Period: A.M. Peak Hour
Project ID: 12-141
E/W St: IL 120

Inter.: IL 120/Hainesville Road
Area Type: All other areas
Jurisd: IDOT
Year : Existing Traffic

N/S St: Hainesville Road

SIGNALIZED INTERSECTION SUMMARY

| | Eastbound | | | Westbound | | | Northbound | | | Southbound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | L | T | R | L | T | R | L | T | R | L | T | R |
| No. Lanes | 1 | 1 | 0 | 1 | 1 | 0 | 0 | 1 | 0 | 1 | 1 | 0 |
| LGConfig | L | TR | | L | TR | | | LTR | | L | TR | |
| Volume | 284 | 860 | 14 | 4 | 528 | 112 | 3 | 6 | 12 | 319 | 10 | 327 |
| Lane Width | 12.0 | 12.0 | | 12.0 | 12.0 | | | 12.0 | | 12.0 | 12.0 | |
| RTOR Vol | | | 0 | | | 0 | | | 0 | | | 28 |

Duration 0.25 Area Type: All other areas

Signal Operations

| Phase Combination | | 1 | 2 | 3 | 4 | | | 5 | 6 | 7 | 8 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| EB | Left | A | A | | | NB | Left | A | | | |
| | Thru | A | A | | | | Thru | A | | | |
| | Right | A | A | | | | Right | A | | | |
| | Peds | | | | | | Peds | | | | |
| WB | Left | | A | | | SB | Left | | A | | |
| | Thru | | A | | | | Thru | | A | | |
| | Right | | A | | | | Right | | A | | |
| | Peds | | | | | | Peds | | | | |
| NB | Right | | | | | EB | Right | | | | |
| SB | Right | | | | | WB | Right | | | | |
| Green | | 9.0 | 58.0 | | | | | 4.0 | 32.0 | | |
| Yellow | | 3.0 | 4.0 | | | | | 3.0 | 3.0 | | |
| All Red | | 0.0 | 2.0 | | | | | 1.0 | 1.0 | | |

Cycle Length: 120.0 secs

Intersection Performance Summary

| Appr/ Lane Grp | Lane Group Capacity | Adj Sat Flow Rate (s) | Ratios v/c | Ratios g/C | Lane Group Delay | Lane Group LOS | Approach Delay | Approach LOS |
|---|---|---|---|---|---|---|---|---|
| Eastbound | | | | | | | | |
| L | 295 | 1719 | 1.01 | 0.61 | 92.2 | F | | |
| TR | 1052 | 1803 | 0.87 | 0.58 | 29.6 | C | 45.0 | D |
| Westbound | | | | | | | | |
| L | 122 | 252 | 0.03 | 0.48 | 16.4 | B | | |
| TR | 826 | 1708 | 0.82 | 0.48 | 32.8 | C | 32.7 | C |
| Northbound | | | | | | | | |
| LTR | 53 | 1588 | 0.42 | 0.03 | 62.1 | E | 62.1 | E |
| Southbound | | | | | | | | |
| L | 454 | 1703 | 0.74 | 0.27 | 46.6 | D | | |
| TR | 413 | 1550 | 0.79 | 0.27 | 50.8 | D | 48.6 | D |

Intersection Delay = 42.8 (sec/veh) Intersection LOS = D

Phone: Fax:
E-Mail:

## OPERATIONAL ANALYSIS

Analyst: JM
Agency/Co.: KLOA, Inc.
Date Performed: 10/18/2012
Analysis Time Period: A.M. Peak Hour
Intersection: IL 120/Hainesville Road
Area Type: All other areas
Jurisdiction: IDOT
Analysis Year: Existing Traffic
Project ID: 12-141
E/W St: IL 120 N/S St: Hainesville Road

## VOLUME DATA

| | Eastbound | | | Westbound | | | Northbound | | | Southbound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | L | T | R | L | T | R | L | T | R | L | T | R |
| Volume | 284 | 860 | 14 | 4 | 528 | 112 | 3 | 6 | 12 | 319 | 10 | 327 |
| % Heavy Veh | 5 | 5 | 14 | 0 | 8 | 10 | 0 | 17 | 8 | 6 | 0 | 5 |
| PHF | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| PK 15 Vol | 75 | 226 | 4 | 1 | 139 | 29 | 1 | 2 | 3 | 84 | 3 | 86 |
| Hi Ln Vol | | | | | | | | | | | | |
| % Grade | | 0 | | | 0 | | | 0 | | | 0 | |
| Ideal Sat | 1900 | 1900 | | 1900 | 1900 | | | 1900 | | 1900 | 1900 | |
| ParkExist | | | | | | | | | | | | |
| NumPark | | | | | | | | | | | | |
| No. Lanes | 1 | 1 | 0 | 1 | 1 | 0 | 0 | 1 | 0 | 1 | 1 | 0 |
| LGConfig | L | TR | | L | TR | | | LTR | | L | TR | |
| Lane Width | 12.0 | 12.0 | | 12.0 | 12.0 | | | 12.0 | | 12.0 | 12.0 | |
| RTOR Vol | | | 0 | | | 0 | | | 0 | | | 28 |
| Adj Flow | 299 | 920 | | 4 | 674 | | | 22 | | 336 | 326 | |
| %InSharedLn | | | | | | | | | | | | |
| Prop LTs | 1.000 | 0.000 | | 1.000 | 0.000 | | | 0.136 | | | 0.000 | |
| Prop RTs | | 0.016 | | | 0.175 | | 0.591 | | | | 0.966 | |
| Peds Bikes | | 0 | | | 0 | | 0 | | | | 0 | |
| Buses | 0 | 0 | | 0 | 0 | | | 0 | | 0 | 0 | |
| %InProtPhase | 0.0 | | | | | | | | | | | |
| Duration | 0.25 | | Area Type: All other areas | | | | | | | | | |

## OPERATING PARAMETERS

| | Eastbound | | | Westbound | | | Northbound | | | Southbound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | L | T | R | L | T | R | L | T | R | L | T | R |
| Init Unmet | 0.0 | 0.0 | | 0.0 | 0.0 | | | 0.0 | | 0.0 | 0.0 | |
| Arriv. Type | 3 | 3 | | 3 | 3 | | | 3 | | 3 | 3 | |
| Unit Ext. | 3.0 | 3.0 | | 3.0 | 3.0 | | | 3.0 | | 3.0 | 3.0 | |
| I Factor | | 1.000 | | | 1.000 | | | 1.000 | | | 1.000 | |
| Lost Time | 2.0 | 2.0 | | 2.0 | 2.0 | | | 2.0 | | 2.0 | 2.0 | |
| Ext of g | 2.0 | 2.0 | | 2.0 | 2.0 | | | 2.0 | | 2.0 | 2.0 | |
| Ped Min g | | 3.2 | | | 3.2 | | | 3.2 | | | 3.2 | |

## PHASE DATA

| Phase Combination | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|---|---|---|---|---|---|---|---|---|
| EB Left | A | A | | | NB Left | A | | |
| Thru | A | A | | | Thru | A | | |
| Right | A | A | | | Right | A | | |
| Peds | | | | | Peds | | | |
| WB Left | | A | | | SB Left | | A | |
| Thru | | A | | | Thru | | A | |
| Right | | A | | | Right | | A | |
| Peds | | | | | Peds | | | |
| NB Right | | | | | EB Right | | | |
| SB Right | | | | | WB Right | | | |
| Green | 9.0 | 58.0 | | | 4.0 | 32.0 | | |
| Yellow | 3.0 | 4.0 | | | 3.0 | 3.0 | | |
| All Red | 0.0 | 2.0 | | | 1.0 | 1.0 | | |

Cycle Length: 120.0 secs

## VOLUME ADJUSTMENT AND SATURATION FLOW WORKSHEET

Volume Adjustment

| | Eastbound | | | Westbound | | | Northbound | | | Southbound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | L | T | R | L | T | R | L | T | R | L | T | R |
| Volume, V | 284 | 860 | 14 | 4 | 528 | 112 | 3 | 6 | 12 | 319 | 10 | 327 |
| PHF | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| Adj flow | 299 | 905 | 15 | 4 | 556 | 118 | 3 | 6 | 13 | 336 | 11 | 315 |
| No. Lanes | 1 | 1 | 0 | 1 | 1 | 0 | 0 | 1 | 0 | 1 | 1 | 0 |
| Lane group | L | TR | | L | TR | | | LTR | | L | TR | |
| Adj flow | 299 | 920 | | 4 | 674 | | | 22 | | 336 | 326 | |
| Prop LTs | 1.000 | 0.000 | | 1.000 | 0.000 | | | 0.136 | | | 0.000 | |
| Prop RTs | 0.016 | | | 0.175 | | | 0.591 | | | 0.966 | | |

Saturation Flow Rate (see Exhibit 16-7 to determine the adjustment factors)

| | Eastbound | | | Westbound | | | Northbound | | | Southbound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| LG | L | TR | | L | TR | | | LTR | | L | TR | |
| So | 1900 | 1900 | | 1900 | 1900 | | | 1900 | | 1900 | 1900 | |
| Lanes | 1 | 1 | 0 | 1 | 1 | 0 | 0 | 1 | 0 | 1 | 1 | 0 |
| fW | 1.000 | 1.000 | | 1.000 | 1.000 | | | 1.000 | | 1.000 | 1.000 | |
| fHV | 0.952 | 0.951 | | 1.000 | 0.923 | | | 0.914 | | 0.943 | 0.954 | |
| fG | 1.000 | 1.000 | | 1.000 | 1.000 | | | 1.000 | | 1.000 | 1.000 | |
| fP | 1.000 | 1.000 | | 1.000 | 1.000 | | | 1.000 | | 1.000 | 1.000 | |
| fBB | 1.000 | 1.000 | | 1.000 | 1.000 | | | 1.000 | | 1.000 | 1.000 | |
| fA | 1.000 | 1.000 | | 1.000 | 1.000 | | | 1.000 | | 1.000 | 1.000 | |
| fLU | 1.000 | 1.000 | | 1.000 | 1.000 | | | 1.000 | | 1.000 | 1.000 | |
| fRT | | 0.998 | | | 0.974 | | | 0.920 | | | 0.855 | |
| fLT | 0.950 | 1.000 | | 0.133 | 1.000 | | | 0.993 | | 0.950 | 1.000 | |
| Sec. | 0.172 | | | | | | | | | | | |
| fLpb | 1.000 | 1.000 | | 1.000 | 1.000 | | | 1.000 | | 1.000 | 1.000 | |
| fRpb | | 1.000 | | | 1.000 | | | 1.000 | | | 1.000 | |
| S | 1719 | 1803 | | 252 | 1708 | | | 1588 | | 1703 | 1550 | |
| Sec. | 311 | | | | | | | | | | | |

## CAPACITY AND LOS WORKSHEET

Capacity Analysis and Lane Group Capacity

| Appr/ Mvmt | Lane Group | Adj Flow Rate (v) | Adj Sat Flow Rate (s) | Flow Ratio (v/s) | Green Ratio (g/C) | --Lane Group-- Capacity (c) | v/c Ratio |
|---|---|---|---|---|---|---|---|
| Eastbound | | | | | | | |
| Prot | | 129 | 1719 | # 0.08 | 0.075 | 129 | 1.00 |
| Perm | | 170 | 311 | # 0.55 | 0.533 | 166 | 1.02 |
| Left | L | 299 | | | 0.61 | 295 | 1.01 |
| Prot | | | | | | | |
| Perm | | | | | | | |
| Thru | TR | 920 | 1803 | 0.51 | 0.58 | 1052 | 0.87 |
| Right | | | | | | | |
| Westbound | | | | | | | |
| Prot | | | | | | | |
| Perm | | | | | | | |
| Left | L | 4 | 252 | 0.02 | 0.48 | 122 | 0.03 |
| Prot | | | | | | | |
| Perm | | | | | | | |
| Thru | TR | 674 | 1708 | 0.39 | 0.48 | 826 | 0.82 |
| Right | | | | | | | |
| Northbound | | | | | | | |
| Prot | | | | | | | |
| Perm | | | | | | | |
| Left | | | | | | | |
| Prot | | | | | | | |
| Perm | | | | | | | |
| Thru | LTR | 22 | 1588 | # 0.01 | 0.03 | 53 | 0.42 |
| Right | | | | | | | |
| Southbound | | | | | | | |
| Prot | | | | | | | |
| Perm | | | | | | | |
| Left | L | 336 | 1703 | 0.20 | 0.27 | 454 | 0.74 |
| Prot | | | | | | | |
| Perm | | | | | | | |
| Thru | TR | 326 | 1550 | # 0.21 | 0.27 | 413 | 0.79 |
| Right | | | | | | | |

Sum of flow ratios for critical lane groups, Yc = Sum (v/s) = 0.85
Total lost time per cycle, L = 14.00 sec
Critical flow rate to capacity ratio, Xc = (Yc)(C)/(C-L) = 0.96

Control Delay and LOS Determination

| Appr/ Lane Grp | Ratios v/c | Ratios g/C | Unf Del d1 | Prog Adj Fact | Lane Grp Cap | Incremental Factor k | Incremental Del d2 | Res Del d3 | Lane Group Delay | Lane Group LOS | Approach Delay | Approach LOS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Eastbound | | | | | | | | | | | | |
| L | 1.01 | 0.61 | 36.3 | 1.000 | 295 | 0.50 | 55.9 | 0.0 | 92.2 | F | | |
| TR | 0.87 | 0.58 | 21.3 | 1.000 | 1052 | 0.40 | 8.4 | 0.0 | 29.6 | C | 45.0 | D |
| Westbound | | | | | | | | | | | | |
| L | 0.03 | 0.48 | 16.3 | 1.000 | 122 | 0.11 | 0.1 | 0.0 | 16.4 | B | | |
| TR | 0.82 | 0.48 | 26.4 | 1.000 | 826 | 0.36 | 6.4 | 0.0 | 32.8 | C | 32.7 | C |
| Northbound | | | | | | | | | | | | |
| LTR | 0.42 | 0.03 | 56.9 | 1.000 | 53 | 0.11 | 5.2 | 0.0 | 62.1 | E | 62.1 | E |
| Southbound | | | | | | | | | | | | |
| L | 0.74 | 0.27 | 40.2 | 1.000 | 454 | 0.30 | 6.4 | 0.0 | 46.6 | D | | |
| TR | 0.79 | 0.27 | 40.9 | 1.000 | 413 | 0.34 | 9.9 | 0.0 | 50.8 | D | 48.6 | D |

Intersection delay = 42.8 (sec/veh) Intersection LOS = D

## SUPPLEMENTAL PERMITTED LT WORKSHEET
for exclusive lefts

Input

| | EB | WB | NB | SB |
|---|---|---|---|---|
| Opposed by Single(S) or Multiple(M) lane approach | | | | |
| Cycle length, C 120.0 sec | | | | |
| Total actual green time for LT lane group, G (s) | 70.0 | 58.0 | | |
| Effective permitted green time for LT lane group, g(s) | 64.0 | 58.0 | | |
| Opposing effective green time, go (s) | 58.0 | 70.0 | | |
| Number of lanes in LT lane group, N | 1 | 1 | | |
| Number of lanes in opposing approach, No | 1 | 1 | | |
| Adjusted LT flow rate, VLT (veh/h) | 299 | 4 | | |
| Proportion of LT in LT lane group, PLT | 1.000 | 1.000 | | |
| Proportion of LT in opposing flow, PLTo | 0.00 | 0.00 | | |
| Adjusted opposing flow rate, Vo (veh/h) | 674 | 920 | | |
| Lost time for LT lane group, tL | 6.00 | 6.00 | | |
| Computation | | | | |
| LT volume per cycle, LTC=VLTC/3600 | 9.97 | 0.13 | | |
| Opposing lane util. factor, fLUo | 1.000 | 1.000 | 1.000 | 1.000 |
| Opposing flow, Volc=VoC/[3600(No)fLUo] (veh/ln/cyc) | 22.47 | 30.67 | | |
| gf=G[exp(- a * (LTC ** b))]-tl, gf<=g | 0.0 | 0.0 | | |
| Opposing platoon ratio, Rpo (refer Exhibit 16-11) | 1.00 | 1.00 | | |
| Opposing Queue Ratio, qro=Max[1-Rpo(go/C),0] | 0.52 | 0.42 | | |
| gq, (see Exhibit C16-4,5,6,7,8) | 37.11 | 34.27 | | |
| gu=g-gq if gq>=gf, or = g-gf if gq<gf | 26.89 | 23.73 | | |
| n=Max(gq-gf)/2,0) | 18.56 | 17.14 | | |
| PTHo=1-PLTo | 1.00 | 1.00 | | |
| PL*=PLT[1+(N-1)g/(gf+gu/EL1+4.24)] | 1.00 | 1.00 | | |
| EL1 (refer to Exhibit C16-3) | 2.45 | 3.08 | | |
| EL2=Max((1-Ptho**n)/Plto, 1.0) | | | | |
| fmin=2(1+PL)/g or fmin=2(1+Pl)/g | 0.06 | 0.07 | | |
| gdiff=max(gq-gf,0) | 0.00 | 0.00 | | |
| fm=[gf/g]+[gu/g]/[1+PL(EL1-1)], (min=fmin;max=1.00) | 0.17 | 0.13 | | |
| flt=fm=[gf/g]+[gu/g]/[1+PL(EL1-1)]+[gdiff/g]/[1+PL(EL2-1)],(fmin<=fm<=1.00) | | | | |
| or flt=[fm+0.91(N-1)]/N** | | | | |
| Left-turn adjustment, fLT | 0.172 | 0.133 | | |

For special case of single-lane approach opposed by multilane approach, see text.

* If Pl>=1 for shared left-turn lanes with N>1, then assume de-facto left-turn lane and redo calculations.

** For permitted left-turns with multiple exclusive left-turn lanes, flt=fm.

For special case of multilane approach opposed by single-lane approach or when gf>gq, see text.

## SUPPLEMENTAL PERMITTED LT WORKSHEET
for shared lefts

Input

| | EB | WB | NB | SB |
|---|---|---|---|---|
| Opposed by Single(S) or Multiple(M) lane approach | | | | |
| Cycle length, C 120.0 sec | | | | |
| Total actual green time for LT lane group, G (s) | | | | |
| Effective permitted green time for LT lane group, g(s) | | | | |
| Opposing effective green time, go (s) | | | | |
| Number of lanes in LT lane group, N | | | | |

Number of lanes in opposing approach, No
Adjusted LT flow rate, VLT (veh/h)
Proportion of LT in LT lane group, PLT 0.000 0.000 0.136 0.000
Proportion of LT in opposing flow, PLTo
Adjusted opposing flow rate, Vo (veh/h)
Lost time for LT lane group, tL
Computation
LT volume per cycle, LTC=VLTC/3600
Opposing lane util. factor, fLUo 1.000 1.000 1.000 1.000
Opposing flow, Volc=VoC/[3600(No)fLUo] (veh/ln/cyc)
gf=G[exp(- a * (LTC ** b)]-tl, gf<=g
Opposing platoon ratio, Rpo (refer Exhibit 16-11)
Opposing Queue Ratio, qro=Max[1-Rpo(go/C),0]
gq, (see Exhibit C16-4,5,6,7,8)
gu=g-gq if gq>=gf, or = g-gf if gq<gf
n=Max(gq-gf)/2,0)
PTHo=1-PLTo
PL*=PLT[1+(N-1)g/(gf+gu/EL1+4.24)]
EL1 (refer to Exhibit C16-3)
EL2=Max((1-Ptho**n)/Plto, 1.0)
fmin=2(1+PL)/g or fmin=2(1+Pl)/g
gdiff=max(gq-gf,0)
fm=[gf/g]+[gu/g]/[1+PL(EL1-1)], (min=fmin;max=1.00)
flt=fm=[gf/g]+[gu/g]/[1+PL(EL1-1)]+[gdiff/g]/[1+PL(EL2-1)],(fmin<=fm<=1.00)
or flt=[fm+0.91(N-1)]/N**
Left-turn adjustment, fLT

For special case of single-lane approach opposed by multilane approach, see text.
* If Pl>=1 for shared left-turn lanes with N>1, then assume de-facto left-turn lane and redo calculations.
** For permitted left-turns with multiple exclusive left-turn lanes, flt=fm.
For special case of multilane approach opposed by single-lane approach or when gf>gq, see text.

## SUPPLEMENTAL PEDESTRIAN-BICYCLE EFFECTS WORKSHEET

Permitted Left Turns

| | EB | WB | NB | SB |
|---|---|---|---|---|
| Effective pedestrian green time, gp (s) | | | | |
| Conflicting pedestrian volume, Vped (p/h) | | | | |
| Pedestrian flow rate, Vpedg (p/h) | | | | |
| OCCpedg | | | | |
| Opposing queue clearing green, gq (s) | | | | |
| Eff. ped. green consumed by opp. veh. queue, gq/gp | | | | |
| OCCpedu | | | | |
| Opposing flow rate, Vo (veh/h) | | | | |
| OCCr | | | | |
| Number of cross-street receiving lanes, Nrec | | | | |
| Number of turning lanes, Nturn | | | | |
| ApbT | | | | |
| Proportion of left turns, PLT | | | | |
| Proportion of left turns using protected phase, PLTA | | | | |
| Left-turn adjustment, fLpb | | | | |
| Permitted Right Turns | | | | |
| Effective pedestrian green time, gp (s) | | | | |
| Conflicting pedestrian volume, Vped (p/h) | | | | |
| Conflicting bicycle volume, Vbic (bicycles/h) | | | | |
| Vpedg | | | | |
| OCCpedg | | | | |
| Effective green, g (s) | | | | |
| Vbicg | | | | |

OCCbicg
OCCr
Number of cross-street receiving lanes, Nrec
Number of turning lanes, Nturn
ApbT
Proportion right-turns, PRT
Proportion right-turns using protected phase, PRTA
Right turn adjustment, fRpb

## SUPPLEMENTAL UNIFORM DELAY WORKSHEET

| | | EBLT | WBLT | NBLT | SBLT |
|---|---|---|---|---|---|
| Cycle length, C | 120.0 sec | | | | |
| Adj. LT vol from Vol Adjustment Worksheet, v | | 299 | | | |
| v/c ratio from Capacity Worksheet, X | | 1.01 | | | |
| Protected phase effective green interval, g (s) | | 9.0 | | | |
| Opposing queue effective green interval, gq | | 37.11 | | | |
| Unopposed green interval, gu | | 26.89 | | | |
| Red time r=(C-g-gq-gu) | | 47.0 | | | |
| Arrival rate, qa=v/(3600(max[X,1.0])) | | 0.08 | | | |
| Protected ph. departure rate, Sp=s/3600 | | 0.478 | | | |
| Permitted ph. departure rate, Ss=s(gq+gu)/(gu*3600) | | 0.21 | | | |
| XPerm | | 0.95 | | | |
| XProt | | 1.07 | | | |
| Case | | 2 | | | |
| Queue at beginning of green arrow, Qa | | 3.85 | | | |
| Queue at beginning of unsaturated green, Qu | | 5.78 | | | |
| Residual queue, Qr | | 0.29 | | | |
| Uniform Delay, d1 | | 36.3 | | | |

## DELAY/LOS WORKSHEET WITH INITIAL QUEUE

| Appr/ Lane Group | Initial Unmet Demand Q veh | Dur. Unmet Demand t hrs. | Uniform Delay Unadj. ds | Uniform Delay Adj. d1 sec | Initial Queue Param. u | Final Unmet Demand Q veh | Initial Queue Delay d3 sec | Lane Group Delay d sec |
|---|---|---|---|---|---|---|---|---|
| Eastbound | | | | | | | | |
| L | 0.0 | 0.00 | | 36.3 | 0.00 | 1.0 | 0.0 | 92.2 |
| TR | 0.0 | 0.00 | 25.0 | 21.3 | 0.00 | 0.0 | 0.0 | 29.6 |
| | 0.0 | | | | | | 0.0 | |
| Westbound | | | | | | | | |
| L | 0.0 | 0.00 | 31.0 | 16.3 | 0.00 | 0.0 | 0.0 | 16.4 |
| TR | 0.0 | 0.00 | 31.0 | 26.4 | 0.00 | 0.0 | 0.0 | 32.8 |
| | 0.0 | | | | | | 0.0 | |
| Northbound | | | | | | | | |
| | 0.0 | | | | | | 0.0 | |
| LTR | 0.0 | 0.00 | 58.0 | 56.9 | 0.00 | 0.0 | 0.0 | 62.1 |
| | 0.0 | | | | | | 0.0 | |
| Southbound | | | | | | | | |
| L | 0.0 | 0.00 | 44.0 | 40.2 | 0.00 | 0.0 | 0.0 | 46.6 |
| TR | 0.0 | 0.00 | 44.0 | 40.9 | 0.00 | 0.0 | 0.0 | 50.8 |
| | 0.0 | | | | | | 0.0 | |

Intersection Delay 42.8 sec/veh Intersection LOS D

## BACK OF QUEUE WORKSHEET

| | Eastbound | | | Westbound | | | Northbound | | | Southbound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| LaneGroup | L | TR | | L | TR | | | LTR | | L | TR | |
| Init Queue | 0.0 | 0.0 | | 0.0 | 0.0 | | | 0.0 | | 0.0 | 0.0 | |
| Flow Rate | 299 | 920 | | 4 | 674 | | | 22 | | 336 | 326 | |
| So | 1900 | 1900 | | 1900 | 1900 | | | 1900 | | 1900 | 1900 | |
| No.Lanes | 1 | 1 | 0 | 1 | 1 | 0 | 0 | 1 | 0 | 1 | 1 | 0 |
| SL | 485 | 1803 | | 252 | 1708 | | | 1588 | | 1703 | 1550 | |
| LnCapacity | 295 | 1052 | | 122 | 826 | | | 53 | | 454 | 413 | |
| Flow Ratio | 0.6 | 0.5 | | 0.0 | 0.4 | | | 0.0 | | 0.2 | 0.2 | |
| v/c Ratio | 1.01 | 0.87 | | 0.03 | 0.82 | | | 0.42 | | 0.74 | 0.79 | |
| Grn Ratio | 0.61 | 0.58 | | 0.48 | 0.48 | | | 0.03 | | 0.27 | 0.27 | |
| I Factor | | 1.000 | | | 1.000 | | | 1.000 | | | 1.000 | |
| AT or PVG | 3 | 3 | | 3 | 3 | | | 3 | | 3 | 3 | |
| Pltn Ratio | 1.00 | 1.00 | | 1.00 | 1.00 | | | 1.00 | | 1.00 | 1.00 | |
| PF2 | 1.00 | 1.00 | | 1.00 | 1.00 | | | 1.00 | | 1.00 | 1.00 | |
| Q1 | 4.2 | 26.1 | | 0.1 | 19.2 | | | 0.7 | | 10.2 | 10.1 | |
| kB | 0.4 | 0.8 | | 0.2 | 0.7 | | | 0.1 | | 0.5 | 0.5 | |
| Q2 | 4.0 | 4.6 | | 0.0 | 2.8 | | | 0.1 | | 1.3 | 1.6 | |
| Q Average | 8.3 | 30.7 | | 0.1 | 22.0 | | | 0.8 | | 11.6 | 11.7 | |
| Q Spacing | 25.0 | 25.0 | | 25.0 | 25.0 | | | 25.0 | | 25.0 | 25.0 | |
| Q Storage | 0 | 0 | | 0 | 0 | | | 0 | | 0 | 0 | |
| Q S Ratio | | | | | | | | | | | | |
| 70th Percentile Output: | | | | | | | | | | | | |
| fB% | 1.2 | 1.1 | | 1.2 | 1.2 | | | 1.2 | | 1.2 | 1.2 | |
| BOQ | 9.8 | 35.2 | | 0.1 | 25.5 | | | 1.0 | | 13.6 | 13.7 | |
| QSRatio | | | | | | | | | | | | |
| 85th Percentile Output: | | | | | | | | | | | | |
| fB% | 1.5 | 1.4 | | 1.6 | 1.4 | | | 1.6 | | 1.5 | 1.5 | |
| BOQ | 12.6 | 43.2 | | 0.1 | 31.8 | | | 1.3 | | 17.4 | 17.5 | |
| QSRatio | | | | | | | | | | | | |
| 90th Percentile Output: | | | | | | | | | | | | |
| fB% | 1.7 | 1.5 | | 1.8 | 1.5 | | | 1.8 | | 1.6 | 1.6 | |
| BOQ | 13.8 | 45.6 | | 0.1 | 33.7 | | | 1.5 | | 18.8 | 18.9 | |
| QSRatio | | | | | | | | | | | | |
| 95th Percentile Output: | | | | | | | | | | | | |
| fB% | 1.9 | 1.6 | | 2.1 | 1.7 | | | 2.1 | | 1.8 | 1.8 | |
| BOQ | 15.5 | 49.4 | | 0.2 | 36.9 | | | 1.7 | | 21.0 | 21.2 | |
| QSRatio | | | | | | | | | | | | |
| 98th Percentile Output: | | | | | | | | | | | | |
| fB% | 2.2 | 1.8 | | 2.7 | 1.9 | | | 2.6 | | 2.1 | 2.1 | |
| BOQ | 18.4 | 55.1 | | 0.2 | 41.4 | | | 2.2 | | 24.4 | 24.6 | |
| QSRatio | | | | | | | | | | | | |

## ERROR MESSAGES

No errors to report.

HCS+: Signalized Intersections Release 5.5

Analyst: JM
Agency: KLOA, Inc.
Date: 10/18/2012
Period: P.M. Peak Hour
Project ID: 12-141
E/W St: IL 120

Inter.: IL 120/Hainesville Road
Area Type: All other areas
Jurisd: IDOT
Year : Existing Traffic

N/S St: Hainesville Road

SIGNALIZED INTERSECTION SUMMARY

| | Eastbound | | | Westbound | | | Northbound | | | Southbound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | L | T | R | L | T | R | L | T | R | L | T | R |
| No. Lanes | 1 | 1 | 0 | 1 | 1 | 0 | 0 | 1 | 0 | 1 | 1 | 0 |
| LGConfig | L | TR | | L | TR | | | LTR | | L | TR | |
| Volume | 300 | 713 | 2 | 7 | 760 | 128 | 13 | 12 | 11 | 126 | 6 | 378 |
| Lane Width | 12.0 | 12.0 | | 12.0 | 12.0 | | | 12.0 | | 12.0 | 12.0 | |
| RTOR Vol | | | 0 | | | 0 | | | 0 | | | 39 |

Duration 0.25 Area Type: All other areas

Signal Operations

| Phase Combination | 1 | 2 | 3 | 4 | | | 5 | 6 | 7 | 8 |
|---|---|---|---|---|---|---|---|---|---|---|
| EB Left | A | A | | | NB | Left | A | | | |
| Thru | A | A | | | | Thru | A | | | |
| Right | A | A | | | | Right | A | | | |
| Peds | | | | | | Peds | | | | |
| WB Left | | A | | | SB | Left | | A | | |
| Thru | | A | | | | Thru | | A | | |
| Right | | A | | | | Right | | A | | |
| Peds | | | | | | Peds | | | | |
| NB Right | | | | | EB | Right | | | | |
| SB Right | | | | | WB | Right | | | | |
| Green | 22.0 | 87.0 | | | | | 4.0 | 30.0 | | |
| Yellow | 3.0 | 4.0 | | | | | 3.0 | 3.0 | | |
| All Red | 0.0 | 2.0 | | | | | 1.0 | 1.0 | | |

Cycle Length: 160.0 secs

Intersection Performance Summary

| Appr/ Lane Grp | Lane Group Capacity | Adj Sat Flow Rate (s) | Ratios v/c | Ratios g/C | Lane Group Delay | Lane Group LOS | Approach Delay | Approach LOS |
|---|---|---|---|---|---|---|---|---|
| Eastbound | | | | | | | | |
| L | 293 | 1752 | 1.08 | 0.72 | 132.8 | F | | |
| TR | 1278 | 1826 | 0.59 | 0.70 | 13.0 | B | 48.4 | D |
| Westbound | | | | | | | | |
| L | 330 | 607 | 0.02 | 0.54 | 16.9 | B | | |
| TR | 964 | 1773 | 0.97 | 0.54 | 57.1 | E | 56.8 | E |
| Northbound | | | | | | | | |
| LTR | 39 | 1573 | 1.00 | 0.03 | 222.1 | F | 222.1 | F |
| Southbound | | | | | | | | |
| L | 329 | 1752 | 0.40 | 0.19 | 58.0 | E | | |
| TR | 294 | 1569 | 1.23 | 0.19 | 196.5 | F | 159.3 | F |

Intersection Delay = 75.8 (sec/veh) Intersection LOS = E

Phone: Fax:
E-Mail:

## OPERATIONAL ANALYSIS

Analyst: JM
Agency/Co.: KLOA, Inc.
Date Performed: 10/18/2012
Analysis Time Period: P.M. Peak Hour
Intersection: IL 120/Hainesville Road
Area Type: All other areas
Jurisdiction: IDOT
Analysis Year: Existing Traffic
Project ID: 12-141
E/W St: IL 120 N/S St: Hainesville Road

## VOLUME DATA

| | Eastbound | | | Westbound | | | Northbound | | | Southbound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | L | T | R | L | T | R | L | T | R | L | T | R |
| Volume | 300 | 713 | 2 | 7 | 760 | 128 | 13 | 12 | 11 | 126 | 6 | 378 |
| % Heavy Veh | 3 | 4 | 0 | 14 | 5 | 4 | 0 | 8 | 36 | 3 | 17 | 3 |
| PHF | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| PK 15 Vol | 79 | 188 | 1 | 2 | 200 | 34 | 4 | 3 | 3 | 33 | 2 | 99 |
| Hi Ln Vol | | | | | | | | | | | | |
| % Grade | | 0 | | | 0 | | | 0 | | | 0 | |
| Ideal Sat | 1900 | 1900 | | 1900 | 1900 | | | 1900 | | 1900 | 1900 | |
| ParkExist | | | | | | | | | | | | |
| NumPark | | | | | | | | | | | | |
| No. Lanes | 1 | 1 | 0 | 1 | 1 | 0 | 0 | 1 | 0 | 1 | 1 | 0 |
| LGConfig | L | TR | | L | TR | | | LTR | | L | TR | |
| Lane Width | 12.0 | 12.0 | | 12.0 | 12.0 | | | 12.0 | | 12.0 | 12.0 | |
| RTOR Vol | | | 0 | | | 0 | | | 0 | | | 39 |
| Adj Flow | 316 | 753 | | 7 | 935 | | | 39 | | 133 | 363 | |
| %InSharedLn | | | | | | | | | | | | |
| Prop LTs | 1.000 | 0.000 | | 1.000 | 0.000 | | | 0.359 | | | 0.000 | |
| Prop RTs | | 0.003 | | | 0.144 | | 0.308 | | | 0.983 | | |
| Peds Bikes | | 0 | | | 0 | | 0 | | | 0 | | |
| Buses | 0 | 0 | | 0 | 0 | | | 0 | | 0 | 0 | |
| %InProtPhase | 0.0 | | | | | | | | | | | |
| Duration | 0.25 | | Area Type: All other areas | | | | | | | | | |

## OPERATING PARAMETERS

| | Eastbound | | | Westbound | | | Northbound | | | Southbound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | L | T | R | L | T | R | L | T | R | L | T | R |
| Init Unmet | 0.0 | 0.0 | | 0.0 | 0.0 | | | 0.0 | | 0.0 | 0.0 | |
| Arriv. Type | 3 | 3 | | 3 | 3 | | | 3 | | 3 | 3 | |
| Unit Ext. | 3.0 | 3.0 | | 3.0 | 3.0 | | | 3.0 | | 3.0 | 3.0 | |
| I Factor | | 1.000 | | | 1.000 | | | 1.000 | | | 1.000 | |
| Lost Time | 2.0 | 2.0 | | 2.0 | 2.0 | | | 2.0 | | 2.0 | 2.0 | |
| Ext of g | 2.0 | 2.0 | | 2.0 | 2.0 | | | 2.0 | | 2.0 | 2.0 | |
| Ped Min g | | 3.2 | | | 3.2 | | | 3.2 | | | 3.2 | |

## PHASE DATA

| Phase Combination | | 1 | 2 | 3 | 4 | | | 5 | 6 | 7 | 8 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| EB | Left | A | A | | | NB | Left | A | | | |
| | Thru | A | A | | | | Thru | A | | | |
| | Right | A | A | | | | Right | A | | | |
| | Peds | | | | | | Peds | | | | |
| WB | Left | | A | | | SB | Left | | A | | |
| | Thru | | A | | | | Thru | | A | | |
| | Right | | A | | | | Right | | A | | |
| | Peds | | | | | | Peds | | | | |
| NB | Right | | | | | EB | Right | | | | |
| SB | Right | | | | | WB | Right | | | | |
| Green | | 22.0 | 87.0 | | | | | 4.0 | 30.0 | | |
| Yellow | | 3.0 | 4.0 | | | | | 3.0 | 3.0 | | |
| All Red | | 0.0 | 2.0 | | | | | 1.0 | 1.0 | | |

Cycle Length: 160.0 secs

## VOLUME ADJUSTMENT AND SATURATION FLOW WORKSHEET

Volume Adjustment

| | Eastbound | | | Westbound | | | Northbound | | | Southbound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | L | T | R | L | T | R | L | T | R | L | T | R |
| Volume, V | 300 | 713 | 2 | 7 | 760 | 128 | 13 | 12 | 11 | 126 | 6 | 378 |
| PHF | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| Adj flow | 316 | 751 | 2 | 7 | 800 | 135 | 14 | 13 | 12 | 133 | 6 | 357 |
| No. Lanes | 1 | 1 | 0 | 1 | 1 | 0 | 0 | 1 | 0 | 1 | 1 | 0 |
| Lane group | L | TR | | L | TR | | | LTR | | L | TR | |
| Adj flow | 316 | 753 | | 7 | 935 | | | 39 | | 133 | 363 | |
| Prop LTs | 1.000 | 0.000 | | 1.000 | 0.000 | | | 0.359 | | | 0.000 | |
| Prop RTs | | 0.003 | | | 0.144 | | | 0.308 | | | 0.983 | |

Saturation Flow Rate (see Exhibit 16-7 to determine the adjustment factors)

| | Eastbound | | | Westbound | | | Northbound | | | Southbound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| LG | L | TR | | L | TR | | | LTR | | L | TR | |
| So | 1900 | 1900 | | 1900 | 1900 | | | 1900 | | 1900 | 1900 | |
| Lanes | 1 | 1 | 0 | 1 | 1 | 0 | 0 | 1 | 0 | 1 | 1 | 0 |
| fW | 1.000 | 1.000 | | 1.000 | 1.000 | | | 1.000 | | 1.000 | 1.000 | |
| fHV | 0.971 | 0.962 | | 0.877 | 0.954 | | | 0.879 | | 0.971 | 0.969 | |
| fG | 1.000 | 1.000 | | 1.000 | 1.000 | | | 1.000 | | 1.000 | 1.000 | |
| fP | 1.000 | 1.000 | | 1.000 | 1.000 | | | 1.000 | | 1.000 | 1.000 | |
| fBB | 1.000 | 1.000 | | 1.000 | 1.000 | | | 1.000 | | 1.000 | 1.000 | |
| fA | 1.000 | 1.000 | | 1.000 | 1.000 | | | 1.000 | | 1.000 | 1.000 | |
| fLU | 1.000 | 1.000 | | 1.000 | 1.000 | | | 1.000 | | 1.000 | 1.000 | |
| fRT | | 1.000 | | | 0.978 | | | 0.958 | | | 0.852 | |
| fLT | 0.950 | 1.000 | | 0.364 | 1.000 | | | 0.982 | | 0.950 | 1.000 | |
| Sec. | 0.049 | | | | | | | | | | | |
| fLpb | 1.000 | 1.000 | | 1.000 | 1.000 | | | 1.000 | | 1.000 | 1.000 | |
| fRpb | | 1.000 | | | 1.000 | | | 1.000 | | | 1.000 | |
| S | 1752 | 1826 | | 607 | 1773 | | | 1573 | | 1752 | 1569 | |
| Sec. | 90 | | | | | | | | | | | |

## CAPACITY AND LOS WORKSHEET

Capacity Analysis and Lane Group Capacity

| Appr/ Mvmt | Lane Group | Adj Flow Rate (v) | Adj Sat Flow Rate (s) | Flow Ratio (v/s) | Green Ratio (g/C) | --Lane Group-- Capacity (c) | v/c Ratio |
|---|---|---|---|---|---|---|---|
| Eastbound | | | | | | | |
| Prot | | 241 | 1752 | # 0.14 | 0.138 | 241 | 1.00 |
| Perm | | 75 | 90 | # 0.83 | 0.581 | 52 | 1.44 |
| Left | L | 316 | | | 0.72 | 293 | 1.08 |
| Prot | | | | | | | |
| Perm | | | | | | | |
| Thru | TR | 753 | 1826 | 0.41 | 0.70 | 1278 | 0.59 |
| Right | | | | | | | |
| Westbound | | | | | | | |
| Prot | | | | | | | |
| Perm | | | | | | | |
| Left | L | 7 | 607 | 0.01 | 0.54 | 330 | 0.02 |
| Prot | | | | | | | |
| Perm | | | | | | | |
| Thru | TR | 935 | 1773 | 0.53 | 0.54 | 964 | 0.97 |
| Right | | | | | | | |
| Northbound | | | | | | | |
| Prot | | | | | | | |
| Perm | | | | | | | |
| Left | | | | | | | |
| Prot | | | | | | | |
| Perm | | | | | | | |
| Thru | LTR | 39 | 1573 | # 0.02 | 0.03 | 39 | 1.00 |
| Right | | | | | | | |
| Southbound | | | | | | | |
| Prot | | | | | | | |
| Perm | | | | | | | |
| Left | L | 133 | 1752 | 0.08 | 0.19 | 329 | 0.40 |
| Prot | | | | | | | |
| Perm | | | | | | | |
| Thru | TR | 363 | 1569 | # 0.23 | 0.19 | 294 | 1.23 |
| Right | | | | | | | |

Sum of flow ratios for critical lane groups, Yc = Sum (v/s) = 1.23
Total lost time per cycle, L = 14.00 sec
Critical flow rate to capacity ratio, Xc = (Yc)(C)/(C-L) = 1.34

Control Delay and LOS Determination

| Appr/ Lane Grp | Ratios v/c | Ratios g/C | Unf Del d1 | Prog Adj Fact | Lane Grp Cap | Incremental Factor k | Incremental Del d2 | Res Del d3 | Lane Group Delay | Lane Group LOS | Approach Delay | Approach LOS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Eastbound | | | | | | | | | | | | |
| L | 1.08 | 0.72 | 57.7 | 1.000 | 293 | 0.50 | 75.1 | 0.0 | 132.8 | F | | |
| TR | 0.59 | 0.70 | 12.3 | 1.000 | 1278 | 0.18 | 0.7 | 0.0 | 13.0 | B | 48.4 | D |
| Westbound | | | | | | | | | | | | |
| L | 0.02 | 0.54 | 16.8 | 1.000 | 330 | 0.11 | 0.0 | 0.0 | 16.9 | B | | |
| TR | 0.97 | 0.54 | 35.2 | 1.000 | 964 | 0.48 | 21.9 | 0.0 | 57.1 | E | 56.8 | E |
| Northbound | | | | | | | | | | | | |
| LTR | 1.00 | 0.03 | 78.0 | 1.000 | 39 | 0.50 | 144.1 | 0.0 | 222.1 | F | 222.1 | F |
| Southbound | | | | | | | | | | | | |
| L | 0.40 | 0.19 | 57.1 | 1.000 | 329 | 0.11 | 0.8 | 0.0 | 58.0 | E | | |
| TR | 1.23 | 0.19 | 65.0 | 1.000 | 294 | 0.50 | 131.5 | 0.0 | 196.5 | F | 159.3 | F |

Intersection delay = 75.8 (sec/veh) Intersection LOS = E

## SUPPLEMENTAL PERMITTED LT WORKSHEET
for exclusive lefts

Input

| | EB | WB | NB | SB |
|---|---|---|---|---|
| Opposed by Single(S) or Multiple(M) lane approach | | | | |
| Cycle length, C 160.0 sec | | | | |
| Total actual green time for LT lane group, G (s) | 112.0 | 87.0 | | |
| Effective permitted green time for LT lane group, g(s) | 93.0 | 87.0 | | |
| Opposing effective green time, go (s) | 87.0 | 112.0 | | |
| Number of lanes in LT lane group, N | 1 | 1 | | |
| Number of lanes in opposing approach, No | 1 | 1 | | |
| Adjusted LT flow rate, VLT (veh/h) | 316 | 7 | | |
| Proportion of LT in LT lane group, PLT | 1.000 | 1.000 | | |
| Proportion of LT in opposing flow, PLTo | 0.00 | 0.00 | | |
| Adjusted opposing flow rate, Vo (veh/h) | 935 | 753 | | |
| Lost time for LT lane group, tL | 6.00 | 6.00 | | |
| Computation | | | | |
| LT volume per cycle, LTC=VLTC/3600 | 14.04 | 0.31 | | |
| Opposing lane util. factor, fLUo | 1.000 | 1.000 | 1.000 | 1.000 |
| Opposing flow, Volc=VoC/[3600(No)fLUo] (veh/ln/cyc) | 41.56 | 33.47 | | |
| gf=G[exp(- a * (LTC ** b))]-tl, gf<=g | 0.0 | 0.0 | | |
| Opposing platoon ratio, Rpo (refer Exhibit 16-11) | 1.00 | 1.00 | | |
| Opposing Queue Ratio, qro=Max[1-Rpo(go/C),0] | 0.46 | 0.30 | | |
| gq, (see Exhibit C16-4,5,6,7,8) | 78.91 | 3.52 | | |
| gu=g-gq if gq>=gf, or = g-gf if gq<gf | 14.09 | 83.48 | | |
| n=Max(gq-gf)/2,0) | 39.45 | 1.76 | | |
| PTHo=1-PLTo | 1.00 | 1.00 | | |
| PL*=PLT[1+(N-1)g/(gf+gu/EL1+4.24)] | 1.00 | 1.00 | | |
| EL1 (refer to Exhibit C16-3) | 3.12 | 2.63 | | |
| EL2=Max((1-Ptho**n)/Plto, 1.0) | | | | |
| fmin=2(1+PL)/g or fmin=2(1+Pl)/g | 0.04 | 0.05 | | |
| gdiff=max(gq-gf,0) | 0.00 | 0.00 | | |
| fm=[gf/g]+[gu/g]/[1+PL(EL1-1)], (min=fmin;max=1.00) | 0.05 | 0.36 | | |
| flt=fm=[gf/g]+[gu/g]/[1+PL(EL1-1)]+[gdiff/g]/[1+PL(EL2-1)],(fmin<=fm<=1.00) | | | | |
| or flt=[fm+0.91(N-1)]/N** | | | | |
| Left-turn adjustment, fLT | 0.049 | 0.364 | | |

For special case of single-lane approach opposed by multilane approach, see text.

* If Pl>=1 for shared left-turn lanes with N>1, then assume de-facto left-turn lane and redo calculations.

** For permitted left-turns with multiple exclusive left-turn lanes, flt=fm.

For special case of multilane approach opposed by single-lane approach or when gf>gq, see text.

## SUPPLEMENTAL PERMITTED LT WORKSHEET
for shared lefts

Input

| | EB | WB | NB | SB |
|---|---|---|---|---|
| Opposed by Single(S) or Multiple(M) lane approach | | | | |
| Cycle length, C 160.0 sec | | | | |
| Total actual green time for LT lane group, G (s) | | | | |
| Effective permitted green time for LT lane group, g(s) | | | | |
| Opposing effective green time, go (s) | | | | |
| Number of lanes in LT lane group, N | | | | |

Number of lanes in opposing approach, No
Adjusted LT flow rate, VLT (veh/h)
Proportion of LT in LT lane group, PLT 0.000 0.000 0.359 0.000
Proportion of LT in opposing flow, PLTo
Adjusted opposing flow rate, Vo (veh/h)
Lost time for LT lane group, tL
Computation
LT volume per cycle, LTC=VLTC/3600
Opposing lane util. factor, fLUo 1.000 1.000 1.000 1.000
Opposing flow, Volc=VoC/[3600(No)fLUo] (veh/ln/cyc)
gf=G[exp(- a * (LTC ** b))]-tl, gf<=g
Opposing platoon ratio, Rpo (refer Exhibit 16-11)
Opposing Queue Ratio, qro=Max[1-Rpo(go/C),0]
gq, (see Exhibit C16-4,5,6,7,8)
gu=g-gq if gq>=gf, or = g-gf if gq<gf
n=Max(gq-gf)/2,0)
PTHo=1-PLTo
PL*=PLT[1+(N-1)g/(gf+gu/EL1+4.24)]
EL1 (refer to Exhibit C16-3)
EL2=Max((1-Ptho**n)/Plto, 1.0)
fmin=2(1+PL)/g or fmin=2(1+Pl)/g
gdiff=max(gq-gf,0)
fm=[gf/g]+[gu/g]/[1+PL(EL1-1)], (min=fmin;max=1.00)
flt=fm=[gf/g]+[gu/g]/[1+PL(EL1-1)]+[gdiff/g]/[1+PL(EL2-1)],(fmin<=fm<=1.00)
or flt=[fm+0.91(N-1)]/N**
Left-turn adjustment, fLT

For special case of single-lane approach opposed by multilane approach, see text.
* If Pl>=1 for shared left-turn lanes with N>1, then assume de-facto left-turn lane and redo calculations.
** For permitted left-turns with multiple exclusive left-turn lanes, flt=fm.
For special case of multilane approach opposed by single-lane approach or when gf>gq, see text.

## SUPPLEMENTAL PEDESTRIAN-BICYCLE EFFECTS WORKSHEET

Permitted Left Turns

| | EB | WB | NB | SB |
|---|---|---|---|---|
| Effective pedestrian green time, gp (s) | | | | |
| Conflicting pedestrian volume, Vped (p/h) | | | | |
| Pedestrian flow rate, Vpedg (p/h) | | | | |
| OCCpedg | | | | |
| Opposing queue clearing green, gq (s) | | | | |
| Eff. ped. green consumed by opp. veh. queue, gq/gp | | | | |
| OCCpedu | | | | |
| Opposing flow rate, Vo (veh/h) | | | | |
| OCCr | | | | |
| Number of cross-street receiving lanes, Nrec | | | | |
| Number of turning lanes, Nturn | | | | |
| ApbT | | | | |
| Proportion of left turns, PLT | | | | |
| Proportion of left turns using protected phase, PLTA | | | | |
| Left-turn adjustment, fLpb | | | | |
| Permitted Right Turns | | | | |
| Effective pedestrian green time, gp (s) | | | | |
| Conflicting pedestrian volume, Vped (p/h) | | | | |
| Conflicting bicycle volume, Vbic (bicycles/h) | | | | |
| Vpedg | | | | |
| OCCpedg | | | | |
| Effective green, g (s) | | | | |
| Vbicg | | | | |

OCCbicg
OCCr
Number of cross-street receiving lanes, Nrec
Number of turning lanes, Nturn
ApbT
Proportion right-turns, PRT
Proportion right-turns using protected phase, PRTA
Right turn adjustment, fRpb

## SUPPLEMENTAL UNIFORM DELAY WORKSHEET

| | | EBLT | WBLT | NBLT | SBLT |
|---|---|---|---|---|---|
| Cycle length, C | 160.0 sec | | | | |
| Adj. LT vol from Vol Adjustment Worksheet, v | | 316 | | | |
| v/c ratio from Capacity Worksheet, X | | 1.08 | | | |
| Protected phase effective green interval, g (s) | | 22.0 | | | |
| Opposing queue effective green interval, gq | | 78.91 | | | |
| Unopposed green interval, gu | | 14.09 | | | |
| Red time r=(C-g-gq-gu) | | 45.0 | | | |
| Arrival rate, qa=v/(3600(max[X,1.0])) | | 0.08 | | | |
| Protected ph. departure rate, Sp=s/3600 | | 0.487 | | | |
| Permitted ph. departure rate, Ss=s(gq+gu)/(gu*3600) | | 0.16 | | | |
| XPerm | | 3.26 | | | |
| XProt | | 0.51 | | | |
| Case | | 3 | | | |
| Queue at beginning of green arrow, Qa | | 8.91 | | | |
| Queue at beginning of unsaturated green, Qu | | 6.42 | | | |
| Residual queue, Qr | | 5.24 | | | |
| Uniform Delay, d1 | | 57.7 | | | |

## DELAY/LOS WORKSHEET WITH INITIAL QUEUE

| Appr/ Lane Group | Initial Unmet Demand Q veh | Dur. Unmet Demand t hrs. | Uniform Delay Unadj. ds | Uniform Delay Adj. d1 sec | Initial Queue Param. u | Final Unmet Demand Q veh | Initial Queue Delay d3 sec | Lane Group Delay d sec |
|---|---|---|---|---|---|---|---|---|
| Eastbound | | | | | | | | |
| L | 0.0 | 0.00 | | 57.7 | 0.00 | 5.7 | 0.0 | 132.8 |
| TR | 0.0 | 0.00 | 24.0 | 12.3 | 0.00 | 0.0 | 0.0 | 13.0 |
| | 0.0 | | | | | | 0.0 | |
| Westbound | | | | | | | | |
| L | 0.0 | 0.00 | 36.5 | 16.8 | 0.00 | 0.0 | 0.0 | 16.9 |
| TR | 0.0 | 0.00 | 36.5 | 35.2 | 0.00 | 0.0 | 0.0 | 57.1 |
| | 0.0 | | | | | | 0.0 | |
| Northbound | | | | | | | | |
| | 0.0 | | | | | | 0.0 | |
| LTR | 0.0 | 0.00 | 78.0 | 78.0 | 0.00 | 0.0 | 0.0 | 222.1 |
| | 0.0 | | | | | | 0.0 | |
| Southbound | | | | | | | | |
| L | 0.0 | 0.00 | 65.0 | 57.1 | 0.00 | 0.0 | 0.0 | 58.0 |
| TR | 0.0 | 0.00 | 65.0 | 65.0 | 0.00 | 17.3 | 0.0 | 196.5 |
| | 0.0 | | | | | | 0.0 | |

Intersection Delay 75.8 sec/veh Intersection LOS E

## BACK OF QUEUE WORKSHEET

| | Eastbound | | | Westbound | | | Northbound | | | Southbound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| LaneGroup | L | TR | | L | TR | | | LTR | | L | TR | |
| Init Queue | 0.0 | 0.0 | | 0.0 | 0.0 | | | 0.0 | | 0.0 | 0.0 | |
| Flow Rate | 316 | 753 | | 7 | 935 | | | 39 | | 133 | 363 | |
| So | 1900 | 1900 | | 1900 | 1900 | | | 1900 | | 1900 | 1900 | |
| No.Lanes | 1 | 1 | 0 | 1 | 1 | 0 | 0 | 1 | 0 | 1 | 1 | 0 |
| SL | 408 | 1826 | | 607 | 1773 | | | 1573 | | 1752 | 1569 | |
| LnCapacity | 293 | 1278 | | 330 | 964 | | | 39 | | 329 | 294 | |
| Flow Ratio | 0.8 | 0.4 | | 0.0 | 0.5 | | | 0.0 | | 0.1 | 0.2 | |
| v/c Ratio | 1.08 | 0.59 | | 0.02 | 0.97 | | | 1.00 | | 0.40 | 1.23 | |
| Grn Ratio | 0.72 | 0.70 | | 0.54 | 0.54 | | | 0.03 | | 0.19 | 0.19 | |
| I Factor | | 1.000 | | | 1.000 | | | 1.000 | | | 1.000 | |
| AT or PVG | 3 | 3 | | 3 | 3 | | | 3 | | 3 | 3 | |
| Pltn Ratio | 1.00 | 1.00 | | 1.00 | 1.00 | | | 1.00 | | 1.00 | 1.00 | |
| PF2 | 1.00 | 1.00 | | 1.00 | 1.00 | | | 1.00 | | 1.00 | 1.00 | |
| Q1 | 4.6 | 17.1 | | 0.1 | 40.1 | | | 1.7 | | 5.2 | 16.1 | |
| kB | 0.5 | 1.1 | | 0.5 | 1.0 | | | 0.1 | | 0.5 | 0.5 | |
| Q2 | 5.9 | 1.6 | | 0.0 | 8.9 | | | 0.8 | | 0.3 | 10.6 | |
| Q Average | 10.5 | 18.7 | | 0.2 | 49.0 | | | 2.6 | | 5.5 | 26.8 | |
| Q Spacing | 25.0 | 25.0 | | 25.0 | 25.0 | | | 25.0 | | 25.0 | 25.0 | |
| Q Storage | 0 | 0 | | 0 | 0 | | | 0 | | 0 | 0 | |
| Q S Ratio | | | | | | | | | | | | |
| 70th Percentile Output: | | | | | | | | | | | | |
| fB% | 1.2 | 1.2 | | 1.2 | 1.1 | | | 1.2 | | 1.2 | 1.2 | |
| BOQ | 12.4 | 21.7 | | 0.2 | 55.4 | | | 3.1 | | 6.6 | 30.8 | |
| QSRatio | | | | | | | | | | | | |
| 85th Percentile Output: | | | | | | | | | | | | |
| fB% | 1.5 | 1.5 | | 1.6 | 1.4 | | | 1.6 | | 1.5 | 1.4 | |
| BOQ | 15.9 | 27.3 | | 0.2 | 66.6 | | | 4.0 | | 8.6 | 38.1 | |
| QSRatio | | | | | | | | | | | | |
| 90th Percentile Output: | | | | | | | | | | | | |
| fB% | 1.6 | 1.6 | | 1.8 | 1.4 | | | 1.8 | | 1.7 | 1.5 | |
| BOQ | 17.2 | 29.1 | | 0.3 | 70.3 | | | 4.5 | | 9.4 | 40.3 | |
| QSRatio | | | | | | | | | | | | |
| 95th Percentile Output: | | | | | | | | | | | | |
| fB% | 1.8 | 1.7 | | 2.1 | 1.5 | | | 2.0 | | 1.9 | 1.6 | |
| BOQ | 19.3 | 32.0 | | 0.3 | 75.5 | | | 5.2 | | 10.7 | 43.8 | |
| QSRatio | | | | | | | | | | | | |
| 98th Percentile Output: | | | | | | | | | | | | |
| fB% | 2.1 | 1.9 | | 2.7 | 1.7 | | | 2.5 | | 2.4 | 1.8 | |
| BOQ | 22.6 | 36.2 | | 0.4 | 84.5 | | | 6.5 | | 13.0 | 48.9 | |
| QSRatio | | | | | | | | | | | | |

## ERROR MESSAGES

No errors to report.

HCS+: Signalized Intersections Release 5.5

Analyst: JM
Agency: KLOA, Inc.
Date: 10/18/2012
Period: A.M. Peak Hour
Project ID: 12-141
E/W St: IL 120

Inter.: IL 120/IL 134
Area Type: All other areas
Jurisd: IDOT
Year : Existing Traffic

N/S St: IL 134

SIGNALIZED INTERSECTION SUMMARY

| | Eastbound | | | Westbound | | | Northbound | | | Southbound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | L | T | R | L | T | R | L | T | R | L | T | R |
| No. Lanes | 1 | 1 | 0 | 1 | 1 | 0 | 0 | 1 | 0 | 0 | 1 | 0 |
| LGConfig | L | TR | | L | T | | | LTR | | | LTR | |
| Volume | 9 | 714 | 1 | 2 | 687 | | 0 | 1 | 1 | 437 | 1 | 25 |
| Lane Width | 12.0 | 12.0 | | 12.0 | 12.0 | | | 12.0 | | | 12.0 | |
| RTOR Vol | | | 0 | | | | | | 0 | | | 0 |

Duration 0.25 Area Type: All other areas

Signal Operations

| Phase Combination | 1 | 2 | 3 | 4 | | | 5 | 6 | 7 | 8 |
|---|---|---|---|---|---|---|---|---|---|---|
| EB Left | A | | | | NB | Left | A | | | |
| Thru | A | | | | | Thru | A | | | |
| Right | A | | | | | Right | A | | | |
| Peds | | | | | | Peds | | | | |
| WB Left | A | | | | SB | Left | | A | | |
| Thru | A | | | | | Thru | | A | | |
| Right | | | | | | Right | | A | | |
| Peds | | | | | | Peds | | | | |
| NB Right | | | | | EB | Right | | | | |
| SB Right | | | | | WB | Right | | | | |
| Green | 69.0 | | | | | | 2.0 | 35.0 | | |
| Yellow | 4.0 | | | | | | 3.0 | 3.0 | | |
| All Red | 2.0 | | | | | | 1.0 | 1.0 | | |

Cycle Length: 120.0 secs

Intersection Performance Summary

| Appr/ Lane Grp | Lane Group Capacity | Adj Sat Flow Rate (s) | Ratios v/c | Ratios g/C | Lane Group Delay | Lane Group LOS | Approach Delay | Approach LOS |
|---|---|---|---|---|---|---|---|---|
| Eastbound | | | | | | | | |
| L | 252 | 438 | 0.04 | 0.57 | 11.1 | B | | |
| TR | 1051 | 1827 | 0.72 | 0.57 | 20.8 | C | 20.7 | C |
| Westbound | | | | | | | | |
| L | 154 | 267 | 0.01 | 0.57 | 11.0 | B | | |
| T | 1030 | 1792 | 0.70 | 0.57 | 20.3 | C | 20.3 | C |
| Northbound | | | | | | | | |
| LTR | 30 | 1772 | 0.07 | 0.02 | 59.0 | E | 59.0 | E |
| Southbound | | | | | | | | |
| LTR | 493 | 1691 | 0.99 | 0.29 | 79.5 | E | 79.5 | E |

Intersection Delay = 35.1 (sec/veh) Intersection LOS = D

Phone: Fax:
E-Mail:

## OPERATIONAL ANALYSIS

Analyst: JM
Agency/Co.: KLOA, Inc.
Date Performed: 10/18/2012
Analysis Time Period: A.M. Peak Hour
Intersection: IL 120/IL 134
Area Type: All other areas
Jurisdiction: IDOT
Analysis Year: Existing Traffic
Project ID: 12-141
E/W St: IL 120 N/S St: IL 134

## VOLUME DATA

| | Eastbound | | | Westbound | | | Northbound | | | Southbound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | L | T | R | L | T | R | L | T | R | L | T | R |
| Volume | 9 | 714 | 1 | 2 | 687 | | 0 | 1 | 1 | 437 | 1 | 25 |
| % Heavy Veh | 0 | 4 | 0 | 50 | 6 | | 0 | 0 | 0 | 6 | 0 | 16 |
| PHF | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| PK 15 Vol | 3 | 188 | 1 | 1 | 181 | | 0 | 1 | 1 | 115 | 1 | 7 |
| Hi Ln Vol | | | | | | | | | | | | |
| % Grade | | 0 | | | 0 | | | 0 | | | 0 | |
| Ideal Sat | 1900 | 1900 | | 1900 | 1900 | | | 1900 | | | 1900 | |
| ParkExist | | | | | | | | | | | | |
| NumPark | | | | | | | | | | | | |
| No. Lanes | 1 | 1 | 0 | 1 | 1 | 0 | 0 | 1 | 0 | 0 | 1 | 0 |
| LGConfig | L | TR | | L | T | | | LTR | | | LTR | |
| Lane Width | 12.0 | 12.0 | | 12.0 | 12.0 | | | 12.0 | | | 12.0 | |
| RTOR Vol | | | 0 | | | | | | 0 | | | 0 |
| Adj Flow | 9 | 753 | | 2 | 723 | | | 2 | | | 487 | |
| %InSharedLn | | | | | | | | | | | | |
| Prop LTs | 1.000 | 0.000 | | 1.000 | 0.000 | | | 0.000 | | | 0.945 | |
| Prop RTs | | 0.001 | | | 0.000 | | 0.500 | | | 0.053 | | |
| Peds Bikes | | 0 | | | 0 | | 0 | | | 0 | | |
| Buses | 0 | 0 | | 0 | 0 | | | 0 | | | 0 | |
| %InProtPhase | | | | | | | | | | | | |

Duration 0.25 Area Type: All other areas

## OPERATING PARAMETERS

| | Eastbound | | | Westbound | | | Northbound | | | Southbound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | L | T | R | L | T | R | L | T | R | L | T | R |
| Init Unmet | 0.0 | 0.0 | | 0.0 | 0.0 | | | 0.0 | | | 0.0 | |
| Arriv. Type | 3 | 3 | | 3 | 3 | | | 3 | | | 3 | |
| Unit Ext. | 3.0 | 3.0 | | 3.0 | 3.0 | | | 3.0 | | | 3.0 | |
| I Factor | | 1.000 | | | 1.000 | | | 1.000 | | | 1.000 | |
| Lost Time | 2.0 | 2.0 | | 2.0 | 2.0 | | | 2.0 | | | 2.0 | |
| Ext of g | 2.0 | 2.0 | | 2.0 | 2.0 | | | 2.0 | | | 2.0 | |
| Ped Min g | | 3.2 | | | 3.2 | | | 3.2 | | | 3.2 | |

## PHASE DATA

| Phase Combination | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|---|---|---|---|---|---|---|---|---|---|
| EB | Left | A | | | | NB Left | A | | |
| | Thru | A | | | | Thru | A | | |
| | Right | A | | | | Right | A | | |
| | Peds | | | | | Peds | | | |
| WB | Left | A | | | | SB Left | | A | |
| | Thru | A | | | | Thru | | A | |
| | Right | | | | | Right | | A | |
| | Peds | | | | | Peds | | | |
| NB | Right | | | | | EB Right | | | |
| SB | Right | | | | | WB Right | | | |
| Green | | 69.0 | | | | 2.0 | 35.0 | | |
| Yellow | | 4.0 | | | | 3.0 | 3.0 | | |
| All Red | | 2.0 | | | | 1.0 | 1.0 | | |

Cycle Length: 120.0 secs

## VOLUME ADJUSTMENT AND SATURATION FLOW WORKSHEET

Volume Adjustment

| | Eastbound | | | Westbound | | | Northbound | | | Southbound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | L | T | R | L | T | R | L | T | R | L | T | R |
| Volume, V | 9 | 714 | 1 | 2 | 687 | | 0 | 1 | 1 | 437 | 1 | 25 |
| PHF | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| Adj flow | 9 | 752 | 1 | 2 | 723 | | 0 | 1 | 1 | 460 | 1 | 26 |
| No. Lanes | 1 | 1 | 0 | 1 | 1 | 0 | 0 | 1 | 0 | 0 | 1 | 0 |
| Lane group | L | TR | | L | T | | | LTR | | | LTR | |
| Adj flow | 9 | 753 | | 2 | 723 | | | 2 | | | 487 | |
| Prop LTs | 1.000 | 0.000 | | 1.000 | 0.000 | | | 0.000 | | | 0.945 | |
| Prop RTs | | 0.001 | | | 0.000 | | | 0.500 | | | 0.053 | |

Saturation Flow Rate (see Exhibit 16-7 to determine the adjustment factors)

| | Eastbound | | | Westbound | | | Northbound | | | Southbound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| LG | L | TR | | L | T | | | LTR | | | LTR | |
| So | 1900 | 1900 | | 1900 | 1900 | | | 1900 | | | 1900 | |
| Lanes | 1 | 1 | 0 | 1 | 1 | 0 | 0 | 1 | 0 | 0 | 1 | 0 |
| fW | 1.000 | 1.000 | | 1.000 | 1.000 | | | 1.000 | | | 1.000 | |
| fHV | 1.000 | 0.962 | | 0.667 | 0.943 | | | 1.000 | | | 0.939 | |
| fG | 1.000 | 1.000 | | 1.000 | 1.000 | | | 1.000 | | | 1.000 | |
| fP | 1.000 | 1.000 | | 1.000 | 1.000 | | | 1.000 | | | 1.000 | |
| fBB | 1.000 | 1.000 | | 1.000 | 1.000 | | | 1.000 | | | 1.000 | |
| fA | 1.000 | 1.000 | | 1.000 | 1.000 | | | 1.000 | | | 1.000 | |
| fLU | 1.000 | 1.000 | | 1.000 | 1.000 | | | 1.000 | | | 1.000 | |
| fRT | | 1.000 | | | 1.000 | | | 0.933 | | | 0.993 | |
| fLT | 0.231 | 1.000 | | 0.211 | 1.000 | | | 1.000 | | | 0.955 | |
| Sec. | | | | | | | | | | | | |
| fLpb | 1.000 | 1.000 | | 1.000 | 1.000 | | | 1.000 | | | 1.000 | |
| fRpb | | 1.000 | | | 1.000 | | | 1.000 | | | 1.000 | |
| S | 438 | 1827 | | 267 | 1792 | | | 1772 | | | 1691 | |
| Sec. | | | | | | | | | | | | |

## CAPACITY AND LOS WORKSHEET

Capacity Analysis and Lane Group Capacity

| Appr/ Mvmt | Lane Group | Adj Flow Rate (v) | Adj Sat Flow Rate (s) | Flow Ratio (v/s) | Green Ratio (g/C) | --Lane Group-- Capacity (c) | v/c Ratio |
|---|---|---|---|---|---|---|---|
| Eastbound | | | | | | | |
| Prot | | | | | | | |
| Perm | | | | | | | |
| Left | L | 9 | 438 | 0.02 | 0.57 | 252 | 0.04 |
| Prot | | | | | | | |
| Perm | | | | | | | |
| Thru | TR | 753 | 1827 | # 0.41 | 0.57 | 1051 | 0.72 |
| Right | | | | | | | |
| Westbound | | | | | | | |
| Prot | | | | | | | |
| Perm | | | | | | | |
| Left | L | 2 | 267 | 0.01 | 0.57 | 154 | 0.01 |
| Prot | | | | | | | |
| Perm | | | | | | | |
| Thru | T | 723 | 1792 | 0.40 | 0.57 | 1030 | 0.70 |
| Right | | | | | | | |
| Northbound | | | | | | | |
| Prot | | | | | | | |
| Perm | | | | | | | |
| Left | | | | | | | |
| Prot | | | | | | | |
| Perm | | | | | | | |
| Thru | LTR | 2 | 1772 | # 0.00 | 0.02 | 30 | 0.07 |
| Right | | | | | | | |
| Southbound | | | | | | | |
| Prot | | | | | | | |
| Perm | | | | | | | |
| Left | | | | | | | |
| Prot | | | | | | | |
| Perm | | | | | | | |
| Thru | LTR | 487 | 1691 | # 0.29 | 0.29 | 493 | 0.99 |
| Right | | | | | | | |

Sum of flow ratios for critical lane groups, Yc = Sum (v/s) = 0.70
Total lost time per cycle, L = 14.00 sec
Critical flow rate to capacity ratio, Xc = (Yc)(C)/(C-L) = 0.79

Control Delay and LOS Determination

| Appr/ Lane Grp | Ratios v/c | Ratios g/C | Unf Del d1 | Prog Adj Fact | Lane Grp Cap | Incremental Factor k | Incremental Del d2 | Res Del d3 | Lane Group Delay | Lane Group LOS | Approach Delay | Approach LOS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Eastbound | | | | | | | | | | | | |
| L | 0.04 | 0.57 | 11.1 | 1.000 | 252 | 0.11 | 0.1 | 0.0 | 11.1 | B | | |
| TR | 0.72 | 0.57 | 18.4 | 1.000 | 1051 | 0.28 | 2.4 | 0.0 | 20.8 | C | 20.7 | C |
| Westbound | | | | | | | | | | | | |
| L | 0.01 | 0.57 | 10.9 | 1.000 | 154 | 0.11 | 0.0 | 0.0 | 11.0 | B | | |
| T | 0.70 | 0.57 | 18.2 | 1.000 | 1030 | 0.27 | 2.2 | 0.0 | 20.3 | C | 20.3 | C |
| Northbound | | | | | | | | | | | | |
| LTR | 0.07 | 0.02 | 58.1 | 1.000 | 30 | 0.11 | 0.9 | 0.0 | 59.0 | E | 59.0 | E |
| Southbound | | | | | | | | | | | | |
| LTR | 0.99 | 0.29 | 42.3 | 1.000 | 493 | 0.49 | 37.3 | 0.0 | 79.5 | E | 79.5 | E |

Intersection delay = 35.1 (sec/veh) Intersection LOS = D

## SUPPLEMENTAL PERMITTED LT WORKSHEET
for exclusive lefts

Input

| | EB | WB | NB | SB |
|---|---|---|---|---|
| Opposed by Single(S) or Multiple(M) lane approach | | | | |
| Cycle length, C 120.0 sec | | | | |
| Total actual green time for LT lane group, G (s) | 69.0 | 69.0 | | |
| Effective permitted green time for LT lane group, g(s) | 69.0 | 69.0 | | |
| Opposing effective green time, go (s) | 69.0 | 69.0 | | |
| Number of lanes in LT lane group, N | 1 | 1 | | |
| Number of lanes in opposing approach, No | 1 | 1 | | |
| Adjusted LT flow rate, VLT (veh/h) | 9 | 2 | | |
| Proportion of LT in LT lane group, PLT | 1.000 | 1.000 | | |
| Proportion of LT in opposing flow, PLTo | 0.00 | 0.00 | | |
| Adjusted opposing flow rate, Vo (veh/h) | 723 | 753 | | |
| Lost time for LT lane group, tL | 6.00 | 6.00 | | |
| Computation | | | | |
| LT volume per cycle, LTC=VLTC/3600 | 0.30 | 0.07 | | |
| Opposing lane util. factor, fLUo | 1.000 | 1.000 | 1.000 | 1.000 |
| Opposing flow, Volc=VoC/[3600(No)fLUo] (veh/ln/cyc) | 24.10 | 25.10 | | |
| gf=G[exp(- a * (LTC ** b))]-tl, gf<=g | 0.0 | 0.0 | | |
| Opposing platoon ratio, Rpo (refer Exhibit 16-11) | 1.00 | 1.00 | | |
| Opposing Queue Ratio, qro=Max[1-Rpo(go/C),0] | 0.43 | 0.43 | | |
| gq, (see Exhibit C16-4,5,6,7,8) | 28.24 | 30.68 | | |
| gu=g-gq if gq>=gf, or = g-gf if gq<gf | 40.76 | 38.32 | | |
| n=Max(gq-gf)/2,0) | 14.12 | 15.34 | | |
| PTHo=1-PLTo | 1.00 | 1.00 | | |
| PL*=PLT[1+(N-1)g/(gf+gu/EL1+4.24)] | 1.00 | 1.00 | | |
| EL1 (refer to Exhibit C16-3) | 2.56 | 2.63 | | |
| EL2=Max((1-Ptho**n)/Plto, 1.0) | | | | |
| fmin=2(1+PL)/g or fmin=2(1+Pl)/g | 0.06 | 0.06 | | |
| gdiff=max(gq-gf,0) | 0.00 | 0.00 | | |
| fm=[gf/g]+[gu/g]/[1+PL(EL1-1)], (min=fmin;max=1.00) | 0.23 | 0.21 | | |
| flt=fm=[gf/g]+[gu/g]/[1+PL(EL1-1)]+[gdiff/g]/[1+PL(EL2-1)],(fmin<=fm<=1.00) | | | | |
| or flt=[fm+0.91(N-1)]/N** | | | | |
| Left-turn adjustment, fLT | 0.231 | 0.211 | | |

For special case of single-lane approach opposed by multilane approach, see text.

* If Pl>=1 for shared left-turn lanes with N>1, then assume de-facto left-turn lane and redo calculations.

** For permitted left-turns with multiple exclusive left-turn lanes, flt=fm.

For special case of multilane approach opposed by single-lane approach or when gf>gq, see text.

## SUPPLEMENTAL PERMITTED LT WORKSHEET
for shared lefts

Input

| | EB | WB | NB | SB |
|---|---|---|---|---|
| Opposed by Single(S) or Multiple(M) lane approach | | | | |
| Cycle length, C 120.0 sec | | | | |
| Total actual green time for LT lane group, G (s) | | | | |
| Effective permitted green time for LT lane group, g(s) | | | | |
| Opposing effective green time, go (s) | | | | |
| Number of lanes in LT lane group, N | | | | |

Number of lanes in opposing approach, No
Adjusted LT flow rate, VLT (veh/h)
Proportion of LT in LT lane group, PLT 0.000 0.000 0.000 0.945
Proportion of LT in opposing flow, PLTo
Adjusted opposing flow rate, Vo (veh/h)
Lost time for LT lane group, tL
Computation
LT volume per cycle, LTC=VLTC/3600
Opposing lane util. factor, fLUo 1.000 1.000 1.000 1.000
Opposing flow, Volc=VoC/[3600(No)fLUo] (veh/ln/cyc)
gf=G[exp(- a * (LTC ** b))]-tl, gf<=g
Opposing platoon ratio, Rpo (refer Exhibit 16-11)
Opposing Queue Ratio, qro=Max[1-Rpo(go/C),0]
gq, (see Exhibit C16-4,5,6,7,8)
gu=g-gq if gq>=gf, or = g-gf if gq<gf
n=Max(gq-gf)/2,0)
PTHo=1-PLTo
PL*=PLT[1+(N-1)g/(gf+gu/EL1+4.24)]
EL1 (refer to Exhibit C16-3)
EL2=Max((1-Ptho**n)/Plto, 1.0)
fmin=2(1+PL)/g or fmin=2(1+Pl)/g
gdiff=max(gq-gf,0)
fm=[gf/g]+[gu/g]/[1+PL(EL1-1)], (min=fmin;max=1.00)
flt=fm=[gf/g]+[gu/g]/[1+PL(EL1-1)]+[gdiff/g]/[1+PL(EL2-1)],(fmin<=fm<=1.00)
or flt=[fm+0.91(N-1)]/N**
Left-turn adjustment, fLT

For special case of single-lane approach opposed by multilane approach, see text.
* If Pl>=1 for shared left-turn lanes with N>1, then assume de-facto left-turn lane and redo calculations.
** For permitted left-turns with multiple exclusive left-turn lanes, flt=fm.
For special case of multilane approach opposed by single-lane approach or when gf>gq, see text.

SUPPLEMENTAL PEDESTRIAN-BICYCLE EFFECTS WORKSHEET

Permitted Left Turns

| | EB | WB | NB | SB |
|---|---|---|---|---|
| Effective pedestrian green time, gp (s) | | | | |
| Conflicting pedestrian volume, Vped (p/h) | | | | |
| Pedestrian flow rate, Vpedg (p/h) | | | | |
| OCCpedg | | | | |
| Opposing queue clearing green, gq (s) | | | | |
| Eff. ped. green consumed by opp. veh. queue, gq/gp | | | | |
| OCCpedu | | | | |
| Opposing flow rate, Vo (veh/h) | | | | |
| OCCr | | | | |
| Number of cross-street receiving lanes, Nrec | | | | |
| Number of turning lanes, Nturn | | | | |
| ApbT | | | | |
| Proportion of left turns, PLT | | | | |
| Proportion of left turns using protected phase, PLTA | | | | |
| Left-turn adjustment, fLpb | | | | |
| Permitted Right Turns | | | | |
| Effective pedestrian green time, gp (s) | | | | |
| Conflicting pedestrian volume, Vped (p/h) | | | | |
| Conflicting bicycle volume, Vbic (bicycles/h) | | | | |
| Vpedg | | | | |
| OCCpedg | | | | |
| Effective green, g (s) | | | | |
| Vbicg | | | | |

OCCbicg
OCCr
Number of cross-street receiving lanes, Nrec
Number of turning lanes, Nturn
ApbT
Proportion right-turns, PRT
Proportion right-turns using protected phase, PRTA
Right turn adjustment, fRpb

## SUPPLEMENTAL UNIFORM DELAY WORKSHEET

| | | EBLT | WBLT | NBLT | SBLT |
|---|---|---|---|---|---|
| Cycle length, C | 120.0 sec | | | | |
| Adj. LT vol from Vol Adjustment Worksheet, v | | | | | |
| v/c ratio from Capacity Worksheet, X | | | | | |
| Protected phase effective green interval, g (s) | | | | | |
| Opposing queue effective green interval, gq | | | | | |
| Unopposed green interval, gu | | | | | |
| Red time r=(C-g-gq-gu) | | | | | |
| Arrival rate, qa=v/(3600(max[X,1.0])) | | | | | |
| Protected ph. departure rate, Sp=s/3600 | | | | | |
| Permitted ph. departure rate, Ss=s(gq+gu)/(gu*3600) | | | | | |
| XPerm | | | | | |
| XProt | | | | | |
| Case | | | | | |
| Queue at beginning of green arrow, Qa | | | | | |
| Queue at beginning of unsaturated green, Qu | | | | | |
| Residual queue, Qr | | | | | |
| Uniform Delay, d1 | | | | | |

## DELAY/LOS WORKSHEET WITH INITIAL QUEUE

| Appr/ Lane Group | Initial Unmet Demand Q veh | Dur. Unmet Demand t hrs. | Uniform Delay Unadj. ds | Uniform Delay Adj. d1 sec | Initial Queue Param. u | Final Unmet Demand Q veh | Initial Queue Delay d3 sec | Lane Group Delay d sec |
|---|---|---|---|---|---|---|---|---|
| Eastbound | | | | | | | | |
| L | 0.0 | 0.00 | 25.5 | 11.1 | 0.00 | 0.0 | 0.0 | 11.1 |
| TR | 0.0 | 0.00 | 25.5 | 18.4 | 0.00 | 0.0 | 0.0 | 20.8 |
| | 0.0 | | | | | | 0.0 | |
| Westbound | | | | | | | | |
| L | 0.0 | 0.00 | 25.5 | 10.9 | 0.00 | 0.0 | 0.0 | 11.0 |
| T | 0.0 | 0.00 | 25.5 | 18.2 | 0.00 | 0.0 | 0.0 | 20.3 |
| | 0.0 | | | | | | 0.0 | |
| Northbound | | | | | | | | |
| | 0.0 | | | | | | 0.0 | |
| LTR | 0.0 | 0.00 | 59.0 | 58.1 | 0.00 | 0.0 | 0.0 | 59.0 |
| | 0.0 | | | | | | 0.0 | |
| Southbound | | | | | | | | |
| | 0.0 | | | | | | 0.0 | |
| LTR | 0.0 | 0.00 | 42.5 | 42.3 | 0.00 | 0.0 | 0.0 | 79.5 |
| | 0.0 | | | | | | 0.0 | |

Intersection Delay 35.1 sec/veh Intersection LOS D

## BACK OF QUEUE WORKSHEET

| | Eastbound | | | Westbound | | | Northbound | | | Southbound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| LaneGroup | L | TR | | L | T | | | LTR | | | LTR | |
| Init Queue | 0.0 | 0.0 | | 0.0 | 0.0 | | | 0.0 | | | 0.0 | |
| Flow Rate | 9 | 753 | | 2 | 723 | | | 2 | | | 487 | |
| So | 1900 | 1900 | | 1900 | 1900 | | | 1900 | | | 1900 | |
| No.Lanes | 1 | 1 | 0 | 1 | 1 | 0 | 0 | 1 | 0 | 0 | 1 | 0 |
| SL | 438 | 1827 | | 267 | 1792 | | | 1772 | | | 1691 | |
| LnCapacity | 252 | 1051 | | 154 | 1030 | | | 30 | | | 493 | |
| Flow Ratio | 0.0 | 0.4 | | 0.0 | 0.4 | | | 0.0 | | | 0.3 | |
| v/c Ratio | 0.04 | 0.72 | | 0.01 | 0.70 | | | 0.07 | | | 0.99 | |
| Grn Ratio | 0.57 | 0.57 | | 0.57 | 0.57 | | | 0.02 | | | 0.29 | |
| I Factor | | 1.000 | | | 1.000 | | | 1.000 | | | 1.000 | |
| AT or PVG | 3 | 3 | | 3 | 3 | | | 3 | | | 3 | |
| Pltn Ratio | 1.00 | 1.00 | | 1.00 | 1.00 | | | 1.00 | | | 1.00 | |
| PF2 | 1.00 | 1.00 | | 1.00 | 1.00 | | | 1.00 | | | 1.00 | |
| Q1 | 0.1 | 18.1 | | 0.0 | 17.2 | | | 0.1 | | | 16.2 | |
| kB | 0.4 | 0.8 | | 0.3 | 0.8 | | | 0.1 | | | 0.5 | |
| Q2 | 0.0 | 2.0 | | 0.0 | 1.9 | | | 0.0 | | | 5.4 | |
| Q Average | 0.1 | 20.2 | | 0.0 | 19.0 | | | 0.1 | | | 21.5 | |
| Q Spacing | 25.0 | 25.0 | | 25.0 | 25.0 | | | 25.0 | | | 25.0 | |
| Q Storage | 0 | 0 | | 0 | 0 | | | 0 | | | 0 | |
| Q S Ratio | | | | | | | | | | | | |
| 70th Percentile Output: | | | | | | | | | | | | |
| fB% | 1.2 | 1.2 | | 1.2 | 1.2 | | | 1.2 | | | 1.2 | |
| BOQ | 0.2 | 23.4 | | 0.0 | 22.1 | | | 0.1 | | | 24.9 | |
| QSRatio | | | | | | | | | | | | |
| 85th Percentile Output: | | | | | | | | | | | | |
| fB% | 1.6 | 1.5 | | 1.6 | 1.5 | | | 1.6 | | | 1.4 | |
| BOQ | 0.2 | 29.3 | | 0.1 | 27.8 | | | 0.1 | | | 31.1 | |
| QSRatio | | | | | | | | | | | | |
| 90th Percentile Output: | | | | | | | | | | | | |
| fB% | 1.8 | 1.5 | | 1.8 | 1.6 | | | 1.8 | | | 1.5 | |
| BOQ | 0.3 | 31.2 | | 0.1 | 29.6 | | | 0.1 | | | 33.0 | |
| QSRatio | | | | | | | | | | | | |
| 95th Percentile Output: | | | | | | | | | | | | |
| fB% | 2.1 | 1.7 | | 2.1 | 1.7 | | | 2.1 | | | 1.7 | |
| BOQ | 0.3 | 34.2 | | 0.1 | 32.5 | | | 0.2 | | | 36.2 | |
| QSRatio | | | | | | | | | | | | |
| 98th Percentile Output: | | | | | | | | | | | | |
| fB% | 2.7 | 1.9 | | 2.7 | 1.9 | | | 2.7 | | | 1.9 | |
| BOQ | 0.4 | 38.6 | | 0.1 | 36.8 | | | 0.2 | | | 40.7 | |
| QSRatio | | | | | | | | | | | | |

## ERROR MESSAGES

No errors to report.

HCS+: Signalized Intersections Release 5.5

Analyst: JM
Agency: KLOA, Inc.
Date: 10/18/2012
Period: P.M. Peak Hour
Project ID: 12-141
E/W St: IL 120

Inter.: IL 120/IL 134
Area Type: All other areas
Jurisd: IDOT
Year : Existing Traffic

N/S St: IL 134

SIGNALIZED INTERSECTION SUMMARY

| | Eastbound | | | Westbound | | | Northbound | | | Southbound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | L | T | R | L | T | R | L | T | R | L | T | R |
| No. Lanes | 1 | 1 | 0 | 1 | 1 | 0 | 0 | 1 | 0 | 0 | 1 | 0 |
| LGConfig | L | TR | | L | T | | | LTR | | | LTR | |
| Volume | 28 | 774 | 0 | 2 | 741 | | 2 | 2 | 3 | 233 | 2 | 24 |
| Lane Width | 12.0 | 12.0 | | 12.0 | 12.0 | | | 12.0 | | | 12.0 | |
| RTOR Vol | | | 0 | | | | | | 0 | | | 0 |

Duration 0.25 Area Type: All other areas

Signal Operations

| Phase Combination | 1 | 2 | 3 | 4 | | | 5 | 6 | 7 | 8 |
|---|---|---|---|---|---|---|---|---|---|---|
| EB Left | A | | | | NB | Left | A | | | |
| Thru | A | | | | | Thru | A | | | |
| Right | A | | | | | Right | A | | | |
| Peds | | | | | | Peds | | | | |
| WB Left | A | | | | SB | Left | | A | | |
| Thru | A | | | | | Thru | | A | | |
| Right | A | | | | | Right | | A | | |
| Peds | | | | | | Peds | | | | |
| NB Right | | | | | EB | Right | | | | |
| SB Right | | | | | WB | Right | | | | |
| Green | 100.0 | | | | | | 4.0 | 42.0 | | |
| Yellow | 4.0 | | | | | | 3.0 | 3.0 | | |
| All Red | 2.0 | | | | | | 1.0 | 1.0 | | |

Cycle Length: 160.0 secs

Intersection Performance Summary

| Appr/ Lane Grp | Lane Group Capacity | Adj Sat Flow Rate (s) | Ratios v/c | Ratios g/C | Lane Group Delay | Lane Group LOS | Approach Delay | Approach LOS |
|---|---|---|---|---|---|---|---|---|
| Eastbound | | | | | | | | |
| L | 247 | 395 | 0.12 | 0.63 | 12.4 | B | | |
| TR | 1153 | 1845 | 0.71 | 0.63 | 22.2 | C | 21.8 | C |
| Westbound | | | | | | | | |
| L | 240 | 384 | 0.01 | 0.63 | 11.3 | B | | |
| T | 1131 | 1810 | 0.69 | 0.63 | 21.6 | C | 21.5 | C |
| Northbound | | | | | | | | |
| LTR | 44 | 1765 | 0.16 | 0.03 | 78.0 | E | 78.0 | E |
| Southbound | | | | | | | | |
| LTR | 446 | 1698 | 0.61 | 0.26 | 54.2 | D | 54.2 | D |

Intersection Delay = 26.5 (sec/veh) Intersection LOS = C

Phone: Fax:
E-Mail:

## OPERATIONAL ANALYSIS

Analyst: JM
Agency/Co.: KLOA, Inc.
Date Performed: 10/18/2012
Analysis Time Period: P.M. Peak Hour
Intersection: IL 120/IL 134
Area Type: All other areas
Jurisdiction: IDOT
Analysis Year: Existing Traffic
Project ID: 12-141
E/W St: IL 120 N/S St: IL 134

## VOLUME DATA

| | Eastbound | | | Westbound | | | Northbound | | | Southbound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | L | T | R | L | T | R | L | T | R | L | T | R |
| Volume | 28 | 774 | 0 | 2 | 741 | | 2 | 2 | 3 | 233 | 2 | 24 |
| % Heavy Veh | 7 | 3 | 0 | 0 | 5 | | 0 | 0 | 0 | 6 | 0 | 4 |
| PHF | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| PK 15 Vol | 7 | 204 | 0 | 1 | 195 | | 1 | 1 | 1 | 61 | 1 | 6 |
| Hi Ln Vol | | | | | | | | | | | | |
| % Grade | | 0 | | | 0 | | | 0 | | | 0 | |
| Ideal Sat | 1900 | 1900 | | 1900 | 1900 | | | 1900 | | | 1900 | |
| ParkExist | | | | | | | | | | | | |
| NumPark | | | | | | | | | | | | |
| No. Lanes | 1 | 1 | 0 | 1 | 1 | 0 | 0 | 1 | 0 | 0 | 1 | 0 |
| LGConfig | L | TR | | L | T | | | LTR | | | LTR | |
| Lane Width | 12.0 | 12.0 | | 12.0 | 12.0 | | | 12.0 | | | 12.0 | |
| RTOR Vol | | | 0 | | | | | | 0 | | | 0 |
| Adj Flow | 29 | 815 | | 2 | 780 | | | 7 | | | 272 | |
| %InSharedLn | | | | | | | | | | | | |
| Prop LTs | 1.000 | 0.000 | | 1.000 | 0.000 | | | 0.286 | | | 0.901 | |
| Prop RTs | | 0.000 | | | 0.000 | | 0.429 | | | 0.092 | | |
| Peds Bikes | | 0 | | | 0 | | 0 | | | 0 | | |
| Buses | 0 | 0 | | 0 | 0 | | | 0 | | | 0 | |
| %InProtPhase | | | | | | | | | | | | |

Duration 0.25 Area Type: All other areas

## OPERATING PARAMETERS

| | Eastbound | | | Westbound | | | Northbound | | | Southbound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | L | T | R | L | T | R | L | T | R | L | T | R |
| Init Unmet | 0.0 | 0.0 | | 0.0 | 0.0 | | | 0.0 | | | 0.0 | |
| Arriv. Type | 3 | 3 | | 3 | 3 | | | 3 | | | 3 | |
| Unit Ext. | 3.0 | 3.0 | | 3.0 | 3.0 | | | 3.0 | | | 3.0 | |
| I Factor | | 1.000 | | | 1.000 | | | 1.000 | | | 1.000 | |
| Lost Time | 2.0 | 2.0 | | 2.0 | 2.0 | | | 2.0 | | | 2.0 | |
| Ext of g | 2.0 | 2.0 | | 2.0 | 2.0 | | | 2.0 | | | 2.0 | |
| Ped Min g | | 3.2 | | | 3.2 | | | 3.2 | | | 3.2 | |

## PHASE DATA

| Phase Combination | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|---|---|---|---|---|---|---|---|---|
| EB Left | A | | | | NB Left | A | | |
| Thru | A | | | | Thru | A | | |
| Right | A | | | | Right | A | | |
| Peds | | | | | Peds | | | |
| WB Left | A | | | | SB Left | | A | |
| Thru | A | | | | Thru | | A | |
| Right | A | | | | Right | | A | |
| Peds | | | | | Peds | | | |
| NB Right | | | | | EB Right | | | |
| SB Right | | | | | WB Right | | | |
| Green | 100.0 | | | | | 4.0 | 42.0 | |
| Yellow | 4.0 | | | | | 3.0 | 3.0 | |
| All Red | 2.0 | | | | | 1.0 | 1.0 | |

Cycle Length: 160.0 secs

## VOLUME ADJUSTMENT AND SATURATION FLOW WORKSHEET

Volume Adjustment

| | Eastbound | | | Westbound | | | Northbound | | | Southbound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | L | T | R | L | T | R | L | T | R | L | T | R |
| Volume, V | 28 | 774 | 0 | 2 | 741 | | 2 | 2 | 3 | 233 | 2 | 24 |
| PHF | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| Adj flow | 29 | 815 | 0 | 2 | 780 | | 2 | 2 | 3 | 245 | 2 | 25 |
| No. Lanes | 1 | 1 | 0 | 1 | 1 | 0 | 0 | 1 | 0 | 0 | 1 | 0 |
| Lane group | L | TR | | L | T | | | LTR | | | LTR | |
| Adj flow | 29 | 815 | | 2 | 780 | | | 7 | | | 272 | |
| Prop LTs | 1.000 | 0.000 | | 1.000 | 0.000 | | | 0.286 | | | 0.901 | |
| Prop RTs | 0.000 | | | 0.000 | | | 0.429 | | | 0.092 | | |

Saturation Flow Rate (see Exhibit 16-7 to determine the adjustment factors)

| | Eastbound | | | Westbound | | | Northbound | | | Southbound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| LG | L | TR | | L | T | | | LTR | | | LTR | |
| So | 1900 | 1900 | | 1900 | 1900 | | | 1900 | | | 1900 | |
| Lanes | 1 | 1 | 0 | 1 | 1 | 0 | 0 | 1 | 0 | 0 | 1 | 0 |
| fW | 1.000 | 1.000 | | 1.000 | 1.000 | | | 1.000 | | | 1.000 | |
| fHV | 0.935 | 0.971 | | 1.000 | 0.952 | | | 1.000 | | | 0.945 | |
| fG | 1.000 | 1.000 | | 1.000 | 1.000 | | | 1.000 | | | 1.000 | |
| fP | 1.000 | 1.000 | | 1.000 | 1.000 | | | 1.000 | | | 1.000 | |
| fBB | 1.000 | 1.000 | | 1.000 | 1.000 | | | 1.000 | | | 1.000 | |
| fA | 1.000 | 1.000 | | 1.000 | 1.000 | | | 1.000 | | | 1.000 | |
| fLU | 1.000 | 1.000 | | 1.000 | 1.000 | | | 1.000 | | | 1.000 | |
| fRT | | 1.000 | | | 1.000 | | | 0.942 | | | 0.988 | |
| fLT | 0.223 | 1.000 | | 0.202 | 1.000 | | | 0.986 | | | 0.957 | |
| Sec. | | | | | | | | | | | | |
| fLpb | 1.000 | 1.000 | | 1.000 | 1.000 | | | 1.000 | | | 1.000 | |
| fRpb | | 1.000 | | | 1.000 | | | 1.000 | | | 1.000 | |
| S | 395 | 1845 | | 384 | 1810 | | | 1765 | | | 1698 | |
| Sec. | | | | | | | | | | | | |

## CAPACITY AND LOS WORKSHEET

Capacity Analysis and Lane Group Capacity

| Appr/ Mvmt | Lane Group | Adj Flow Rate (v) | Adj Sat Flow Rate (s) | Flow Ratio (v/s) | Green Ratio (g/C) | --Lane Group-- Capacity (c) | v/c Ratio |
|---|---|---|---|---|---|---|---|
| Eastbound | | | | | | | |
| Prot | | | | | | | |
| Perm | | | | | | | |
| Left | L | 29 | 395 | 0.07 | 0.63 | 247 | 0.12 |
| Prot | | | | | | | |
| Perm | | | | | | | |
| Thru | TR | 815 | 1845 | # 0.44 | 0.63 | 1153 | 0.71 |
| Right | | | | | | | |
| Westbound | | | | | | | |
| Prot | | | | | | | |
| Perm | | | | | | | |
| Left | L | 2 | 384 | 0.01 | 0.63 | 240 | 0.01 |
| Prot | | | | | | | |
| Perm | | | | | | | |
| Thru | T | 780 | 1810 | 0.43 | 0.63 | 1131 | 0.69 |
| Right | | | | | | | |
| Northbound | | | | | | | |
| Prot | | | | | | | |
| Perm | | | | | | | |
| Left | | | | | | | |
| Prot | | | | | | | |
| Perm | | | | | | | |
| Thru | LTR | 7 | 1765 | # 0.00 | 0.03 | 44 | 0.16 |
| Right | | | | | | | |
| Southbound | | | | | | | |
| Prot | | | | | | | |
| Perm | | | | | | | |
| Left | | | | | | | |
| Prot | | | | | | | |
| Perm | | | | | | | |
| Thru | LTR | 272 | 1698 | # 0.16 | 0.26 | 446 | 0.61 |
| Right | | | | | | | |

Sum of flow ratios for critical lane groups, Yc = Sum (v/s) = 0.61
Total lost time per cycle, L = 14.00 sec
Critical flow rate to capacity ratio, Xc = (Yc)(C)/(C-L) = 0.66

Control Delay and LOS Determination

| Appr/ Lane Grp | Ratios v/c | Ratios g/C | Unf Del d1 | Prog Adj Fact | Lane Grp Cap | Incremental Factor k | Del d2 | Res Del d3 | Lane Group Delay | Lane Group LOS | Approach Delay | Approach LOS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Eastbound | | | | | | | | | | | | |
| L | 0.12 | 0.63 | 12.1 | 1.000 | 247 | 0.11 | 0.2 | 0.0 | 12.4 | B | | |
| TR | 0.71 | 0.63 | 20.2 | 1.000 | 1153 | 0.27 | 2.0 | 0.0 | 22.2 | C | 21.8 | C |
| Westbound | | | | | | | | | | | | |
| L | 0.01 | 0.63 | 11.3 | 1.000 | 240 | 0.11 | 0.0 | 0.0 | 11.3 | B | | |
| T | 0.69 | 0.63 | 19.8 | 1.000 | 1131 | 0.26 | 1.8 | 0.0 | 21.6 | C | 21.5 | C |
| Northbound | | | | | | | | | | | | |
| LTR | 0.16 | 0.03 | 76.4 | 1.000 | 44 | 0.11 | 1.7 | 0.0 | 78.0 | E | 78.0 | E |
| Southbound | | | | | | | | | | | | |
| LTR | 0.61 | 0.26 | 51.8 | 1.000 | 446 | 0.20 | 2.4 | 0.0 | 54.2 | D | 54.2 | D |

Intersection delay = 26.5 (sec/veh) Intersection LOS = C

## SUPPLEMENTAL PERMITTED LT WORKSHEET
for exclusive lefts

Input

| | EB | WB | NB | SB |
|---|---|---|---|---|
| Opposed by Single(S) or Multiple(M) lane approach | | | | |
| Cycle length, C 160.0 sec | | | | |
| Total actual green time for LT lane group, G (s) | 100.0 | 100.0 | | |
| Effective permitted green time for LT lane group, g(s) | 100.0 | 100.0 | | |
| Opposing effective green time, go (s) | 100.0 | 100.0 | | |
| Number of lanes in LT lane group, N | 1 | 1 | | |
| Number of lanes in opposing approach, No | 1 | 1 | | |
| Adjusted LT flow rate, VLT (veh/h) | 29 | 2 | | |
| Proportion of LT in LT lane group, PLT | 1.000 | 1.000 | | |
| Proportion of LT in opposing flow, PLTo | 0.00 | 0.00 | | |
| Adjusted opposing flow rate, Vo (veh/h) | 780 | 815 | | |
| Lost time for LT lane group, tL | 6.00 | 6.00 | | |
| Computation | | | | |
| LT volume per cycle, LTC=VLTC/3600 | 1.29 | 0.09 | | |
| Opposing lane util. factor, fLUo | 1.000 | 1.000 | 1.000 | 1.000 |
| Opposing flow, Volc=VoC/[3600(No)fLUo] (veh/ln/cyc) | 34.67 | 36.22 | | |
| gf=G[exp(- a * (LTC ** b))]-tl, gf<=g | 0.0 | 0.0 | | |
| Opposing platoon ratio, Rpo (refer Exhibit 16-11) | 1.00 | 1.00 | | |
| Opposing Queue Ratio, qro=Max[1-Rpo(go/C),0] | 0.38 | 0.38 | | |
| gq, (see Exhibit C16-4,5,6,7,8) | 39.88 | 43.64 | | |
| gu=g-gq if gq>=gf, or = g-gf if gq<gf | 60.12 | 56.36 | | |
| n=Max(gq-gf)/2,0) | 19.94 | 21.82 | | |
| PTHo=1-PLTo | 1.00 | 1.00 | | |
| PL*=PLT[1+(N-1)g/(gf+gu/EL1+4.24)] | 1.00 | 1.00 | | |
| EL1 (refer to Exhibit C16-3) | 2.70 | 2.79 | | |
| EL2=Max((1-Ptho**n)/Plto, 1.0) | | | | |
| fmin=2(1+PL)/g or fmin=2(1+Pl)/g | 0.04 | 0.04 | | |
| gdiff=max(gq-gf,0) | 0.00 | 0.00 | | |
| fm=[gf/g]+[gu/g]/[1+PL(EL1-1)], (min=fmin;max=1.00) | 0.22 | 0.20 | | |
| flt=fm=[gf/g]+[gu/g]/[1+PL(EL1-1)]+[gdiff/g]/[1+PL(EL2-1)],(fmin<=fm<=1.00) | | | | |
| or flt=[fm+0.91(N-1)]/N** | | | | |
| Left-turn adjustment, fLT | 0.223 | 0.202 | | |

For special case of single-lane approach opposed by multilane approach, see text.

* If Pl>=1 for shared left-turn lanes with N>1, then assume de-facto left-turn lane and redo calculations.

** For permitted left-turns with multiple exclusive left-turn lanes, flt=fm.

For special case of multilane approach opposed by single-lane approach or when gf>gq, see text.

## SUPPLEMENTAL PERMITTED LT WORKSHEET
for shared lefts

Input

| | EB | WB | NB | SB |
|---|---|---|---|---|
| Opposed by Single(S) or Multiple(M) lane approach | | | | |
| Cycle length, C 160.0 sec | | | | |
| Total actual green time for LT lane group, G (s) | | | | |
| Effective permitted green time for LT lane group, g(s) | | | | |
| Opposing effective green time, go (s) | | | | |
| Number of lanes in LT lane group, N | | | | |

Number of lanes in opposing approach, No
Adjusted LT flow rate, VLT (veh/h)
Proportion of LT in LT lane group, PLT 0.000 0.000 0.286 0.901
Proportion of LT in opposing flow, PLTo
Adjusted opposing flow rate, Vo (veh/h)
Lost time for LT lane group, tL
Computation
LT volume per cycle, LTC=VLTC/3600
Opposing lane util. factor, fLUo 1.000 1.000 1.000 1.000
Opposing flow, Volc=VoC/[3600(No)fLUo] (veh/ln/cyc)
gf=G[exp(- a * (LTC ** b)]-tl, gf<=g
Opposing platoon ratio, Rpo (refer Exhibit 16-11)
Opposing Queue Ratio, qro=Max[1-Rpo(go/C),0]
gq, (see Exhibit C16-4,5,6,7,8)
gu=g-gq if gq>=gf, or = g-gf if gq<gf
n=Max(gq-gf)/2,0)
PTHo=1-PLTo
PL*=PLT[1+(N-1)g/(gf+gu/EL1+4.24)]
EL1 (refer to Exhibit C16-3)
EL2=Max((1-Ptho**n)/Plto, 1.0)
fmin=2(1+PL)/g or fmin=2(1+Pl)/g
gdiff=max(gq-gf,0)
fm=[gf/g]+[gu/g]/[1+PL(EL1-1)], (min=fmin;max=1.00)
flt=fm=[gf/g]+[gu/g]/[1+PL(EL1-1)]+[gdiff/g]/[1+PL(EL2-1)],(fmin<=fm<=1.00)
or flt=[fm+0.91(N-1)]/N**
Left-turn adjustment, fLT

For special case of single-lane approach opposed by multilane approach, see text.
* If Pl>=1 for shared left-turn lanes with N>1, then assume de-facto left-turn lane and redo calculations.
** For permitted left-turns with multiple exclusive left-turn lanes, flt=fm.
For special case of multilane approach opposed by single-lane approach or when gf>gq, see text.

## SUPPLEMENTAL PEDESTRIAN-BICYCLE EFFECTS WORKSHEET

Permitted Left Turns

| | EB | WB | NB | SB |
|---|---|---|---|---|
| Effective pedestrian green time, gp (s) | | | | |
| Conflicting pedestrian volume, Vped (p/h) | | | | |
| Pedestrian flow rate, Vpedg (p/h) | | | | |
| OCCpedg | | | | |
| Opposing queue clearing green, gq (s) | | | | |
| Eff. ped. green consumed by opp. veh. queue, gq/gp | | | | |
| OCCpedu | | | | |
| Opposing flow rate, Vo (veh/h) | | | | |
| OCCr | | | | |
| Number of cross-street receiving lanes, Nrec | | | | |
| Number of turning lanes, Nturn | | | | |
| ApbT | | | | |
| Proportion of left turns, PLT | | | | |
| Proportion of left turns using protected phase, PLTA | | | | |
| Left-turn adjustment, fLpb | | | | |
| Permitted Right Turns | | | | |
| Effective pedestrian green time, gp (s) | | | | |
| Conflicting pedestrian volume, Vped (p/h) | | | | |
| Conflicting bicycle volume, Vbic (bicycles/h) | | | | |
| Vpedg | | | | |
| OCCpedg | | | | |
| Effective green, g (s) | | | | |
| Vbicg | | | | |

OCCbicg
OCCr
Number of cross-street receiving lanes, Nrec
Number of turning lanes, Nturn
ApbT
Proportion right-turns, PRT
Proportion right-turns using protected phase, PRTA
Right turn adjustment, fRpb

## SUPPLEMENTAL UNIFORM DELAY WORKSHEET

| | | EBLT | WBLT | NBLT | SBLT |
|---|---|---|---|---|---|
| Cycle length, C | 160.0 sec | | | | |
| Adj. LT vol from Vol Adjustment Worksheet, v | | | | | |
| v/c ratio from Capacity Worksheet, X | | | | | |
| Protected phase effective green interval, g (s) | | | | | |
| Opposing queue effective green interval, gq | | | | | |
| Unopposed green interval, gu | | | | | |
| Red time r=(C-g-gq-gu) | | | | | |
| Arrival rate, qa=v/(3600(max[X,1.0])) | | | | | |
| Protected ph. departure rate, Sp=s/3600 | | | | | |
| Permitted ph. departure rate, Ss=s(gq+gu)/(gu*3600) | | | | | |
| XPerm | | | | | |
| XProt | | | | | |
| Case | | | | | |
| Queue at beginning of green arrow, Qa | | | | | |
| Queue at beginning of unsaturated green, Qu | | | | | |
| Residual queue, Qr | | | | | |
| Uniform Delay, d1 | | | | | |

## DELAY/LOS WORKSHEET WITH INITIAL QUEUE

| Appr/ Lane Group | Initial Unmet Demand Q veh | Dur. Unmet Demand t hrs. | Uniform Delay Unadj. ds | Uniform Delay Adj. d1 sec | Initial Queue Param. u | Final Unmet Demand Q veh | Initial Queue Delay d3 sec | Lane Group Delay d sec |
|---|---|---|---|---|---|---|---|---|
| Eastbound | | | | | | | | |
| L | 0.0 | 0.00 | 30.0 | 12.1 | 0.00 | 0.0 | 0.0 | 12.4 |
| TR | 0.0 | 0.00 | 30.0 | 20.2 | 0.00 | 0.0 | 0.0 | 22.2 |
| | 0.0 | | | | | | 0.0 | |
| Westbound | | | | | | | | |
| L | 0.0 | 0.00 | 30.0 | 11.3 | 0.00 | 0.0 | 0.0 | 11.3 |
| T | 0.0 | 0.00 | 30.0 | 19.8 | 0.00 | 0.0 | 0.0 | 21.6 |
| | 0.0 | | | | | | 0.0 | |
| Northbound | | | | | | | | |
| | 0.0 | | | | | | 0.0 | |
| LTR | 0.0 | 0.00 | 78.0 | 76.4 | 0.00 | 0.0 | 0.0 | 78.0 |
| | 0.0 | | | | | | 0.0 | |
| Southbound | | | | | | | | |
| | 0.0 | | | | | | 0.0 | |
| LTR | 0.0 | 0.00 | 59.0 | 51.8 | 0.00 | 0.0 | 0.0 | 54.2 |
| | 0.0 | | | | | | 0.0 | |

Intersection Delay 26.5 sec/veh Intersection LOS C

## BACK OF QUEUE WORKSHEET

| | Eastbound | | | Westbound | | | Northbound | | | Southbound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| LaneGroup | L | TR | | L | T | | | LTR | | | LTR | |
| Init Queue | 0.0 | 0.0 | | 0.0 | 0.0 | | | 0.0 | | | 0.0 | |
| Flow Rate | 29 | 815 | | 2 | 780 | | | 7 | | | 272 | |
| So | 1900 | 1900 | | 1900 | 1900 | | | 1900 | | | 1900 | |
| No.Lanes | 1 | 1 | 0 | 1 | 1 | 0 | 0 | 1 | 0 | 0 | 1 | 0 |
| SL | 395 | 1845 | | 384 | 1810 | | | 1765 | | | 1698 | |
| LnCapacity | 247 | 1153 | | 240 | 1131 | | | 44 | | | 446 | |
| Flow Ratio | 0.1 | 0.4 | | 0.0 | 0.4 | | | 0.0 | | | 0.2 | |
| v/c Ratio | 0.12 | 0.71 | | 0.01 | 0.69 | | | 0.16 | | | 0.61 | |
| Grn Ratio | 0.63 | 0.63 | | 0.63 | 0.63 | | | 0.03 | | | 0.26 | |
| I Factor | | 1.000 | | | 1.000 | | | 1.000 | | | 1.000 | |
| AT or PVG | 3 | 3 | | 3 | 3 | | | 3 | | | 3 | |
| Pltn Ratio | 1.00 | 1.00 | | 1.00 | 1.00 | | | 1.00 | | | 1.00 | |
| PF2 | 1.00 | 1.00 | | 1.00 | 1.00 | | | 1.00 | | | 1.00 | |
| Q1 | 0.5 | 24.3 | | 0.0 | 22.8 | | | 0.3 | | | 10.6 | |
| kB | 0.4 | 1.1 | | 0.4 | 1.0 | | | 0.1 | | | 0.6 | |
| Q2 | 0.1 | 2.4 | | 0.0 | 2.2 | | | 0.0 | | | 0.9 | |
| Q Average | 0.6 | 26.8 | | 0.0 | 25.1 | | | 0.3 | | | 11.5 | |
| Q Spacing | 25.0 | 25.0 | | 25.0 | 25.0 | | | 25.0 | | | 25.0 | |
| Q Storage | 0 | 0 | | 0 | 0 | | | 0 | | | 0 | |
| Q S Ratio | | | | | | | | | | | | |
| 70th Percentile Output: | | | | | | | | | | | | |
| fB% | 1.2 | 1.2 | | 1.2 | 1.2 | | | 1.2 | | | 1.2 | |
| BOQ | 0.7 | 30.8 | | 0.0 | 28.9 | | | 0.4 | | | 13.5 | |
| QSRatio | | | | | | | | | | | | |
| 85th Percentile Output: | | | | | | | | | | | | |
| fB% | 1.6 | 1.4 | | 1.6 | 1.4 | | | 1.6 | | | 1.5 | |
| BOQ | 0.9 | 38.1 | | 0.1 | 35.8 | | | 0.5 | | | 17.3 | |
| QSRatio | | | | | | | | | | | | |
| 90th Percentile Output: | | | | | | | | | | | | |
| fB% | 1.8 | 1.5 | | 1.8 | 1.5 | | | 1.8 | | | 1.6 | |
| BOQ | 1.0 | 40.3 | | 0.1 | 38.0 | | | 0.6 | | | 18.7 | |
| QSRatio | | | | | | | | | | | | |
| 95th Percentile Output: | | | | | | | | | | | | |
| fB% | 2.1 | 1.6 | | 2.1 | 1.6 | | | 2.1 | | | 1.8 | |
| BOQ | 1.2 | 43.8 | | 0.1 | 41.3 | | | 0.7 | | | 20.9 | |
| QSRatio | | | | | | | | | | | | |
| 98th Percentile Output: | | | | | | | | | | | | |
| fB% | 2.7 | 1.8 | | 2.7 | 1.8 | | | 2.7 | | | 2.1 | |
| BOQ | 1.5 | 48.9 | | 0.1 | 46.3 | | | 0.9 | | | 24.3 | |
| QSRatio | | | | | | | | | | | | |

ERROR MESSAGES

West bound right does not exist but has green time.

HCS+: Signalized Intersections Release 5.5

Analyst: JM
Agency: KLOA, Inc.
Date: 5/13/2013
Period: A.M. Peak Hour
Project ID: 12-141
E/W St: IL 120

Inter.: IL 120 & Cedar Lake Road
Area Type: All other areas
Jurisd: IDOT
Year : Existing Traffic

N/S St: Cedra Lake Road

SIGNALIZED INTERSECTION SUMMARY

| | Eastbound | | | Westbound | | | Northbound | | | Southbound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | L | T | R | L | T | R | L | T | R | L | T | R |
| No. Lanes | 1 | 1 | 0 | 1 | 1 | 0 | 1 | 2 | 0 | 1 | 2 | 0 |
| LGConfig | L | TR | | L | TR | | L | TR | | L | TR | |
| Volume | 98 | 570 | 47 | 66 | 623 | 28 | 29 | 87 | 37 | 11 | 118 | 128 |
| Lane Width | 12.0 | 12.0 | | 12.0 | 12.0 | | 12.0 | 12.0 | | 12.0 | 12.0 | |
| RTOR Vol | | | 0 | | | 0 | | | 0 | | | 0 |

Duration 0.25 Area Type: All other areas

Signal Operations

| Phase Combination | 1 | 2 | 3 | 4 | | | 5 | 6 | 7 | 8 |
|---|---|---|---|---|---|---|---|---|---|---|
| EB Left | A | A | | | NB | Left | A | A | | |
| Thru | | A | | | | Thru | | A | | |
| Right | | A | | | | Right | | A | | |
| Peds | | | | | | Peds | | | | |
| WB Left | A | A | | | SB | Left | A | A | | |
| Thru | | A | | | | Thru | | A | | |
| Right | | A | | | | Right | | A | | |
| Peds | | | | | | Peds | | | | |
| NB Right | | | | | EB | Right | | | | |
| SB Right | | | | | WB | Right | | | | |
| Green | 12.0 | 50.0 | | | | | 12.0 | 18.0 | | |
| Yellow | 3.0 | 4.5 | | | | | 3.0 | 4.5 | | |
| All Red | 0.0 | 1.5 | | | | | 0.0 | 1.5 | | |

Cycle Length: 110.0 secs

Intersection Performance Summary

| Appr/ Lane Grp | Lane Group Capacity | Adj Sat Flow Rate (s) | Ratios v/c | Ratios g/C | Lane Group Delay | Lane Group LOS | Approach Delay | Approach LOS |
|---|---|---|---|---|---|---|---|---|
| Eastbound | | | | | | | | |
| L | 318 | 1736 | 0.32 | 0.62 | 16.3 | B | | |
| TR | 808 | 1777 | 0.80 | 0.45 | 31.7 | C | 29.6 | C |
| Westbound | | | | | | | | |
| L | 334 | 1687 | 0.21 | 0.62 | 14.4 | B | | |
| TR | 795 | 1749 | 0.86 | 0.45 | 36.5 | D | 34.5 | C |
| Northbound | | | | | | | | |
| L | 355 | 1752 | 0.09 | 0.33 | 25.7 | C | | |
| TR | 545 | 3333 | 0.24 | 0.16 | 40.3 | D | 37.5 | D |
| Southbound | | | | | | | | |
| L | 432 | 1805 | 0.03 | 0.33 | 25.1 | C | | |
| TR | 516 | 3156 | 0.50 | 0.16 | 42.7 | D | 41.9 | D |

Intersection Delay = 33.9 (sec/veh) Intersection LOS = C

Phone: Fax:
E-Mail:

## OPERATIONAL ANALYSIS

Analyst: JM
Agency/Co.: KLOA, Inc.
Date Performed: 5/13/2013
Analysis Time Period: A.M. Peak Hour
Intersection: IL 120 & Cedar Lake Road
Area Type: All other areas
Jurisdiction: IDOT
Analysis Year: Existing Traffic
Project ID: 12-141
E/W St: IL 120 N/S St: Cedra Lake Road

## VOLUME DATA

| | Eastbound | | | Westbound | | | Northbound | | | Southbound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | L | T | R | L | T | R | L | T | R | L | T | R |
| Volume | 98 | 570 | 47 | 66 | 623 | 28 | 29 | 87 | 37 | 11 | 118 | 128 |
| % Heavy Veh | 4 | 6 | 2 | 7 | 8 | 7 | 3 | 4 | 3 | 0 | 2 | 9 |
| PHF | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| PK 15 Vol | 26 | 150 | 12 | 17 | 164 | 7 | 8 | 23 | 10 | 3 | 31 | 34 |
| Hi Ln Vol | | | | | | | | | | | | |
| % Grade | | 0 | | | 0 | | | 0 | | | 0 | |
| Ideal Sat | 1900 | 1900 | | 1900 | 1900 | | 1900 | 1900 | | 1900 | 1900 | |
| ParkExist | | | | | | | | | | | | |
| NumPark | | | | | | | | | | | | |
| No. Lanes | 1 | 1 | 0 | 1 | 1 | 0 | 1 | 2 | 0 | 1 | 2 | 0 |
| LGConfig | L | TR | | L | TR | | L | TR | | L | TR | |
| Lane Width | 12.0 | 12.0 | | 12.0 | 12.0 | | 12.0 | 12.0 | | 12.0 | 12.0 | |
| RTOR Vol | | | 0 | | | 0 | | | 0 | | | 0 |
| Adj Flow | 103 | 649 | | 69 | 685 | | 31 | 131 | | 12 | 259 | |
| %InSharedLn | | | | | | | | | | | | |
| Prop LTs | 1.000 | 0.000 | | 1.000 | 0.000 | | 1.000 | 0.000 | | 1.000 | 0.000 | |
| Prop RTs | | 0.076 | | | 0.042 | | | 0.298 | | | 0.521 | |
| Peds Bikes | | 0 | | | 0 | | | 0 | | | 0 | |
| Buses | 0 | 0 | | 0 | 0 | | 0 | 0 | | 0 | 0 | |
| %InProtPhase | 0.0 | | | 0.0 | | | 0.0 | | | 0.0 | | |
| Duration | 0.25 | | | Area Type: All other areas | | | | | | | | |

## OPERATING PARAMETERS

| | Eastbound | | | Westbound | | | Northbound | | | Southbound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | L | T | R | L | T | R | L | T | R | L | T | R |
| Init Unmet | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | |
| Arriv. Type | 3 | 3 | | 3 | 3 | | 3 | 3 | | 3 | 3 | |
| Unit Ext. | 3.0 | 3.0 | | 3.0 | 3.0 | | 3.0 | 3.0 | | 3.0 | 3.0 | |
| I Factor | | 1.000 | | | 1.000 | | | 1.000 | | | 1.000 | |
| Lost Time | 2.0 | 2.0 | | 2.0 | 2.0 | | 2.0 | 2.0 | | 2.0 | 2.0 | |
| Ext of g | 2.0 | 2.0 | | 2.0 | 2.0 | | 2.0 | 2.0 | | 2.0 | 2.0 | |
| Ped Min g | | 3.2 | | | 3.2 | | | 3.2 | | | 3.2 | |

## PHASE DATA

| Phase Combination | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|---|---|---|---|---|---|---|---|---|
| EB Left | A | A | | | NB Left | A | A | |
| Thru | | A | | | Thru | | A | |
| Right | | A | | | Right | | A | |
| Peds | | | | | Peds | | | |
| WB Left | A | A | | | SB Left | A | A | |
| Thru | | A | | | Thru | | A | |
| Right | | A | | | Right | | A | |
| Peds | | | | | Peds | | | |
| NB Right | | | | | EB Right | | | |
| SB Right | | | | | WB Right | | | |
| Green | 12.0 | 50.0 | | | 12.0 | 18.0 | | |
| Yellow | 3.0 | 4.5 | | | 3.0 | 4.5 | | |
| All Red | 0.0 | 1.5 | | | 0.0 | 1.5 | | |

Cycle Length: 110.0 secs

## VOLUME ADJUSTMENT AND SATURATION FLOW WORKSHEET

Volume Adjustment

| | Eastbound | | | Westbound | | | Northbound | | | Southbound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | L | T | R | L | T | R | L | T | R | L | T | R |
| Volume, V | 98 | 570 | 47 | 66 | 623 | 28 | 29 | 87 | 37 | 11 | 118 | 128 |
| PHF | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| Adj flow | 103 | 600 | 49 | 69 | 656 | 29 | 31 | 92 | 39 | 12 | 124 | 135 |
| No. Lanes | 1 | 1 | 0 | 1 | 1 | 0 | 1 | 2 | 0 | 1 | 2 | 0 |
| Lane group | L | TR | | L | TR | | L | TR | | L | TR | |
| Adj flow | 103 | 649 | | 69 | 685 | | 31 | 131 | | 12 | 259 | |
| Prop LTs | 1.000 | 0.000 | | 1.000 | 0.000 | | 1.000 | 0.000 | | 1.000 | 0.000 | |
| Prop RTs | 0.076 | | | 0.042 | | | 0.298 | | | 0.521 | | |

Saturation Flow Rate (see Exhibit 16-7 to determine the adjustment factors)

| | Eastbound | | | Westbound | | | Northbound | | | Southbound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| LG | L | TR | | L | TR | | L | TR | | L | TR | |
| So | 1900 | 1900 | | 1900 | 1900 | | 1900 | 1900 | | 1900 | 1900 | |
| Lanes | 1 | 1 | 0 | 1 | 1 | 0 | 1 | 2 | 0 | 1 | 2 | 0 |
| fW | 1.000 | 1.000 | | 1.000 | 1.000 | | 1.000 | 1.000 | | 1.000 | 1.000 | |
| fHV | 0.962 | 0.946 | | 0.935 | 0.926 | | 0.971 | 0.964 | | 1.000 | 0.947 | |
| fG | 1.000 | 1.000 | | 1.000 | 1.000 | | 1.000 | 1.000 | | 1.000 | 1.000 | |
| fP | 1.000 | 1.000 | | 1.000 | 1.000 | | 1.000 | 1.000 | | 1.000 | 1.000 | |
| fBB | 1.000 | 1.000 | | 1.000 | 1.000 | | 1.000 | 1.000 | | 1.000 | 1.000 | |
| fA | 1.000 | 1.000 | | 1.000 | 1.000 | | 1.000 | 1.000 | | 1.000 | 1.000 | |
| fLU | 1.000 | 1.000 | | 1.000 | 1.000 | | 1.000 | 0.952 | | 1.000 | 0.952 | |
| fRT | | 0.989 | | | 0.994 | | | 0.955 | | | 0.922 | |
| fLT | 0.950 | 1.000 | | 0.950 | 1.000 | | 0.950 | 1.000 | | 0.950 | 1.000 | |
| Sec. | 0.138 | | | 0.166 | | | 0.406 | | | 0.567 | | |
| fLpb | 1.000 | 1.000 | | 1.000 | 1.000 | | 1.000 | 1.000 | | 1.000 | 1.000 | |
| fRpb | | 1.000 | | | 1.000 | | | 1.000 | | | 1.000 | |
| S | 1736 | 1777 | | 1687 | 1749 | | 1752 | 3333 | | 1805 | 3156 | |
| Sec. | 253 | | | 294 | | | 750 | | | 1078 | | |

## CAPACITY AND LOS WORKSHEET

Capacity Analysis and Lane Group Capacity

| Appr/ Mvmt | Lane Group | Adj Flow Rate (v) | Adj Sat Flow Rate (s) | Flow Ratio (v/s) | Green Ratio (g/C) | --Lane Group-- Capacity (c) | v/c Ratio |
|---|---|---|---|---|---|---|---|
| Eastbound | | | | | | | |
| Prot | | 103 | 1736 | # 0.06 | 0.109 | 189 | 0.54 |
| Perm | | 0 | 253 | 0.00 | 0.509 | 129 | 0.00 |
| Left | L | 103 | | | 0.62 | 318 | 0.32 |
| Prot | | | | | | | |
| Perm | | | | | | | |
| Thru | TR | 649 | 1777 | 0.37 | 0.45 | 808 | 0.80 |
| Right | | | | | | | |
| Westbound | | | | | | | |
| Prot | | 69 | 1687 | 0.04 | 0.109 | 184 | 0.38 |
| Perm | | 0 | 294 | 0.00 | 0.509 | 150 | 0.00 |
| Left | L | 69 | | | 0.62 | 334 | 0.21 |
| Prot | | | | | | | |
| Perm | | | | | | | |
| Thru | TR | 685 | 1749 | # 0.39 | 0.45 | 795 | 0.86 |
| Right | | | | | | | |
| Northbound | | | | | | | |
| Prot | | 31 | 1752 | # 0.02 | 0.109 | 191 | 0.16 |
| Perm | | 0 | 750 | 0.00 | 0.218 | 164 | 0.00 |
| Left | L | 31 | | | 0.33 | 355 | 0.09 |
| Prot | | | | | | | |
| Perm | | | | | | | |
| Thru | TR | 131 | 3333 | 0.04 | 0.16 | 545 | 0.24 |
| Right | | | | | | | |
| Southbound | | | | | | | |
| Prot | | 12 | 1805 | 0.01 | 0.109 | 197 | 0.06 |
| Perm | | 0 | 1078 | 0.00 | 0.218 | 235 | 0.00 |
| Left | L | 12 | | | 0.33 | 432 | 0.03 |
| Prot | | | | | | | |
| Perm | | | | | | | |
| Thru | TR | 259 | 3156 | # 0.08 | 0.16 | 516 | 0.50 |
| Right | | | | | | | |

Sum of flow ratios for critical lane groups, Yc = Sum (v/s) = 0.55
Total lost time per cycle, L = 24.00 sec
Critical flow rate to capacity ratio, Xc = (Yc)(C)/(C-L) = 0.70

Control Delay and LOS Determination

| Appr/ Lane Grp | Ratios v/c | Ratios g/C | Unf Del d1 | Prog Adj Fact | Lane Grp Cap | Incremental Factor k | Incremental Del d2 | Res Del d3 | Lane Group Delay | Lane Group LOS | Approach Delay | Approach LOS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Eastbound | | | | | | | | | | | | |
| L | 0.32 | 0.62 | 15.7 | 1.000 | 318 | 0.11 | 0.6 | 0.0 | 16.3 | B | | |
| TR | 0.80 | 0.45 | 25.8 | 1.000 | 808 | 0.35 | 5.9 | 0.0 | 31.7 | C | 29.6 | C |
| Westbound | | | | | | | | | | | | |
| L | 0.21 | 0.62 | 14.1 | 1.000 | 334 | 0.11 | 0.3 | 0.0 | 14.4 | B | | |
| TR | 0.86 | 0.45 | 26.9 | 1.000 | 795 | 0.39 | 9.6 | 0.0 | 36.5 | D | 34.5 | C |
| Northbound | | | | | | | | | | | | |
| L | 0.09 | 0.33 | 25.6 | 1.000 | 355 | 0.11 | 0.1 | 0.0 | 25.7 | C | | |
| TR | 0.24 | 0.16 | 40.0 | 1.000 | 545 | 0.11 | 0.2 | 0.0 | 40.3 | D | 37.5 | D |
| Southbound | | | | | | | | | | | | |
| L | 0.03 | 0.33 | 25.1 | 1.000 | 432 | 0.11 | 0.0 | 0.0 | 25.1 | C | | |
| TR | 0.50 | 0.16 | 41.9 | 1.000 | 516 | 0.11 | 0.8 | 0.0 | 42.7 | D | 41.9 | D |

Intersection delay = 33.9 (sec/veh) Intersection LOS = C

## SUPPLEMENTAL PERMITTED LT WORKSHEET
for exclusive lefts

Input

| | EB | WB | NB | SB |
|---|---|---|---|---|
| Opposed by Single(S) or Multiple(M) lane approach | | | | |
| Cycle length, C 110.0 sec | | | | |
| Total actual green time for LT lane group, G (s) | 65.0 | 65.0 | 33.0 | 33.0 |
| Effective permitted green time for LT lane group, g(s) | 56.0 | 56.0 | 24.0 | 24.0 |
| Opposing effective green time, go (s) | 50.0 | 50.0 | 18.0 | 18.0 |
| Number of lanes in LT lane group, N | 1 | 1 | 1 | 1 |
| Number of lanes in opposing approach, No | 1 | 1 | 2 | 2 |
| Adjusted LT flow rate, VLT (veh/h) | 103 | 69 | 31 | 12 |
| Proportion of LT in LT lane group, PLT | 1.000 | 1.000 | 1.000 | 1.000 |
| Proportion of LT in opposing flow, PLTo | 0.00 | 0.00 | 0.00 | 0.00 |
| Adjusted opposing flow rate, Vo (veh/h) | 685 | 649 | 259 | 131 |
| Lost time for LT lane group, tL | 6.00 | 6.00 | 6.00 | 6.00 |
| Computation | | | | |
| LT volume per cycle, LTC=VLTC/3600 | 3.15 | 2.11 | 0.95 | 0.37 |
| Opposing lane util. factor, fLUo | 1.000 | 1.000 | 0.952 | 0.952 |
| Opposing flow, Volc=VoC/[3600(No)fLUo] (veh/ln/cyc) | 20.93 | 19.83 | 4.16 | 2.10 |
| gf=G[exp(- a * (LTC ** b))]-tl, gf<=g | 0.0 | 0.0 | 0.0 | 0.0 |
| Opposing platoon ratio, Rpo (refer Exhibit 16-11) | 1.00 | 1.00 | 1.00 | 1.00 |
| Opposing Queue Ratio, qro=Max[1-Rpo(go/C),0] | 0.55 | 0.55 | 0.84 | 0.84 |
| gq, (see Exhibit C16-4,5,6,7,8) | 36.86 | 33.83 | 7.52 | 3.66 |
| gu=g-gq if gq>=gf, or = g-gf if gq<gf | 19.14 | 22.17 | 16.48 | 20.34 |
| n=Max(gq-gf)/2,0) | 18.43 | 16.92 | 3.76 | 1.83 |
| PTHo=1-PLTo | 1.00 | 1.00 | 1.00 | 1.00 |
| PL*=PLT[1+(N-1)g/(gf+gu/EL1+4.24)] | 1.00 | 1.00 | 1.00 | 1.00 |
| EL1 (refer to Exhibit C16-3) | 2.47 | 2.39 | 1.69 | 1.49 |
| EL2=Max((1-Ptho**n)/Plto, 1.0) | | | | |
| fmin=2(1+PL)/g or fmin=2(1+Pl)/g | 0.07 | 0.07 | 0.17 | 0.17 |
| gdiff=max(gq-gf,0) | 0.00 | 0.00 | 0.00 | 0.00 |
| fm=[gf/g]+[gu/g]/[1+PL(EL1-1)], (min=fmin;max=1.00) | 0.14 | 0.17 | 0.41 | 0.57 |
| flt=fm=[gf/g]+[gu/g]/[1+PL(EL1-1)]+[gdiff/g]/[1+PL(EL2-1)],(fmin<=fm<=1.00) | | | | |
| or flt=[fm+0.91(N-1)]/N** | | | | |
| Left-turn adjustment, fLT | 0.138 | 0.166 | 0.406 | 0.567 |

For special case of single-lane approach opposed by multilane approach, see text.

* If Pl>=1 for shared left-turn lanes with N>1, then assume de-facto left-turn lane and redo calculations.

** For permitted left-turns with multiple exclusive left-turn lanes, flt=fm.

For special case of multilane approach opposed by single-lane approach or when gf>gq, see text.

## SUPPLEMENTAL PERMITTED LT WORKSHEET
for shared lefts

Input

| | EB | WB | NB | SB |
|---|---|---|---|---|
| Opposed by Single(S) or Multiple(M) lane approach | | | | |
| Cycle length, C 110.0 sec | | | | |
| Total actual green time for LT lane group, G (s) | | | | |
| Effective permitted green time for LT lane group, g(s) | | | | |
| Opposing effective green time, go (s) | | | | |
| Number of lanes in LT lane group, N | | | | |

| | | | | |
|---|---|---|---|---|
| Number of lanes in opposing approach, No | | | | |
| Adjusted LT flow rate, VLT (veh/h) | | | | |
| Proportion of LT in LT lane group, PLT | 0.000 | 0.000 | 0.000 | 0.000 |
| Proportion of LT in opposing flow, PLTo | | | | |
| Adjusted opposing flow rate, Vo (veh/h) | | | | |
| Lost time for LT lane group, tL | | | | |
| Computation | | | | |
| LT volume per cycle, LTC=VLTC/3600 | | | | |
| Opposing lane util. factor, fLUo | 1.000 | 1.000 | 0.952 | 0.952 |
| Opposing flow, Volc=VoC/[3600(No)fLUo] (veh/ln/cyc) | | | | |
| gf=G[exp(- a * (LTC ** b)]-tl, gf<=g | | | | |
| Opposing platoon ratio, Rpo (refer Exhibit 16-11) | | | | |
| Opposing Queue Ratio, qro=Max[1-Rpo(go/C),0] | | | | |
| gq, (see Exhibit C16-4,5,6,7,8) | | | | |
| gu=g-gq if gq>=gf, or = g-gf if gq<gf | | | | |
| n=Max(gq-gf)/2,0) | | | | |
| PTHo=1-PLTo | | | | |
| PL*=PLT[1+(N-1)g/(gf+gu/EL1+4.24)] | | | | |
| EL1 (refer to Exhibit C16-3) | | | | |
| EL2=Max((1-Ptho**n)/Plto, 1.0) | | | | |
| fmin=2(1+PL)/g or fmin=2(1+Pl)/g | | | | |
| gdiff=max(gq-gf,0) | | | | |
| fm=[gf/g]+[gu/g]/[1+PL(EL1-1)], (min=fmin;max=1.00) | | | | |
| flt=fm=[gf/g]+[gu/g]/[1+PL(EL1-1)]+[gdiff/g]/[1+PL(EL2-1)],(fmin<=fm<=1.00) | | | | |
| or flt=[fm+0.91(N-1)]/N** | | | | |
| Left-turn adjustment, fLT | | | | |

For special case of single-lane approach opposed by multilane approach, see text.

* If Pl>=1 for shared left-turn lanes with N>1, then assume de-facto left-turn lane and redo calculations.

** For permitted left-turns with multiple exclusive left-turn lanes, flt=fm.

For special case of multilane approach opposed by single-lane approach or when gf>gq, see text.

## SUPPLEMENTAL PEDESTRIAN-BICYCLE EFFECTS WORKSHEET

| Permitted Left Turns | EB | WB | NB | SB |
|---|---|---|---|---|
| Effective pedestrian green time, gp (s) | | | | |
| Conflicting pedestrian volume, Vped (p/h) | | | | |
| Pedestrian flow rate, Vpedg (p/h) | | | | |
| OCCpedg | | | | |
| Opposing queue clearing green, gq (s) | | | | |
| Eff. ped. green consumed by opp. veh. queue, gq/gp | | | | |
| OCCpedu | | | | |
| Opposing flow rate, Vo (veh/h) | | | | |
| OCCr | | | | |
| Number of cross-street receiving lanes, Nrec | | | | |
| Number of turning lanes, Nturn | | | | |
| ApbT | | | | |
| Proportion of left turns, PLT | | | | |
| Proportion of left turns using protected phase, PLTA | | | | |
| Left-turn adjustment, fLpb | | | | |
| Permitted Right Turns | | | | |
| Effective pedestrian green time, gp (s) | | | | |
| Conflicting pedestrian volume, Vped (p/h) | | | | |
| Conflicting bicycle volume, Vbic (bicycles/h) | | | | |
| Vpedg | | | | |
| OCCpedg | | | | |
| Effective green, g (s) | | | | |
| Vbicg | | | | |

OCCbicg
OCCr
Number of cross-street receiving lanes, Nrec
Number of turning lanes, Nturn
ApbT
Proportion right-turns, PRT
Proportion right-turns using protected phase, PRTA
Right turn adjustment, fRpb

## SUPPLEMENTAL UNIFORM DELAY WORKSHEET

| | | EBLT | WBLT | NBLT | SBLT |
|---|---|---|---|---|---|
| Cycle length, C | 110.0 sec | | | | |
| Adj. LT vol from Vol Adjustment Worksheet, v | | 103 | 69 | 31 | 12 |
| v/c ratio from Capacity Worksheet, X | | 0.32 | 0.21 | 0.09 | 0.03 |
| Protected phase effective green interval, g (s) | | 12.0 | 12.0 | 12.0 | 12.0 |
| Opposing queue effective green interval, gq | | 36.86 | 33.83 | 7.52 | 3.66 |
| Unopposed green interval, gu | | 19.14 | 22.17 | 16.48 | 20.34 |
| Red time r=(C-g-gq-gu) | | 42.0 | 42.0 | 74.0 | 74.0 |
| Arrival rate, qa=v/(3600(max[X,1.0])) | | 0.03 | 0.02 | 0.01 | 0.00 |
| Protected ph. departure rate, Sp=s/3600 | | 0.482 | 0.469 | 0.487 | 0.501 |
| Permitted ph. departure rate, Ss=s(gq+gu)/(gu*3600) | | 0.21 | 0.21 | 0.30 | 0.35 |
| XPerm | | 0.41 | 0.23 | 0.04 | 0.01 |
| XProt | | 0.27 | 0.18 | 0.13 | 0.05 |
| Case | | 1 | 1 | 1 | 1 |
| Queue at beginning of green arrow, Qa | | 1.20 | 0.81 | 0.64 | 0.25 |
| Queue at beginning of unsaturated green, Qu | | 1.05 | 0.65 | 0.06 | 0.01 |
| Residual queue, Qr | | 0.00 | 0.00 | 0.00 | 0.00 |
| Uniform Delay, d1 | | 15.7 | 14.1 | 25.6 | 25.1 |

## DELAY/LOS WORKSHEET WITH INITIAL QUEUE

| Appr/ Lane Group | Initial Unmet Demand Q veh | Dur. Unmet Demand t hrs. | Uniform Delay Unadj. ds | Uniform Delay Adj. d1 sec | Initial Queue Param. u | Final Unmet Demand Q veh | Initial Queue Delay d3 sec | Lane Group Delay d sec |
|---|---|---|---|---|---|---|---|---|
| Eastbound | | | | | | | | |
| L | 0.0 | 0.00 | | 15.7 | 0.00 | 0.0 | 0.0 | 16.3 |
| TR | 0.0 | 0.00 | 30.0 | 25.8 | 0.00 | 0.0 | 0.0 | 31.7 |
| | 0.0 | | | | | | 0.0 | |
| Westbound | | | | | | | | |
| L | 0.0 | 0.00 | | 14.1 | 0.00 | 0.0 | 0.0 | 14.4 |
| TR | 0.0 | 0.00 | 30.0 | 26.9 | 0.00 | 0.0 | 0.0 | 36.5 |
| | 0.0 | | | | | | 0.0 | |
| Northbound | | | | | | | | |
| L | 0.0 | 0.00 | | 25.6 | 0.00 | 0.0 | 0.0 | 25.7 |
| TR | 0.0 | 0.00 | 46.0 | 40.0 | 0.00 | 0.0 | 0.0 | 40.3 |
| | 0.0 | | | | | | 0.0 | |
| Southbound | | | | | | | | |
| L | 0.0 | 0.00 | | 25.1 | 0.00 | 0.0 | 0.0 | 25.1 |
| TR | 0.0 | 0.00 | 46.0 | 41.9 | 0.00 | 0.0 | 0.0 | 42.7 |
| | 0.0 | | | | | | 0.0 | |

Intersection Delay 33.9 sec/veh Intersection LOS C

## BACK OF QUEUE WORKSHEET

| | Eastbound | | | Westbound | | | Northbound | | | Southbound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| LaneGroup | L | TR | | L | TR | | L | TR | | L | TR | |
| Init Queue | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | |
| Flow Rate | 103 | 649 | | 69 | 685 | | 31 | 68 | | 12 | 136 | |
| So | 1900 | 1900 | | 1900 | 1900 | | 1900 | 1900 | | 1900 | 1900 | |
| No.Lanes | 1 | 1 | 0 | 1 | 1 | 0 | 1 | 2 | 0 | 1 | 2 | 0 |
| SL | 515 | 1777 | | 540 | 1749 | | 1084 | 1750 | | 1320 | 1657 | |
| LnCapacity | 318 | 808 | | 334 | 795 | | 355 | 286 | | 432 | 271 | |
| Flow Ratio | 0.2 | 0.4 | | 0.1 | 0.4 | | 0.0 | 0.0 | | 0.0 | 0.1 | |
| v/c Ratio | 0.32 | 0.80 | | 0.21 | 0.86 | | 0.09 | 0.24 | | 0.03 | 0.50 | |
| Grn Ratio | 0.62 | 0.45 | | 0.62 | 0.45 | | 0.33 | 0.16 | | 0.33 | 0.16 | |
| I Factor | | 1.000 | | | 1.000 | | | 1.000 | | | 1.000 | |
| AT or PVG | 3 | 3 | | 3 | 3 | | 3 | 3 | | 3 | 3 | |
| Pltn Ratio | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | |
| PF2 | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | |
| Q1 | 1.2 | 17.0 | | 0.8 | 18.8 | | 0.6 | 1.8 | | 0.2 | 3.8 | |
| kB | 0.4 | 0.7 | | 0.4 | 0.7 | | 0.4 | 0.4 | | 0.4 | 0.4 | |
| Q2 | 0.2 | 2.5 | | 0.1 | 3.4 | | 0.0 | 0.1 | | 0.0 | 0.4 | |
| Q Average | 1.4 | 19.5 | | 0.9 | 22.2 | | 0.7 | 1.9 | | 0.3 | 4.1 | |
| Q Spacing | 25.0 | 25.0 | | 25.0 | 25.0 | | 25.0 | 25.0 | | 25.0 | 25.0 | |
| Q Storage | 0 | 0 | | 0 | 0 | | 0 | 0 | | 0 | 0 | |
| Q S Ratio | | | | | | | | | | | | |
| 70th Percentile Output: | | | | | | | | | | | | |
| fB% | 1.2 | 1.2 | | 1.2 | 1.2 | | 1.2 | 1.2 | | 1.2 | 1.2 | |
| BOQ | 1.7 | 22.7 | | 1.1 | 25.6 | | 0.8 | 2.3 | | 0.3 | 4.9 | |
| QSRatio | | | | | | | | | | | | |
| 85th Percentile Output: | | | | | | | | | | | | |
| fB% | 1.6 | 1.5 | | 1.6 | 1.4 | | 1.6 | 1.6 | | 1.6 | 1.6 | |
| BOQ | 2.3 | 28.4 | | 1.5 | 32.0 | | 1.1 | 3.0 | | 0.4 | 6.5 | |
| QSRatio | | | | | | | | | | | | |
| 90th Percentile Output: | | | | | | | | | | | | |
| fB% | 1.8 | 1.6 | | 1.8 | 1.5 | | 1.8 | 1.8 | | 1.8 | 1.7 | |
| BOQ | 2.5 | 30.3 | | 1.6 | 33.9 | | 1.2 | 3.4 | | 0.5 | 7.1 | |
| QSRatio | | | | | | | | | | | | |
| 95th Percentile Output: | | | | | | | | | | | | |
| fB% | 2.1 | 1.7 | | 2.1 | 1.7 | | 2.1 | 2.0 | | 2.1 | 2.0 | |
| BOQ | 2.9 | 33.2 | | 1.9 | 37.1 | | 1.4 | 3.9 | | 0.5 | 8.2 | |
| QSRatio | | | | | | | | | | | | |
| 98th Percentile Output: | | | | | | | | | | | | |
| fB% | 2.6 | 1.9 | | 2.6 | 1.9 | | 2.6 | 2.6 | | 2.7 | 2.4 | |
| BOQ | 3.7 | 37.5 | | 2.4 | 41.7 | | 1.8 | 4.9 | | 0.7 | 10.0 | |
| QSRatio | | | | | | | | | | | | |

## ERROR MESSAGES

No errors to report.

HCS+: Signalized Intersections Release 5.5

Analyst: JM
Agency: KLOA, Inc.
Date: 5/13/2013
Period: P.M. Peak Hour
Project ID: 12-141
E/W St: IL 120

Inter.: IL 120 & Cedar Lake Road
Area Type: All other areas
Jurisd: IDOT
Year : Existing Traffic

N/S St: Cedra Lake Road

SIGNALIZED INTERSECTION SUMMARY

| | Eastbound | | | Westbound | | | Northbound | | | Southbound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | L | T | R | L | T | R | L | T | R | L | T | R |
| No. Lanes | 1 | 1 | 0 | 1 | 1 | 0 | 1 | 2 | 0 | 1 | 2 | 0 |
| LGConfig | L | TR | | L | TR | | L | TR | | L | TR | |
| Volume | 155 | 625 | 27 | 51 | 574 | 14 | 46 | 235 | 91 | 20 | 82 | 112 |
| Lane Width | 12.0 | 12.0 | | 12.0 | 12.0 | | 12.0 | 12.0 | | 12.0 | 12.0 | |
| RTOR Vol | | | 0 | | | 0 | | | 0 | | | 0 |

Duration 0.25 Area Type: All other areas

Signal Operations

| Phase Combination | 1 | 2 | 3 | 4 | | | 5 | 6 | 7 | 8 |
|---|---|---|---|---|---|---|---|---|---|---|
| EB Left | A | A | | | NB | Left | A | A | | |
| Thru | | A | | | | Thru | | A | | |
| Right | | A | | | | Right | | A | | |
| Peds | | | | | | Peds | | | | |
| WB Left | A | A | | | SB | Left | A | A | | |
| Thru | | A | | | | Thru | | A | | |
| Right | | A | | | | Right | | A | | |
| Peds | | | | | | Peds | | | | |
| NB Right | | | | | EB | Right | | | | |
| SB Right | | | | | WB | Right | | | | |
| Green | 12.0 | 54.0 | | | | | 12.0 | 24.0 | | |
| Yellow | 3.0 | 4.5 | | | | | 3.0 | 4.5 | | |
| All Red | 0.0 | 1.5 | | | | | 0.0 | 1.5 | | |

Cycle Length: 120.0 secs

Intersection Performance Summary

| Appr/ Lane Grp | Lane Group Capacity | Adj Sat Flow Rate (s) | Ratios v/c | Ratios g/C | Lane Group Delay | Lane Group LOS | Approach Delay | Approach LOS |
|---|---|---|---|---|---|---|---|---|
| Eastbound | | | | | | | | |
| L | 333 | 1703 | 0.49 | 0.60 | 18.1 | B | | |
| TR | 816 | 1814 | 0.84 | 0.45 | 37.1 | D | 33.4 | C |
| Westbound | | | | | | | | |
| L | 299 | 1770 | 0.18 | 0.60 | 17.6 | B | | |
| TR | 796 | 1769 | 0.78 | 0.45 | 32.8 | C | 31.6 | C |
| Northbound | | | | | | | | |
| L | 409 | 1770 | 0.12 | 0.35 | 26.3 | C | | |
| TR | 681 | 3407 | 0.50 | 0.20 | 43.3 | D | 41.2 | D |
| Southbound | | | | | | | | |
| L | 348 | 1805 | 0.06 | 0.35 | 26.2 | C | | |
| TR | 650 | 3252 | 0.31 | 0.20 | 41.3 | D | 39.8 | D |

Intersection Delay = 35.0- (sec/veh) Intersection LOS = C

Phone: Fax:
E-Mail:

## OPERATIONAL ANALYSIS

Analyst: JM
Agency/Co.: KLOA, Inc.
Date Performed: 5/13/2013
Analysis Time Period: P.M. Peak Hour
Intersection: IL 120 & Cedar Lake Road
Area Type: All other areas
Jurisdiction: IDOT
Analysis Year: Existing Traffic
Project ID: 12-141
E/W St: IL 120 N/S St: Cedra Lake Road

## VOLUME DATA

| | Eastbound | | | Westbound | | | Northbound | | | Southbound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | L | T | R | L | T | R | L | T | R | L | T | R |
| Volume | 155 | 625 | 27 | 51 | 574 | 14 | 46 | 235 | 91 | 20 | 82 | 112 |
| % Heavy Veh | 6 | 4 | 7 | 2 | 7 | 7 | 2 | 2 | 1 | 0 | 1 | 2 |
| PHF | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| PK 15 Vol | 41 | 164 | 7 | 13 | 151 | 4 | 12 | 62 | 24 | 5 | 22 | 29 |
| Hi Ln Vol | | | | | | | | | | | | |
| % Grade | | 0 | | | 0 | | | 0 | | | 0 | |
| Ideal Sat | 1900 | 1900 | | 1900 | 1900 | | 1900 | 1900 | | 1900 | 1900 | |
| ParkExist | | | | | | | | | | | | |
| NumPark | | | | | | | | | | | | |
| No. Lanes | 1 | 1 | 0 | 1 | 1 | 0 | 1 | 2 | 0 | 1 | 2 | 0 |
| LGConfig | L | TR | | L | TR | | L | TR | | L | TR | |
| Lane Width | 12.0 | 12.0 | | 12.0 | 12.0 | | 12.0 | 12.0 | | 12.0 | 12.0 | |
| RTOR Vol | | | 0 | | | 0 | | | 0 | | | 0 |
| Adj Flow | 163 | 686 | | 54 | 619 | | 48 | 343 | | 21 | 204 | |
| %InSharedLn | | | | | | | | | | | | |
| Prop LTs | 1.000 | 0.000 | | 1.000 | 0.000 | | 1.000 | 0.000 | | 1.000 | 0.000 | |
| Prop RTs | | 0.041 | | | 0.024 | | | 0.280 | | | 0.578 | |
| Peds Bikes | | 0 | | | 0 | | | 0 | | | 0 | |
| Buses | 0 | 0 | | 0 | 0 | | 0 | 0 | | 0 | 0 | |
| %InProtPhase | 0.0 | | | 0.0 | | | 0.0 | | | 0.0 | | |
| Duration | 0.25 | | Area Type: All other areas | | | | | | | | | |

## OPERATING PARAMETERS

| | Eastbound | | | Westbound | | | Northbound | | | Southbound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | L | T | R | L | T | R | L | T | R | L | T | R |
| Init Unmet | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | |
| Arriv. Type | 3 | 3 | | 3 | 3 | | 3 | 3 | | 3 | 3 | |
| Unit Ext. | 3.0 | 3.0 | | 3.0 | 3.0 | | 3.0 | 3.0 | | 3.0 | 3.0 | |
| I Factor | | 1.000 | | | 1.000 | | | 1.000 | | | 1.000 | |
| Lost Time | 2.0 | 2.0 | | 2.0 | 2.0 | | 2.0 | 2.0 | | 2.0 | 2.0 | |
| Ext of g | 2.0 | 2.0 | | 2.0 | 2.0 | | 2.0 | 2.0 | | 2.0 | 2.0 | |
| Ped Min g | | 3.2 | | | 3.2 | | | 3.2 | | | 3.2 | |

## PHASE DATA

| Phase Combination | | 1 | 2 | 3 | 4 | | | 5 | 6 | 7 | 8 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| EB | Left | A | A | | | NB | Left | A | A | | |
| | Thru | | A | | | | Thru | | A | | |
| | Right | | A | | | | Right | | A | | |
| | Peds | | | | | | Peds | | | | |
| WB | Left | A | A | | | SB | Left | A | A | | |
| | Thru | | A | | | | Thru | | A | | |
| | Right | | A | | | | Right | | A | | |
| | Peds | | | | | | Peds | | | | |
| NB | Right | | | | | EB | Right | | | | |
| SB | Right | | | | | WB | Right | | | | |
| Green | | 12.0 | 54.0 | | | | | 12.0 | 24.0 | | |
| Yellow | | 3.0 | 4.5 | | | | | 3.0 | 4.5 | | |
| All Red | | 0.0 | 1.5 | | | | | 0.0 | 1.5 | | |

Cycle Length: 120.0 secs

## VOLUME ADJUSTMENT AND SATURATION FLOW WORKSHEET

Volume Adjustment

| | Eastbound | | | Westbound | | | Northbound | | | Southbound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | L | T | R | L | T | R | L | T | R | L | T | R |
| Volume, V | 155 | 625 | 27 | 51 | 574 | 14 | 46 | 235 | 91 | 20 | 82 | 112 |
| PHF | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| Adj flow | 163 | 658 | 28 | 54 | 604 | 15 | 48 | 247 | 96 | 21 | 86 | 118 |
| No. Lanes | 1 | 1 | 0 | 1 | 1 | 0 | 1 | 2 | 0 | 1 | 2 | 0 |
| Lane group | L | TR | | L | TR | | L | TR | | L | TR | |
| Adj flow | 163 | 686 | | 54 | 619 | | 48 | 343 | | 21 | 204 | |
| Prop LTs | 1.000 | 0.000 | | 1.000 | 0.000 | | 1.000 | 0.000 | | 1.000 | 0.000 | |
| Prop RTs | 0.041 | | | 0.024 | | | 0.280 | | | 0.578 | | |

Saturation Flow Rate (see Exhibit 16-7 to determine the adjustment factors)

| | Eastbound | | | Westbound | | | Northbound | | | Southbound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| LG | L | TR | | L | TR | | L | TR | | L | TR | |
| So | 1900 | 1900 | | 1900 | 1900 | | 1900 | 1900 | | 1900 | 1900 | |
| Lanes | 1 | 1 | 0 | 1 | 1 | 0 | 1 | 2 | 0 | 1 | 2 | 0 |
| fW | 1.000 | 1.000 | | 1.000 | 1.000 | | 1.000 | 1.000 | | 1.000 | 1.000 | |
| fHV | 0.943 | 0.960 | | 0.980 | 0.935 | | 0.980 | 0.983 | | 1.000 | 0.984 | |
| fG | 1.000 | 1.000 | | 1.000 | 1.000 | | 1.000 | 1.000 | | 1.000 | 1.000 | |
| fP | 1.000 | 1.000 | | 1.000 | 1.000 | | 1.000 | 1.000 | | 1.000 | 1.000 | |
| fBB | 1.000 | 1.000 | | 1.000 | 1.000 | | 1.000 | 1.000 | | 1.000 | 1.000 | |
| fA | 1.000 | 1.000 | | 1.000 | 1.000 | | 1.000 | 1.000 | | 1.000 | 1.000 | |
| fLU | 1.000 | 1.000 | | 1.000 | 1.000 | | 1.000 | 0.952 | | 1.000 | 0.952 | |
| fRT | | 0.994 | | | 0.996 | | | 0.958 | | | 0.913 | |
| fLT | 0.950 | 1.000 | | 0.950 | 1.000 | | 0.950 | 1.000 | | 0.950 | 1.000 | |
| Sec. | 0.182 | | | 0.130 | | | 0.498 | | | 0.352 | | |
| fLpb | 1.000 | 1.000 | | 1.000 | 1.000 | | 1.000 | 1.000 | | 1.000 | 1.000 | |
| fRpb | | 1.000 | | | 1.000 | | | 1.000 | | | 1.000 | |
| S | 1703 | 1814 | | 1770 | 1769 | | 1770 | 3407 | | 1805 | 3252 | |
| Sec. | 326 | | | 243 | | | 927 | | | 668 | | |

## CAPACITY AND LOS WORKSHEET

Capacity Analysis and Lane Group Capacity

| Appr/ Mvmt | Lane Group | Adj Flow Rate (v) | Adj Sat Flow Rate (s) | Flow Ratio (v/s) | Green Ratio (g/C) | --Lane Group-- Capacity (c) | v/c Ratio |
|---|---|---|---|---|---|---|---|
| Eastbound | | | | | | | |
| Prot | | 163 | 1703 | # 0.10 | 0.100 | 170 | 0.96 |
| Perm | | 0 | 326 | 0.00 | 0.500 | 163 | 0.00 |
| Left | L | 163 | | | 0.60 | 333 | 0.49 |
| Prot | | | | | | | |
| Perm | | | | | | | |
| Thru | TR | 686 | 1814 | # 0.38 | 0.45 | 816 | 0.84 |
| Right | | | | | | | |
| Westbound | | | | | | | |
| Prot | | 54 | 1770 | 0.03 | 0.100 | 177 | 0.31 |
| Perm | | 0 | 243 | 0.00 | 0.500 | 122 | 0.00 |
| Left | L | 54 | | | 0.60 | 299 | 0.18 |
| Prot | | | | | | | |
| Perm | | | | | | | |
| Thru | TR | 619 | 1769 | 0.35 | 0.45 | 796 | 0.78 |
| Right | | | | | | | |
| Northbound | | | | | | | |
| Prot | | 48 | 1770 | # 0.03 | 0.100 | 177 | 0.27 |
| Perm | | 0 | 927 | 0.00 | 0.250 | 232 | 0.00 |
| Left | L | 48 | | | 0.35 | 409 | 0.12 |
| Prot | | | | | | | |
| Perm | | | | | | | |
| Thru | TR | 343 | 3407 | # 0.10 | 0.20 | 681 | 0.50 |
| Right | | | | | | | |
| Southbound | | | | | | | |
| Prot | | 21 | 1805 | 0.01 | 0.100 | 181 | 0.12 |
| Perm | | 0 | 668 | 0.00 | 0.250 | 167 | 0.00 |
| Left | L | 21 | | | 0.35 | 348 | 0.06 |
| Prot | | | | | | | |
| Perm | | | | | | | |
| Thru | TR | 204 | 3252 | 0.06 | 0.20 | 650 | 0.31 |
| Right | | | | | | | |

Sum of flow ratios for critical lane groups, Yc = Sum (v/s) = 0.60
Total lost time per cycle, L = 24.00 sec
Critical flow rate to capacity ratio, Xc = (Yc)(C)/(C-L) = 0.75

Control Delay and LOS Determination

| Appr/ Lane Grp | Ratios v/c | Ratios g/C | Unf Del d1 | Prog Adj Fact | Lane Grp Cap | Incremental Factor k | Incremental Del d2 | Res Del d3 | Lane Group Delay | Lane Group LOS | Approach Delay | Approach LOS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Eastbound | | | | | | | | | | | | |
| L | 0.49 | 0.60 | 16.9 | 1.000 | 333 | 0.11 | 1.1 | 0.0 | 18.1 | B | | |
| TR | 0.84 | 0.45 | 29.2 | 1.000 | 816 | 0.38 | 7.9 | 0.0 | 37.1 | D | 33.4 | C |
| Westbound | | | | | | | | | | | | |
| L | 0.18 | 0.60 | 17.3 | 1.000 | 299 | 0.11 | 0.3 | 0.0 | 17.6 | B | | |
| TR | 0.78 | 0.45 | 27.9 | 1.000 | 796 | 0.33 | 4.9 | 0.0 | 32.8 | C | 31.6 | C |
| Northbound | | | | | | | | | | | | |
| L | 0.12 | 0.35 | 26.2 | 1.000 | 409 | 0.11 | 0.1 | 0.0 | 26.3 | C | | |
| TR | 0.50 | 0.20 | 42.7 | 1.000 | 681 | 0.11 | 0.6 | 0.0 | 43.3 | D | 41.2 | D |
| Southbound | | | | | | | | | | | | |
| L | 0.06 | 0.35 | 26.1 | 1.000 | 348 | 0.11 | 0.1 | 0.0 | 26.2 | C | | |
| TR | 0.31 | 0.20 | 41.0 | 1.000 | 650 | 0.11 | 0.3 | 0.0 | 41.3 | D | 39.8 | D |

Intersection delay = 35.0- (sec/veh)  Intersection LOS = C

## SUPPLEMENTAL PERMITTED LT WORKSHEET
for exclusive lefts

Input

| | EB | WB | NB | SB |
|---|---|---|---|---|
| Opposed by Single(S) or Multiple(M) lane approach | | | | |
| Cycle length, C  120.0 sec | | | | |
| Total actual green time for LT lane group, G (s) | 69.0 | 69.0 | 39.0 | 39.0 |
| Effective permitted green time for LT lane group, g(s) | 60.0 | 60.0 | 30.0 | 30.0 |
| Opposing effective green time, go (s) | 54.0 | 54.0 | 24.0 | 24.0 |
| Number of lanes in LT lane group, N | 1 | 1 | 1 | 1 |
| Number of lanes in opposing approach, No | 1 | 1 | 2 | 2 |
| Adjusted LT flow rate, VLT (veh/h) | 163 | 54 | 48 | 21 |
| Proportion of LT in LT lane group, PLT | 1.000 | 1.000 | 1.000 | 1.000 |
| Proportion of LT in opposing flow, PLTo | 0.00 | 0.00 | 0.00 | 0.00 |
| Adjusted opposing flow rate, Vo (veh/h) | 619 | 686 | 204 | 343 |
| Lost time for LT lane group, tL | 6.00 | 6.00 | 6.00 | 6.00 |
| Computation | | | | |
| LT volume per cycle, LTC=VLTC/3600 | 5.43 | 1.80 | 1.60 | 0.70 |
| Opposing lane util. factor, fLUo | 1.000 | 1.000 | 0.952 | 0.952 |
| Opposing flow, Volc=VoC/[3600(No)fLUo] (veh/ln/cyc) | 20.63 | 22.87 | 3.57 | 6.00 |
| gf=G[exp(- a * (LTC ** b))]-tl, gf<=g | 0.0 | 0.0 | 0.0 | 0.0 |
| Opposing platoon ratio, Rpo (refer Exhibit 16-11) | 1.00 | 1.00 | 1.00 | 1.00 |
| Opposing Queue Ratio, qro=Max[1-Rpo(go/C),0] | 0.55 | 0.55 | 0.80 | 0.80 |
| gq, (see Exhibit C16-4,5,6,7,8) | 34.59 | 40.64 | 6.08 | 10.68 |
| gu=g-gq if gq>=gf, or = g-gf if gq<gf | 25.41 | 19.36 | 23.92 | 19.32 |
| n=Max(gq-gf)/2,0) | 17.30 | 20.32 | 3.04 | 5.34 |
| PTHo=1-PLTo | 1.00 | 1.00 | 1.00 | 1.00 |
| PL*=PLT[1+(N-1)g/(gf+gu/EL1+4.24)] | 1.00 | 1.00 | 1.00 | 1.00 |
| EL1 (refer to Exhibit C16-3) | 2.32 | 2.47 | 1.60 | 1.83 |
| EL2=Max((1-Ptho**n)/Plto, 1.0) | | | | |
| fmin=2(1+PL)/g  or  fmin=2(1+Pl)/g | 0.07 | 0.07 | 0.13 | 0.13 |
| gdiff=max(gq-gf,0) | 0.00 | 0.00 | 0.00 | 0.00 |
| fm=[gf/g]+[gu/g]/[1+PL(EL1-1)], (min=fmin;max=1.00) | 0.18 | 0.13 | 0.50 | 0.35 |
| flt=fm=[gf/g]+[gu/g]/[1+PL(EL1-1)]+[gdiff/g]/[1+PL(EL2-1)],(fmin<=fm<=1.00) | | | | |
| or flt=[fm+0.91(N-1)]/N** | | | | |
| Left-turn adjustment, fLT | 0.182 | 0.130 | 0.498 | 0.352 |

For special case of single-lane approach opposed by multilane approach, see text.

* If Pl>=1 for shared left-turn lanes with N>1, then assume de-facto left-turn lane and redo calculations.

** For permitted left-turns with multiple exclusive left-turn lanes, flt=fm.

For special case of multilane approach opposed by single-lane approach or when gf>gq, see text.

## SUPPLEMENTAL PERMITTED LT WORKSHEET
for shared lefts

Input

| | EB | WB | NB | SB |
|---|---|---|---|---|
| Opposed by Single(S) or Multiple(M) lane approach | | | | |
| Cycle length, C  120.0 sec | | | | |
| Total actual green time for LT lane group, G (s) | | | | |
| Effective permitted green time for LT lane group, g(s) | | | | |
| Opposing effective green time, go (s) | | | | |
| Number of lanes in LT lane group, N | | | | |

Number of lanes in opposing approach, No
Adjusted LT flow rate, VLT (veh/h)
Proportion of LT in LT lane group, PLT 0.000 0.000 0.000 0.000
Proportion of LT in opposing flow, PLTo
Adjusted opposing flow rate, Vo (veh/h)
Lost time for LT lane group, tL
Computation
LT volume per cycle, LTC=VLTC/3600
Opposing lane util. factor, fLUo 1.000 1.000 0.952 0.952
Opposing flow, Volc=VoC/[3600(No)fLUo] (veh/ln/cyc)
gf=G[exp(- a * (LTC ** b))]-tl, gf<=g
Opposing platoon ratio, Rpo (refer Exhibit 16-11)
Opposing Queue Ratio, qro=Max[1-Rpo(go/C),0]
gq, (see Exhibit C16-4,5,6,7,8)
gu=g-gq if gq>=gf, or = g-gf if gq<gf
n=Max(gq-gf)/2,0)
PTHo=1-PLTo
PL*=PLT[1+(N-1)g/(gf+gu/EL1+4.24)]
EL1 (refer to Exhibit C16-3)
EL2=Max((1-Ptho**n)/Plto, 1.0)
fmin=2(1+PL)/g or fmin=2(1+Pl)/g
gdiff=max(gq-gf,0)
fm=[gf/g]+[gu/g]/[1+PL(EL1-1)], (min=fmin;max=1.00)
flt=fm=[gf/g]+[gu/g]/[1+PL(EL1-1)]+[gdiff/g]/[1+PL(EL2-1)],(fmin<=fm<=1.00)
or flt=[fm+0.91(N-1)]/N**
Left-turn adjustment, fLT

For special case of single-lane approach opposed by multilane approach, see text.
* If Pl>=1 for shared left-turn lanes with N>1, then assume de-facto left-turn lane and redo calculations.
** For permitted left-turns with multiple exclusive left-turn lanes, flt=fm.
For special case of multilane approach opposed by single-lane approach or when gf>gq, see text.

## SUPPLEMENTAL PEDESTRIAN-BICYCLE EFFECTS WORKSHEET

Permitted Left Turns

| | EB | WB | NB | SB |
|---|---|---|---|---|
| Effective pedestrian green time, gp (s) | | | | |
| Conflicting pedestrian volume, Vped (p/h) | | | | |
| Pedestrian flow rate, Vpedg (p/h) | | | | |
| OCCpedg | | | | |
| Opposing queue clearing green, gq (s) | | | | |
| Eff. ped. green consumed by opp. veh. queue, gq/gp | | | | |
| OCCpedu | | | | |
| Opposing flow rate, Vo (veh/h) | | | | |
| OCCr | | | | |
| Number of cross-street receiving lanes, Nrec | | | | |
| Number of turning lanes, Nturn | | | | |
| ApbT | | | | |
| Proportion of left turns, PLT | | | | |
| Proportion of left turns using protected phase, PLTA | | | | |
| Left-turn adjustment, fLpb | | | | |
| Permitted Right Turns | | | | |
| Effective pedestrian green time, gp (s) | | | | |
| Conflicting pedestrian volume, Vped (p/h) | | | | |
| Conflicting bicycle volume, Vbic (bicycles/h) | | | | |
| Vpedg | | | | |
| OCCpedg | | | | |
| Effective green, g (s) | | | | |
| Vbicg | | | | |

OCCbicg
OCCr
Number of cross-street receiving lanes, Nrec
Number of turning lanes, Nturn
ApbT
Proportion right-turns, PRT
Proportion right-turns using protected phase, PRTA
Right turn adjustment, fRpb

## SUPPLEMENTAL UNIFORM DELAY WORKSHEET

| | EBLT | WBLT | NBLT | SBLT |
|---|---|---|---|---|
| Cycle length, C 120.0 sec | | | | |
| Adj. LT vol from Vol Adjustment Worksheet, v | 163 | 54 | 48 | 21 |
| v/c ratio from Capacity Worksheet, X | 0.49 | 0.18 | 0.12 | 0.06 |
| Protected phase effective green interval, g (s) | 12.0 | 12.0 | 12.0 | 12.0 |
| Opposing queue effective green interval, gq | 34.59 | 40.64 | 6.08 | 10.68 |
| Unopposed green interval, gu | 25.41 | 19.36 | 23.92 | 19.32 |
| Red time r=(C-g-gq-gu) | 48.0 | 48.0 | 78.0 | 78.0 |
| Arrival rate, qa=v/(3600(max[X,1.0])) | 0.05 | 0.02 | 0.01 | 0.01 |
| Protected ph. departure rate, Sp=s/3600 | 0.473 | 0.492 | 0.492 | 0.501 |
| Permitted ph. departure rate, Ss=s(gq+gu)/(gu*3600) | 0.21 | 0.21 | 0.32 | 0.29 |
| XPerm | 0.50 | 0.22 | 0.05 | 0.03 |
| XProt | 0.48 | 0.15 | 0.20 | 0.09 |
| Case | 1 | 1 | 1 | 1 |
| Queue at beginning of green arrow, Qa | 2.17 | 0.72 | 1.04 | 0.46 |
| Queue at beginning of unsaturated green, Qu | 1.57 | 0.61 | 0.08 | 0.06 |
| Residual queue, Qr | 0.00 | 0.00 | 0.00 | 0.00 |
| Uniform Delay, d1 | 16.9 | 17.3 | 26.2 | 26.1 |

## DELAY/LOS WORKSHEET WITH INITIAL QUEUE

| Appr/ Lane Group | Initial Unmet Demand Q veh | Dur. Unmet Demand t hrs. | Uniform Delay Unadj. ds | Uniform Delay Adj. d1 sec | Initial Queue Param. u | Final Unmet Demand Q veh | Initial Queue Delay d3 sec | Lane Group Delay d sec |
|---|---|---|---|---|---|---|---|---|
| Eastbound | | | | | | | | |
| L | 0.0 | 0.00 | | 16.9 | 0.00 | 0.0 | 0.0 | 18.1 |
| TR | 0.0 | 0.00 | 33.0 | 29.2 | 0.00 | 0.0 | 0.0 | 37.1 |
| | 0.0 | | | | | | 0.0 | |
| Westbound | | | | | | | | |
| L | 0.0 | 0.00 | | 17.3 | 0.00 | 0.0 | 0.0 | 17.6 |
| TR | 0.0 | 0.00 | 33.0 | 27.9 | 0.00 | 0.0 | 0.0 | 32.8 |
| | 0.0 | | | | | | 0.0 | |
| Northbound | | | | | | | | |
| L | 0.0 | 0.00 | | 26.2 | 0.00 | 0.0 | 0.0 | 26.3 |
| TR | 0.0 | 0.00 | 48.0 | 42.7 | 0.00 | 0.0 | 0.0 | 43.3 |
| | 0.0 | | | | | | 0.0 | |
| Southbound | | | | | | | | |
| L | 0.0 | 0.00 | | 26.1 | 0.00 | 0.0 | 0.0 | 26.2 |
| TR | 0.0 | 0.00 | 48.0 | 41.0 | 0.00 | 0.0 | 0.0 | 41.3 |
| | 0.0 | | | | | | 0.0 | |

Intersection Delay 35.0- sec/veh Intersection LOS C

## BACK OF QUEUE WORKSHEET

| | Eastbound | | | Westbound | | | Northbound | | | Southbound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| LaneGroup | L | TR | | L | TR | | L | TR | | L | TR | |
| Init Queue | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | |
| Flow Rate | 163 | 686 | | 54 | 619 | | 48 | 180 | | 21 | 107 | |
| So | 1900 | 1900 | | 1900 | 1900 | | 1900 | 1900 | | 1900 | 1900 | |
| No.Lanes | 1 | 1 | 0 | 1 | 1 | 0 | 1 | 2 | 0 | 1 | 2 | 0 |
| SL | 556 | 1814 | | 497 | 1769 | | 1168 | 1789 | | 993 | 1707 | |
| LnCapacity | 333 | 816 | | 299 | 796 | | 409 | 357 | | 348 | 341 | |
| Flow Ratio | 0.3 | 0.4 | | 0.1 | 0.3 | | 0.0 | 0.1 | | 0.0 | 0.1 | |
| v/c Ratio | 0.49 | 0.84 | | 0.18 | 0.78 | | 0.12 | 0.50 | | 0.06 | 0.31 | |
| Grn Ratio | 0.60 | 0.45 | | 0.60 | 0.45 | | 0.35 | 0.20 | | 0.35 | 0.20 | |
| I Factor | | 1.000 | | | 1.000 | | | 1.000 | | | 1.000 | |
| AT or PVG | 3 | 3 | | 3 | 3 | | 3 | 3 | | 3 | 3 | |
| Pltn Ratio | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | |
| PF2 | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | |
| Q1 | 2.3 | 20.2 | | 0.7 | 17.5 | | 1.1 | 5.3 | | 0.5 | 3.0 | |
| kB | 0.4 | 0.7 | | 0.4 | 0.7 | | 0.5 | 0.4 | | 0.4 | 0.4 | |
| Q2 | 0.4 | 3.2 | | 0.1 | 2.3 | | 0.1 | 0.4 | | 0.0 | 0.2 | |
| Q Average | 2.7 | 23.4 | | 0.8 | 19.7 | | 1.1 | 5.8 | | 0.5 | 3.2 | |
| Q Spacing | 25.0 | 25.0 | | 25.0 | 25.0 | | 25.0 | 25.0 | | 25.0 | 25.0 | |
| Q Storage | 0 | 0 | | 0 | 0 | | 0 | 0 | | 0 | 0 | |
| Q S Ratio | | | | | | | | | | | | |
| 70th Percentile Output: | | | | | | | | | | | | |
| fB% | 1.2 | 1.2 | | 1.2 | 1.2 | | 1.2 | 1.2 | | 1.2 | 1.2 | |
| BOQ | 3.2 | 27.1 | | 1.0 | 22.9 | | 1.3 | 6.9 | | 0.6 | 3.9 | |
| QSRatio | | | | | | | | | | | | |
| 85th Percentile Output: | | | | | | | | | | | | |
| fB% | 1.6 | 1.4 | | 1.6 | 1.5 | | 1.6 | 1.5 | | 1.6 | 1.6 | |
| BOQ | 4.2 | 33.7 | | 1.3 | 28.7 | | 1.8 | 8.9 | | 0.8 | 5.1 | |
| QSRatio | | | | | | | | | | | | |
| 90th Percentile Output: | | | | | | | | | | | | |
| fB% | 1.7 | 1.5 | | 1.8 | 1.5 | | 1.8 | 1.7 | | 1.8 | 1.7 | |
| BOQ | 4.7 | 35.7 | | 1.5 | 30.6 | | 2.0 | 9.8 | | 0.9 | 5.6 | |
| QSRatio | | | | | | | | | | | | |
| 95th Percentile Output: | | | | | | | | | | | | |
| fB% | 2.0 | 1.7 | | 2.1 | 1.7 | | 2.1 | 1.9 | | 2.1 | 2.0 | |
| BOQ | 5.4 | 39.0 | | 1.7 | 33.5 | | 2.3 | 11.2 | | 1.0 | 6.5 | |
| QSRatio | | | | | | | | | | | | |
| 98th Percentile Output: | | | | | | | | | | | | |
| fB% | 2.5 | 1.9 | | 2.6 | 1.9 | | 2.6 | 2.3 | | 2.7 | 2.5 | |
| BOQ | 6.7 | 43.7 | | 2.2 | 37.9 | | 2.9 | 13.5 | | 1.3 | 8.0 | |
| QSRatio | | | | | | | | | | | | |

## ERROR MESSAGES

No errors to report.

## TWO-WAY STOP CONTROL SUMMARY

| General Information | | Site Information | |
|---|---|---|---|
| Analyst | *JM* | Intersection | *IL 120 & Porter Drive* |
| Agency/Co. | *KLOA, Inc.* | Jurisdiction | *IDOT* |
| Date Performed | | Analysis Year | *Existing Traffic* |
| Analysis Time Period | *A.M. Peak Hour* | | |

| | |
|---|---|
| Project Description *12-141* | |
| East/West Street: *IL 120* | North/South Street: *Porter Drive* |
| Intersection Orientation: *East-West* | Study Period (hrs): *0.25* |

### Vehicle Volumes and Adjustments

| Major Street | Eastbound | | | Westbound | | |
|---|---|---|---|---|---|---|
| Movement | 1 | 2 | 3 | 4 | 5 | 6 |
| | L | T | R | L | T | R |
| Volume (veh/h) | 38 | 729 | | | 720 | 7 |
| Peak-Hour Factor, PHF | 0.95 | 0.95 | 1.00 | 1.00 | 0.95 | 0.95 |
| Hourly Flow Rate, HFR (veh/h) | 40 | 767 | 0 | 0 | 757 | 7 |
| Percent Heavy Vehicles | 10 | -- | -- | 0 | -- | -- |
| Median Type | Undivided | | | | | |
| RT Channelized | | | 0 | | | 0 |
| Lanes | 0 | 1 | 0 | 0 | 1 | 0 |
| Configuration | LT | | | | | TR |
| Upstream Signal | | 0 | | | 0 | |

| Minor Street | Northbound | | | Southbound | | |
|---|---|---|---|---|---|---|
| Movement | 7 | 8 | 9 | 10 | 11 | 12 |
| | L | T | R | L | T | R |
| Volume (veh/h) | | | | 5 | | 42 |
| Peak-Hour Factor, PHF | 1.00 | 1.00 | 1.00 | 0.95 | 1.00 | 0.95 |
| Hourly Flow Rate, HFR (veh/h) | 0 | 0 | 0 | 5 | 0 | 44 |
| Percent Heavy Vehicles | 0 | 0 | 0 | 40 | 0 | 14 |
| Percent Grade (%) | | 0 | | | 0 | |
| Flared Approach | | N | | | N | |
| Storage | | 0 | | | 0 | |
| RT Channelized | | | 0 | | | 0 |
| Lanes | 0 | 0 | 0 | 0 | 0 | 0 |
| Configuration | | | | | LR | |

### Delay, Queue Length, and Level of Service

| Approach | Eastbound | Westbound | Northbound | | | Southbound | | |
|---|---|---|---|---|---|---|---|---|
| Movement | 1 | 4 | 7 | 8 | 9 | 10 | 11 | 12 |
| Lane Configuration | LT | | | | | | LR | |
| v (veh/h) | 40 | | | | | | 49 | |
| C (m) (veh/h) | 814 | | | | | | 288 | |
| v/c | 0.05 | | | | | | 0.17 | |
| 95% queue length | 0.15 | | | | | | 0.60 | |
| Control Delay (s/veh) | 9.7 | | | | | | 20.0 | |
| LOS | A | | | | | | C | |
| Approach Delay (s/veh) | -- | -- | 20.0 | | | | | |
| Approach LOS | -- | -- | C | | | | | |

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# TWO-WAY STOP CONTROL SUMMARY

| General Information | | Site Information | |
|---|---|---|---|
| Analyst | *JM* | Intersection | *IL 120 & Porter Drive* |
| Agency/Co. | *KLOA, Inc.* | Jurisdiction | *IDOT* |
| Date Performed | *5/14/2013* | Analysis Year | *Existing Traffic* |
| Analysis Time Period | *P.M. Peak Hour* | | |
| Project Description *12-141* | | | |
| East/West Street: *IL 120* | | North/South Street: *Porter Drive* | |
| Intersection Orientation: *East-West* | | Study Period (hrs): *0.25* | |

## Vehicle Volumes and Adjustments

| Major Street | Eastbound | | | Westbound | | |
|---|---|---|---|---|---|---|
| Movement | 1 | 2 | 3 | 4 | 5 | 6 |
| | L | T | R | L | T | R |
| Volume (veh/h) | *48* | *779* | | | *751* | *23* |
| Peak-Hour Factor, PHF | *0.95* | *0.95* | *1.00* | *1.00* | *0.95* | *0.95* |
| Hourly Flow Rate, HFR (veh/h) | *50* | *820* | *0* | *0* | *790* | *24* |
| Percent Heavy Vehicles | *6* | -- | -- | *0* | -- | -- |
| Median Type | *Undivided* | | | | | |
| RT Channelized | | | *0* | | | *0* |
| Lanes | *0* | *1* | *0* | *0* | *1* | *0* |
| Configuration | *LT* | | | | | *TR* |
| Upstream Signal | | *0* | | | *0* | |

| Minor Street | Northbound | | | Southbound | | |
|---|---|---|---|---|---|---|
| Movement | 7 | 8 | 9 | 10 | 11 | 12 |
| | L | T | R | L | T | R |
| Volume (veh/h) | | | | *15* | | *26* |
| Peak-Hour Factor, PHF | *1.00* | *1.00* | *1.00* | *0.95* | *1.00* | *0.95* |
| Hourly Flow Rate, HFR (veh/h) | *0* | *0* | *0* | *15* | *0* | *27* |
| Percent Heavy Vehicles | *0* | *0* | *0* | *14* | *0* | *12* |
| Percent Grade (%) | | *0* | | | *0* | |
| Flared Approach | | *N* | | | *N* | |
| Storage | | *0* | | | *0* | |
| RT Channelized | | | *0* | | | *0* |
| Lanes | *0* | *0* | *0* | *0* | *0* | *0* |
| Configuration | | | | | *LR* | |

## Delay, Queue Length, and Level of Service

| Approach | Eastbound | Westbound | Northbound | | | Southbound | | |
|---|---|---|---|---|---|---|---|---|
| Movement | 1 | 4 | 7 | 8 | 9 | 10 | 11 | 12 |
| Lane Configuration | *LT* | | | | | | *LR* | |
| v (veh/h) | *50* | | | | | | *42* | |
| C (m) (veh/h) | *796* | | | | | | *170* | |
| v/c | *0.06* | | | | | | *0.25* | |
| 95% queue length | *0.20* | | | | | | *0.93* | |
| Control Delay (s/veh) | *9.8* | | | | | | *33.0* | |
| LOS | *A* | | | | | | *D* | |
| Approach Delay (s/veh) | -- | -- | *33.0* | | | | | |
| Approach LOS | -- | -- | *D* | | | | | |

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# TWO-WAY STOP CONTROL SUMMARY

| General Information | | Site Information | |
|---|---|---|---|
| Analyst | JM | Intersection | IL 120 & Curran Road |
| Agency/Co. | KLOA, Inc. | Jurisdiction | IDOT |
| Date Performed | 5/13/2013 | Analysis Year | Existing Traffic |
| Analysis Time Period | A.M. Peak Hour | | |

| | |
|---|---|
| Project Description 12-141 | |
| East/West Street: IL 120 | North/South Street: Curran Road |
| Intersection Orientation: East-West | Study Period (hrs): 0.25 |

## Vehicle Volumes and Adjustments

| Major Street | Eastbound | | | Westbound | | |
|---|---|---|---|---|---|---|
| Movement | 1 | 2 | 3 | 4 | 5 | 6 |
| | L | T | R | L | T | R |
| Volume (veh/h) | | 694 | 15 | 27 | 732 | |
| Peak-Hour Factor, PHF | 1.00 | 0.95 | 0.95 | 0.95 | 0.95 | 1.00 |
| Hourly Flow Rate, HFR (veh/h) | 0 | 730 | 15 | 28 | 770 | 0 |
| Percent Heavy Vehicles | 0 | -- | -- | 4 | -- | -- |
| Median Type | Two Way Left Turn Lane | | | | | |
| RT Channelized | | | 0 | | | 0 |
| Lanes | 0 | 1 | 1 | 1 | 1 | 0 |
| Configuration | | T | R | L | T | |
| Upstream Signal | | 0 | | | 0 | |

| Minor Street | Northbound | | | Southbound | | |
|---|---|---|---|---|---|---|
| Movement | 7 | 8 | 9 | 10 | 11 | 12 |
| | L | T | R | L | T | R |
| Volume (veh/h) | 20 | | 58 | | | |
| Peak-Hour Factor, PHF | 0.95 | 1.00 | 0.95 | 1.00 | 1.00 | 1.00 |
| Hourly Flow Rate, HFR (veh/h) | 21 | 0 | 61 | 0 | 0 | 0 |
| Percent Heavy Vehicles | 0 | 0 | 3 | 0 | 0 | 0 |
| Percent Grade (%) | | 0 | | | 0 | |
| Flared Approach | | N | | | N | |
| Storage | | 0 | | | 0 | |
| RT Channelized | | | 0 | | | 0 |
| Lanes | 1 | 0 | 1 | 0 | 0 | 0 |
| Configuration | L | | R | | | |

## Delay, Queue Length, and Level of Service

| Approach | Eastbound | Westbound | Northbound | | | Southbound | | |
|---|---|---|---|---|---|---|---|---|
| Movement | 1 | 4 | 7 | 8 | 9 | 10 | 11 | 12 |
| Lane Configuration | | L | L | | R | | | |
| v (veh/h) | | 28 | 21 | | 61 | | | |
| C (m) (veh/h) | | 854 | 260 | | 421 | | | |
| v/c | | 0.03 | 0.08 | | 0.14 | | | |
| 95% queue length | | 0.10 | 0.26 | | 0.50 | | | |
| Control Delay (s/veh) | | 9.4 | 20.1 | | 15.0 | | | |
| LOS | | A | C | | B | | | |
| Approach Delay (s/veh) | -- | -- | 16.3 | | | | | |
| Approach LOS | -- | -- | C | | | | | |

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# TWO-WAY STOP CONTROL SUMMARY

| General Information | | Site Information | |
|---|---|---|---|
| Analyst | JM | Intersection | IL 120 & Curran Road |
| Agency/Co. | KLOA, Inc. | Jurisdiction | IDOT |
| Date Performed | 5/13/2013 | Analysis Year | Existing Traffic |
| Analysis Time Period | P.M. Peak Hour | | |
| Project Description | 12-140 | | |
| East/West Street: | IL 120 | North/South Street: | Curran Road |
| Intersection Orientation: | East-West | Study Period (hrs): | 0.25 |

## Vehicle Volumes and Adjustments

| Major Street | Eastbound | | | Westbound | | |
|---|---|---|---|---|---|---|
| Movement | 1 | 2 | 3 | 4 | 5 | 6 |
| | L | T | R | L | T | R |
| Volume (veh/h) | | 770 | 21 | 52 | 737 | |
| Peak-Hour Factor, PHF | 1.00 | 0.95 | 0.95 | 0.95 | 0.95 | 1.00 |
| Hourly Flow Rate, HFR (veh/h) | 0 | 810 | 22 | 54 | 775 | 0 |
| Percent Heavy Vehicles | 0 | -- | -- | 0 | -- | -- |
| Median Type | Two Way Left Turn Lane | | | | | |
| RT Channelized | | | 0 | | | 0 |
| Lanes | 0 | 1 | 1 | 1 | 1 | 0 |
| Configuration | | T | R | L | T | |
| Upstream Signal | | 0 | | | 0 | |

| Minor Street | Northbound | | | Southbound | | |
|---|---|---|---|---|---|---|
| Movement | 7 | 8 | 9 | 10 | 11 | 12 |
| | L | T | R | L | T | R |
| Volume (veh/h) | 13 | | 60 | | | |
| Peak-Hour Factor, PHF | 0.95 | 1.00 | 0.95 | 1.00 | 1.00 | 1.00 |
| Hourly Flow Rate, HFR (veh/h) | 13 | 0 | 63 | 0 | 0 | 0 |
| Percent Heavy Vehicles | 15 | 0 | 0 | 0 | 0 | 0 |
| Percent Grade (%) | | 0 | | | 0 | |
| Flared Approach | | N | | | N | |
| Storage | | 0 | | | 0 | |
| RT Channelized | | | 0 | | | 0 |
| Lanes | 1 | 0 | 1 | 0 | 0 | 0 |
| Configuration | L | | R | | | |

## Delay, Queue Length, and Level of Service

| Approach | Eastbound | Westbound | Northbound | | | Southbound | | |
|---|---|---|---|---|---|---|---|---|
| Movement | 1 | 4 | 7 | 8 | 9 | 10 | 11 | 12 |
| Lane Configuration | | L | L | | R | | | |
| v (veh/h) | | 54 | 13 | | 63 | | | |
| C (m) (veh/h) | | 809 | 216 | | 383 | | | |
| v/c | | 0.07 | 0.06 | | 0.16 | | | |
| 95% queue length | | 0.21 | 0.19 | | 0.58 | | | |
| Control Delay (s/veh) | | 9.8 | 22.7 | | 16.2 | | | |
| LOS | | A | C | | C | | | |
| Approach Delay (s/veh) | -- | -- | 17.4 | | | | | |
| Approach LOS | -- | -- | C | | | | | |

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# TWO-WAY STOP CONTROL SUMMARY

| General Information | | Site Information | |
|---|---|---|---|
| Analyst | *JM* | Intersection | *IL 120 & Wildspring Road* |
| Agency/Co. | *KLOA, Inc.* | Jurisdiction | *IDOT* |
| Date Performed | *5/13/2013* | Analysis Year | *Existing Traffic* |
| Analysis Time Period | *A.M. Peak Hour* | | |
| Project Description *12-141* | | | |
| East/West Street: *IL 120* | | North/South Street: *Wildspring Road* | |
| Intersection Orientation: *East-West* | | Study Period (hrs): *0.25* | |

## Vehicle Volumes and Adjustments

| Major Street | Eastbound | | | Westbound | | |
|---|---|---|---|---|---|---|
| Movement | 1 | 2 | 3 | 4 | 5 | 6 |
| | L | T | R | L | T | R |
| Volume (veh/h) | 6 | 596 | 16 | 77 | 667 | 8 |
| Peak-Hour Factor, PHF | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| Hourly Flow Rate, HFR (veh/h) | 6 | 627 | 16 | 81 | 702 | 8 |
| Percent Heavy Vehicles | 0 | -- | -- | 5 | -- | -- |
| Median Type | Undivided | | | | | |
| RT Channelized | | | 0 | | | 0 |
| Lanes | 1 | 1 | 1 | 1 | 1 | 1 |
| Configuration | L | T | R | L | T | R |
| Upstream Signal | | 0 | | | 0 | |

| Minor Street | Northbound | | | Southbound | | |
|---|---|---|---|---|---|---|
| Movement | 7 | 8 | 9 | 10 | 11 | 12 |
| | L | T | R | L | T | R |
| Volume (veh/h) | 22 | 5 | 88 | 25 | 0 | 28 |
| Peak-Hour Factor, PHF | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| Hourly Flow Rate, HFR (veh/h) | 23 | 5 | 92 | 26 | 0 | 29 |
| Percent Heavy Vehicles | 0 | 0 | 1 | 0 | 0 | 0 |
| Percent Grade (%) | | 0 | | | 0 | |
| Flared Approach | | N | | | N | |
| Storage | | 0 | | | 0 | |
| RT Channelized | | | 0 | | | 0 |
| Lanes | 1 | 1 | 0 | 1 | 1 | 0 |
| Configuration | L | | TR | L | | TR |

## Delay, Queue Length, and Level of Service

| Approach | Eastbound | Westbound | Northbound | | | Southbound | | |
|---|---|---|---|---|---|---|---|---|
| Movement | 1 | 4 | 7 | 8 | 9 | 10 | 11 | 12 |
| Lane Configuration | L | L | L | | TR | L | | TR |
| v (veh/h) | 6 | 81 | 23 | | 97 | 26 | | 29 |
| C (m) (veh/h) | 899 | 928 | 85 | | 413 | 67 | | 442 |
| v/c | 0.01 | 0.09 | 0.27 | | 0.23 | 0.39 | | 0.07 |
| 95% queue length | 0.02 | 0.29 | 0.99 | | 0.90 | 1.48 | | 0.21 |
| Control Delay (s/veh) | 9.0 | 9.2 | 62.4 | | 16.4 | 89.4 | | 13.7 |
| LOS | A | A | F | | C | F | | B |
| Approach Delay (s/veh) | -- | -- | 25.2 | | | 49.5 | | |
| Approach LOS | -- | -- | D | | | E | | |

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# TWO-WAY STOP CONTROL SUMMARY

| General Information | | Site Information | |
|---|---|---|---|
| Analyst | *JM* | Intersection | *IL 120 & Wildspring Road* |
| Agency/Co. | *KLOA, Inc.* | Jurisdiction | *IDOT* |
| Date Performed | *5/13/2013* | Analysis Year | *Existing Traffic* |
| Analysis Time Period | *P.M. Peak Hour* | | |

| | |
|---|---|
| Project Description *12-141* | |
| East/West Street: *IL 120* | North/South Street: *Wildspring Road* |
| Intersection Orientation: *East-West* | Study Period (hrs): *0.25* |

## Vehicle Volumes and Adjustments

| Major Street | Eastbound | | | Westbound | | |
|---|---|---|---|---|---|---|
| Movement | 1 | 2 | 3 | 4 | 5 | 6 |
| | L | T | R | L | T | R |
| Volume (veh/h) | 8 | 690 | 38 | 98 | 617 | 35 |
| Peak-Hour Factor, PHF | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| Hourly Flow Rate, HFR (veh/h) | 8 | 726 | 40 | 103 | 649 | 36 |
| Percent Heavy Vehicles | 0 | -- | -- | 0 | -- | -- |
| Median Type | Undivided | | | | | |
| RT Channelized | | | 0 | | | 0 |
| Lanes | 1 | 1 | 1 | 1 | 1 | 1 |
| Configuration | L | T | R | L | T | R |
| Upstream Signal | | 0 | | | 0 | |

| Minor Street | Northbound | | | Southbound | | |
|---|---|---|---|---|---|---|
| Movement | 7 | 8 | 9 | 10 | 11 | 12 |
| | L | T | R | L | T | R |
| Volume (veh/h) | 17 | 2 | 84 | 17 | 1 | 5 |
| Peak-Hour Factor, PHF | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| Hourly Flow Rate, HFR (veh/h) | 17 | 2 | 88 | 17 | 1 | 5 |
| Percent Heavy Vehicles | 12 | 0 | 2 | 0 | 0 | 20 |
| Percent Grade (%) | | 0 | | | 0 | |
| Flared Approach | | N | | | N | |
| Storage | | 0 | | | 0 | |
| RT Channelized | | | 0 | | | 0 |
| Lanes | 1 | 1 | 0 | 1 | 1 | 0 |
| Configuration | L | | TR | L | | TR |

## Delay, Queue Length, and Level of Service

| Approach | Eastbound | Westbound | Northbound | | | Southbound | | |
|---|---|---|---|---|---|---|---|---|
| Movement | 1 | 4 | 7 | 8 | 9 | 10 | 11 | 12 |
| Lane Configuration | L | L | L | | TR | L | | TR |
| v (veh/h) | 8 | 103 | 17 | | 90 | 17 | | 6 |
| C (m) (veh/h) | 918 | 856 | 70 | | 392 | 55 | | 265 |
| v/c | 0.01 | 0.12 | 0.24 | | 0.23 | 0.31 | | 0.02 |
| 95% queue length | 0.03 | 0.41 | 0.85 | | 0.87 | 1.09 | | 0.07 |
| Control Delay (s/veh) | 9.0 | 9.8 | 72.2 | | 16.9 | 97.4 | | 18.9 |
| LOS | A | A | F | | C | F | | C |
| Approach Delay (s/veh) | -- | -- | 25.7 | | | 76.9 | | |
| Approach LOS | -- | -- | D | | | F | | |

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# TWO-WAY STOP CONTROL SUMMARY

| General Information | | Site Information | |
|---|---|---|---|
| Analyst | *JM* | Intersection | *IL 134 & Porter Drive* |
| Agency/Co. | *KLOA, Inc.* | Jurisdiction | *IDOT* |
| Date Performed | *05/17/13* | Analysis Year | *Existing Traffic* |
| Analysis Time Period | | | |
| Project Description *12-141* | | | |
| East/West Street: *IL 134* | | North/South Street: *Porter Drive* | |
| Intersection Orientation: *East-West* | | Study Period (hrs): *0.25* | |

## Vehicle Volumes and Adjustments

| Major Street | Eastbound | | | Westbound | | |
|---|---|---|---|---|---|---|
| Movement | 1 | 2 | 3 | 4 | 5 | 6 |
| | L | T | R | L | T | R |
| Volume (veh/h) | | 468 | 50 | 25 | 269 | |
| Peak-Hour Factor, PHF | 1.00 | 0.95 | 0.95 | 0.95 | 0.95 | 1.00 |
| Hourly Flow Rate, HFR (veh/h) | 0 | 492 | 52 | 26 | 283 | 0 |
| Percent Heavy Vehicles | 0 | -- | -- | 12 | -- | -- |
| Median Type | Undivided | | | | | |
| RT Channelized | | | 0 | | | 0 |
| Lanes | 0 | 1 | 0 | 0 | 1 | 0 |
| Configuration | | | TR | LT | | |
| Upstream Signal | | 0 | | | 0 | |

| Minor Street | Northbound | | | Southbound | | |
|---|---|---|---|---|---|---|
| Movement | 7 | 8 | 9 | 10 | 11 | 12 |
| | L | T | R | L | T | R |
| Volume (veh/h) | 43 | | 52 | | | |
| Peak-Hour Factor, PHF | 0.95 | 1.00 | 0.95 | 1.00 | 1.00 | 1.00 |
| Hourly Flow Rate, HFR (veh/h) | 45 | 0 | 54 | 0 | 0 | 0 |
| Percent Heavy Vehicles | 18 | 0 | 11 | 0 | 0 | 0 |
| Percent Grade (%) | | 0 | | | 0 | |
| Flared Approach | | N | | | N | |
| Storage | | 0 | | | 0 | |
| RT Channelized | | | 0 | | | 0 |
| Lanes | 1 | 0 | 1 | 0 | 0 | 0 |
| Configuration | L | | R | | | |

## Delay, Queue Length, and Level of Service

| Approach | Eastbound | Westbound | Northbound | | | Southbound | | |
|---|---|---|---|---|---|---|---|---|
| Movement | 1 | 4 | 7 | 8 | 9 | 10 | 11 | 12 |
| Lane Configuration | | LT | L | | R | | | |
| v (veh/h) | | 26 | 45 | | 54 | | | |
| C (m) (veh/h) | | 976 | 301 | | 540 | | | |
| v/c | | 0.03 | 0.15 | | 0.10 | | | |
| 95% queue length | | 0.08 | 0.52 | | 0.33 | | | |
| Control Delay (s/veh) | | 8.8 | 19.1 | | 12.4 | | | |
| LOS | | A | C | | B | | | |
| Approach Delay (s/veh) | -- | -- | 15.4 | | | | | |
| Approach LOS | -- | -- | C | | | | | |

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## TWO-WAY STOP CONTROL SUMMARY

| General Information | | Site Information | |
|---|---|---|---|
| Analyst | *JM* | Intersection | *IL 134 & Porter Drive* |
| Agency/Co. | *KLOA, Inc.* | Jurisdiction | *IDOT* |
| Date Performed | *05/17/13* | Analysis Year | *Existing Traffic* |
| Analysis Time Period | *P.M. Peak Hour* | | |

| | |
|---|---|
| Project Description *12-141* | |
| East/West Street: *IL 134* | North/South Street: *Porter Drive* |
| Intersection Orientation: *East-West* | Study Period (hrs): *0.25* |

### Vehicle Volumes and Adjustments

| Major Street | Eastbound | | | Westbound | | |
|---|---|---|---|---|---|---|
| Movement | 1 | 2 | 3 | 4 | 5 | 6 |
| | L | T | R | L | T | R |
| Volume (veh/h) | | 324 | 46 | 57 | 481 | |
| Peak-Hour Factor, PHF | 1.00 | 0.95 | 0.95 | 0.95 | 0.95 | 1.00 |
| Hourly Flow Rate, HFR (veh/h) | 0 | 341 | 48 | 60 | 506 | 0 |
| Percent Heavy Vehicles | 0 | -- | -- | 7 | -- | -- |
| Median Type | Undivided | | | | | |
| RT Channelized | | | 0 | | | 0 |
| Lanes | 0 | 1 | 0 | 0 | 1 | 0 |
| Configuration | | | TR | LT | | |
| Upstream Signal | | 0 | | | 0 | |

| Minor Street | Northbound | | | Southbound | | |
|---|---|---|---|---|---|---|
| Movement | 7 | 8 | 9 | 10 | 11 | 12 |
| | L | T | R | L | T | R |
| Volume (veh/h) | 59 | | 60 | | | |
| Peak-Hour Factor, PHF | 0.95 | 1.00 | 0.95 | 1.00 | 1.00 | 1.00 |
| Hourly Flow Rate, HFR (veh/h) | 62 | 0 | 63 | 0 | 0 | 0 |
| Percent Heavy Vehicles | 3 | 0 | 3 | 0 | 0 | 0 |
| Percent Grade (%) | | 0 | | | 0 | |
| Flared Approach | | N | | | N | |
| Storage | | 0 | | | 0 | |
| RT Channelized | | | 0 | | | 0 |
| Lanes | 1 | 0 | 1 | 0 | 0 | 0 |
| Configuration | L | | R | | | |

### Delay, Queue Length, and Level of Service

| Approach | Eastbound | Westbound | Northbound | | | Southbound | | |
|---|---|---|---|---|---|---|---|---|
| Movement | 1 | 4 | 7 | 8 | 9 | 10 | 11 | 12 |
| Lane Configuration | | LT | L | | R | | | |
| v (veh/h) | | 60 | 62 | | 63 | | | |
| C (m) (veh/h) | | 1143 | 258 | | 678 | | | |
| v/c | | 0.05 | 0.24 | | 0.09 | | | |
| 95% queue length | | 0.17 | 0.91 | | 0.31 | | | |
| Control Delay (s/veh) | | 8.3 | 23.3 | | 10.9 | | | |
| LOS | | A | C | | B | | | |
| Approach Delay (s/veh) | -- | -- | 17.0 | | | | | |
| Approach LOS | -- | -- | C | | | | | |

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# TWO-WAY STOP CONTROL SUMMARY

| General Information | | Site Information | |
|---|---|---|---|
| Analyst | JM | Intersection | Porter Dr & Cedar Mound Rd |
| Agency/Co. | KLOA, Inc. | Jurisdiction | IDOT |
| Date Performed | 05/17/13 | Analysis Year | Existing Traffic |
| Analysis Time Period | A.M. Peak Hour | | |
| Project Description 12-141 | | | |
| East/West Street: Porter Drive | | North/South Street: Cedar Mound Road | |
| Intersection Orientation: East-West | | Study Period (hrs): 0.25 | |

## Vehicle Volumes and Adjustments

| Major Street | Eastbound | | | Westbound | | |
|---|---|---|---|---|---|---|
| Movement | 1 | 2 | 3 | 4 | 5 | 6 |
| | L | T | R | L | T | R |
| Volume (veh/h) | | 44 | 30 | 7 | 24 | |
| Peak-Hour Factor, PHF | 1.00 | 0.95 | 0.95 | 0.95 | 0.95 | 1.00 |
| Hourly Flow Rate, HFR (veh/h) | 0 | 46 | 31 | 7 | 25 | 0 |
| Percent Heavy Vehicles | 0 | -- | -- | 0 | -- | -- |
| Median Type | Undivided | | | | | |
| RT Channelized | | | 0 | | | 0 |
| Lanes | 0 | 1 | 0 | 0 | 1 | 0 |
| Configuration | | | TR | LT | | |
| Upstream Signal | | 0 | | | 0 | |

| Minor Street | Northbound | | | Southbound | | |
|---|---|---|---|---|---|---|
| Movement | 7 | 8 | 9 | 10 | 11 | 12 |
| | L | T | R | L | T | R |
| Volume (veh/h) | 60 | | 11 | | | |
| Peak-Hour Factor, PHF | 0.95 | 1.00 | 0.95 | 1.00 | 1.00 | 1.00 |
| Hourly Flow Rate, HFR (veh/h) | 63 | 0 | 11 | 0 | 0 | 0 |
| Percent Heavy Vehicles | 4 | 0 | 22 | 0 | 0 | 0 |
| Percent Grade (%) | | 0 | | | 0 | |
| Flared Approach | | N | | | N | |
| Storage | | 0 | | | 0 | |
| RT Channelized | | | 0 | | | 0 |
| Lanes | 0 | 0 | 0 | 0 | 0 | 0 |
| Configuration | | LR | | | | |

## Delay, Queue Length, and Level of Service

| Approach | Eastbound | Westbound | Northbound | | | Southbound | | |
|---|---|---|---|---|---|---|---|---|
| Movement | 1 | 4 | 7 | 8 | 9 | 10 | 11 | 12 |
| Lane Configuration | | LT | | LR | | | | |
| v (veh/h) | | 7 | | 74 | | | | |
| C (m) (veh/h) | | 1535 | | 897 | | | | |
| v/c | | 0.00 | | 0.08 | | | | |
| 95% queue length | | 0.01 | | 0.27 | | | | |
| Control Delay (s/veh) | | 7.4 | | 9.4 | | | | |
| LOS | | A | | A | | | | |
| Approach Delay (s/veh) | -- | -- | 9.4 | | | | | |
| Approach LOS | -- | -- | A | | | | | |

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# TWO-WAY STOP CONTROL SUMMARY

| General Information | | Site Information | |
|---|---|---|---|
| Analyst | *JM* | Intersection | *Porter Dr & Cedar Mound Rd* |
| Agency/Co. | *KLOA, Inc.* | Jurisdiction | *IDOT* |
| Date Performed | *05/17/13* | Analysis Year | *Existing Traffic* |
| Analysis Time Period | *P.M. Peak Hour* | | |
| Project Description *12-141* | | | |
| East/West Street: *Porter Drive* | | North/South Street: *Cedar Mound Road* | |
| Intersection Orientation: *East-West* | | Study Period (hrs): *0.25* | |

## Vehicle Volumes and Adjustments

| Major Street | Eastbound | | | Westbound | | |
|---|---|---|---|---|---|---|
| Movement | 1 | 2 | 3 | 4 | 5 | 6 |
| | L | T | R | L | T | R |
| Volume (veh/h) | | 12 | 92 | 26 | 59 | |
| Peak-Hour Factor, PHF | 1.00 | 0.95 | 0.95 | 0.95 | 0.95 | 1.00 |
| Hourly Flow Rate, HFR (veh/h) | 0 | 12 | 96 | 27 | 62 | 0 |
| Percent Heavy Vehicles | 0 | -- | -- | 0 | -- | -- |
| Median Type | Undivided | | | | | |
| RT Channelized | | | 0 | | | 0 |
| Lanes | 0 | 1 | 0 | 0 | 1 | 0 |
| Configuration | | | TR | LT | | |
| Upstream Signal | | 0 | | | 0 | |

| Minor Street | Northbound | | | Southbound | | |
|---|---|---|---|---|---|---|
| Movement | 7 | 8 | 9 | 10 | 11 | 12 |
| | L | T | R | L | T | R |
| Volume (veh/h) | 59 | | 6 | | | |
| Peak-Hour Factor, PHF | 0.95 | 1.00 | 0.95 | 1.00 | 1.00 | 1.00 |
| Hourly Flow Rate, HFR (veh/h) | 62 | 0 | 6 | 0 | 0 | 0 |
| Percent Heavy Vehicles | 10 | 0 | 0 | 0 | 0 | 0 |
| Percent Grade (%) | | 0 | | | 0 | |
| Flared Approach | | N | | | N | |
| Storage | | 0 | | | 0 | |
| RT Channelized | | | 0 | | | 0 |
| Lanes | 0 | 0 | 0 | 0 | 0 | 0 |
| Configuration | | LR | | | | |

## Delay, Queue Length, and Level of Service

| Approach | Eastbound | Westbound | Northbound | | | Southbound | | |
|---|---|---|---|---|---|---|---|---|
| Movement | 1 | 4 | 7 | 8 | 9 | 10 | 11 | 12 |
| Lane Configuration | | LT | | LR | | | | |
| v (veh/h) | | 27 | | 68 | | | | |
| C (m) (veh/h) | | 1495 | | 798 | | | | |
| v/c | | 0.02 | | 0.09 | | | | |
| 95% queue length | | 0.06 | | 0.28 | | | | |
| Control Delay (s/veh) | | 7.5 | | 9.9 | | | | |
| LOS | | A | | A | | | | |
| Approach Delay (s/veh) | -- | -- | 9.9 | | | | | |
| Approach LOS | -- | -- | A | | | | | |

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# TWO-WAY STOP CONTROL SUMMARY

| General Information | | Site Information | |
|---|---|---|---|
| Analyst | *JM* | Intersection | *Porter Dr & Groot Industries D* |
| Agency/Co. | *KLOA, Inc.* | Jurisdiction | |
| Date Performed | *05/17/13* | Analysis Year | *Existing Traffic* |
| Analysis Time Period | *A.M. Peak Hour* | | |
| Project Description *12-141* | | | |
| East/West Street: *Groot Industries Dr* | | North/South Street: *Porter Drive* | |
| Intersection Orientation: *North-South* | | Study Period (hrs): *0.25* | |

## Vehicle Volumes and Adjustments

| Major Street | Northbound | | | Southbound | | |
|---|---|---|---|---|---|---|
| Movement | 1 | 2 | 3 | 4 | 5 | 6 |
| | L | T | R | L | T | R |
| Volume (veh/h) | 5 | 50 | | | 45 | 3 |
| Peak-Hour Factor, PHF | 0.95 | 0.95 | 1.00 | 1.00 | 0.95 | 0.95 |
| Hourly Flow Rate, HFR (veh/h) | 5 | 52 | 0 | 0 | 47 | 3 |
| Percent Heavy Vehicles | 100 | -- | -- | 0 | -- | -- |
| Median Type | Undivided | | | | | |
| RT Channelized | | | 0 | | | 0 |
| Lanes | 0 | 1 | 0 | 0 | 1 | 0 |
| Configuration | LT | | | | | TR |
| Upstream Signal | | 0 | | | 0 | |

| Minor Street | Eastbound | | | Westbound | | |
|---|---|---|---|---|---|---|
| Movement | 7 | 8 | 9 | 10 | 11 | 12 |
| | L | T | R | L | T | R |
| Volume (veh/h) | 1 | | 0 | | | |
| Peak-Hour Factor, PHF | 0.95 | 1.00 | 0.95 | 1.00 | 1.00 | 1.00 |
| Hourly Flow Rate, HFR (veh/h) | 1 | 0 | 0 | 0 | 0 | 0 |
| Percent Heavy Vehicles | 100 | 0 | 100 | 0 | 0 | 0 |
| Percent Grade (%) | | 0 | | | 0 | |
| Flared Approach | | N | | | N | |
| Storage | | 0 | | | 0 | |
| RT Channelized | | | 0 | | | 0 |
| Lanes | 0 | 0 | 0 | 0 | 0 | 0 |
| Configuration | | LR | | | | |

## Delay, Queue Length, and Level of Service

| Approach | Northbound | Southbound | Westbound | | | Eastbound | | |
|---|---|---|---|---|---|---|---|---|
| Movement | 1 | 4 | 7 | 8 | 9 | 10 | 11 | 12 |
| Lane Configuration | LT | | | | | | LR | |
| v (veh/h) | 5 | | | | | | 1 | |
| C (m) (veh/h) | 1105 | | | | | | 694 | |
| v/c | 0.00 | | | | | | 0.00 | |
| 95% queue length | 0.01 | | | | | | 0.00 | |
| Control Delay (s/veh) | 8.3 | | | | | | 10.2 | |
| LOS | A | | | | | | B | |
| Approach Delay (s/veh) | -- | -- | | | | 10.2 | | |
| Approach LOS | -- | -- | | | | B | | |

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# TWO-WAY STOP CONTROL SUMMARY

| General Information | | Site Information | |
|---|---|---|---|
| Analyst | *JM* | Intersection | *Porter Dr & Groot Industries D* |
| Agency/Co. | *KLOA, Inc.* | Jurisdiction | |
| Date Performed | *05/17/13* | Analysis Year | *Existing Traffic* |
| Analysis Time Period | *P.M. Peak Hour* | | |
| Project Description *12-141* | | | |
| East/West Street: *Groot Industries Dr* | | North/South Street: *Porter Drive* | |
| Intersection Orientation: *North-South* | | Study Period (hrs): *0.25* | |

## Vehicle Volumes and Adjustments

| Major Street | Northbound | | | Southbound | | |
|---|---|---|---|---|---|---|
| Movement | 1 | 2 | 3 | 4 | 5 | 6 |
| | L | T | R | L | T | R |
| Volume (veh/h) | *14* | *60* | | | *29* | *4* |
| Peak-Hour Factor, PHF | *0.95* | *0.95* | *1.00* | *1.00* | *0.95* | *0.95* |
| Hourly Flow Rate, HFR (veh/h) | *14* | *63* | *0* | *0* | *30* | *4* |
| Percent Heavy Vehicles | *100* | -- | -- | *0* | -- | -- |
| Median Type | *Undivided* | | | | | |
| RT Channelized | | | *0* | | | *0* |
| Lanes | *0* | *1* | *0* | *0* | *1* | *0* |
| Configuration | *LT* | | | | | *TR* |
| Upstream Signal | | *0* | | | *0* | |

| Minor Street | Eastbound | | | Westbound | | |
|---|---|---|---|---|---|---|
| Movement | 7 | 8 | 9 | 10 | 11 | 12 |
| | L | T | R | L | T | R |
| Volume (veh/h) | *19* | | *11* | | | |
| Peak-Hour Factor, PHF | *0.95* | *1.00* | *0.95* | *1.00* | *1.00* | *1.00* |
| Hourly Flow Rate, HFR (veh/h) | *20* | *0* | *11* | *0* | *0* | *0* |
| Percent Heavy Vehicles | *100* | *0* | *100* | *0* | *0* | *0* |
| Percent Grade (%) | | *0* | | | *0* | |
| Flared Approach | | *N* | | | *N* | |
| Storage | | *0* | | | *0* | |
| RT Channelized | | | *0* | | | *0* |
| Lanes | *0* | *0* | *0* | *0* | *0* | *0* |
| Configuration | | *LR* | | | | |

## Delay, Queue Length, and Level of Service

| Approach | Northbound | Southbound | Westbound | | | Eastbound | | |
|---|---|---|---|---|---|---|---|---|
| Movement | 1 | 4 | 7 | 8 | 9 | 10 | 11 | 12 |
| Lane Configuration | *LT* | | | | | | *LR* | |
| v (veh/h) | *14* | | | | | | *31* | |
| C (m) (veh/h) | *1123* | | | | | | *720* | |
| v/c | *0.01* | | | | | | *0.04* | |
| 95% queue length | *0.04* | | | | | | *0.13* | |
| Control Delay (s/veh) | *8.2* | | | | | | *10.2* | |
| LOS | *A* | | | | | | *B* | |
| Approach Delay (s/veh) | -- | -- | | | | | *10.2* | |
| Approach LOS | -- | -- | | | | | *B* | |

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# CAPACITY ANALYSES
# YEAR 2016 PROJECTED TRAFFIC VOLUMES

HCS+: Signalized Intersections Release 5.5

Analyst: JM
Agency: KLOA, Inc.
Date: 10/18/2012
Period: A.M. Peak Hour
Project ID: 12-141
E/W St: IL 120

Inter.: IL 120/Hainesville Road
Area Type: All other areas
Jurisd: IDOT
Year : Year 2016 Future Traffic

N/S St: Hainesville Road

SIGNALIZED INTERSECTION SUMMARY

| | Eastbound | | | Westbound | | | Northbound | | | Southbound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | L | T | R | L | T | R | L | T | R | L | T | R |
| No. Lanes | 1 | 1 | 0 | 1 | 1 | 0 | 0 | 1 | 0 | 1 | 1 | 0 |
| LGConfig | L | TR | | L | TR | | | LTR | | L | TR | |
| Volume | 293 | 886 | 14 | 4 | 554 | 115 | 3 | 6 | 12 | 329 | 10 | 339 |
| Lane Width | 12.0 | 12.0 | | 12.0 | 12.0 | | | 12.0 | | 12.0 | 12.0 | |
| RTOR Vol | | | 0 | | | 0 | | | 0 | | | 28 |

Duration 0.25 Area Type: All other areas

Signal Operations

| Phase Combination | 1 | 2 | 3 | 4 | | | 5 | 6 | 7 | 8 |
|---|---|---|---|---|---|---|---|---|---|---|
| EB Left | A | A | | | NB | Left | A | | | |
| Thru | A | A | | | | Thru | A | | | |
| Right | A | A | | | | Right | A | | | |
| Peds | | | | | | Peds | | | | |
| WB Left | | A | | | SB | Left | | A | | |
| Thru | | A | | | | Thru | | A | | |
| Right | | A | | | | Right | | A | | |
| Peds | | | | | | Peds | | | | |
| NB Right | | | | | EB | Right | | | | |
| SB Right | | | | | WB | Right | | | | |
| Green | 9.0 | 58.0 | | | | | 4.0 | 32.0 | | |
| Yellow | 3.0 | 4.0 | | | | | 3.0 | 3.0 | | |
| All Red | 0.0 | 2.0 | | | | | 1.0 | 1.0 | | |

Cycle Length: 120.0 secs

Intersection Performance Summary

| Appr/ Lane Grp | Lane Group Capacity | Adj Sat Flow Rate (s) | Ratios v/c | Ratios g/C | Lane Group Delay | Lane Group LOS | Approach Delay | Approach LOS |
|---|---|---|---|---|---|---|---|---|
| Eastbound | | | | | | | | |
| L | 274 | 1719 | 1.12 | 0.61 | 113.8 | F | | |
| TR | 1052 | 1803 | 0.90 | 0.58 | 32.6 | C | 52.5 | D |
| Westbound | | | | | | | | |
| L | 102 | 211 | 0.04 | 0.48 | 16.5 | B | | |
| TR | 813 | 1683 | 0.87 | 0.48 | 37.3 | D | 37.2 | D |
| Northbound | | | | | | | | |
| LTR | 53 | 1588 | 0.42 | 0.03 | 62.1 | E | 62.1 | E |
| Southbound | | | | | | | | |
| L | 454 | 1703 | 0.76 | 0.27 | 48.0 | D | | |
| TR | 413 | 1549 | 0.82 | 0.27 | 53.5 | D | 50.7 | D |

Intersection Delay = 48.1 (sec/veh) Intersection LOS = D

Phone: Fax:
E-Mail:

## OPERATIONAL ANALYSIS

Analyst: JM
Agency/Co.: KLOA, Inc.
Date Performed: 10/18/2012
Analysis Time Period: A.M. Peak Hour
Intersection: IL 120/Hainesville Road
Area Type: All other areas
Jurisdiction: IDOT
Analysis Year: Year 2016 Future Traffic
Project ID: 12-141
E/W St: IL 120 N/S St: Hainesville Road

## VOLUME DATA

| | Eastbound | | | Westbound | | | Northbound | | | Southbound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | L | T | R | L | T | R | L | T | R | L | T | R |
| Volume | 293 | 886 | 14 | 4 | 554 | 115 | 3 | 6 | 12 | 329 | 10 | 339 |
| % Heavy Veh | 5 | 5 | 14 | 0 | 10 | 10 | 0 | 17 | 8 | 6 | 0 | 5 |
| PHF | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| PK 15 Vol | 77 | 233 | 4 | 1 | 146 | 30 | 1 | 2 | 3 | 87 | 3 | 89 |
| Hi Ln Vol | | | | | | | | | | | | |
| % Grade | | 0 | | | 0 | | | 0 | | | 0 | |
| Ideal Sat | 1900 | 1900 | | 1900 | 1900 | | | 1900 | | 1900 | 1900 | |
| ParkExist | | | | | | | | | | | | |
| NumPark | | | | | | | | | | | | |
| No. Lanes | 1 | 1 | 0 | 1 | 1 | 0 | 0 | 1 | 0 | 1 | 1 | 0 |
| LGConfig | L | TR | | L | TR | | | LTR | | L | TR | |
| Lane Width | 12.0 | 12.0 | | 12.0 | 12.0 | | | 12.0 | | 12.0 | 12.0 | |
| RTOR Vol | | | 0 | | | 0 | | | 0 | | | 28 |
| Adj Flow | 308 | 948 | | 4 | 704 | | | 22 | | 346 | 338 | |
| %InSharedLn | | | | | | | | | | | | |
| Prop LTs | 1.000 | 0.000 | | 1.000 | 0.000 | | | 0.136 | | | 0.000 | |
| Prop RTs | | 0.016 | | | 0.172 | | | 0.591 | | | 0.967 | |
| Peds Bikes | | 0 | | | 0 | | | 0 | | | 0 | |
| Buses | 0 | 0 | | 0 | 0 | | | 0 | | 0 | 0 | |
| %InProtPhase | 0.0 | | | | | | | | | | | |
| Duration | 0.25 | | Area Type: All other areas | | | | | | | | | |

## OPERATING PARAMETERS

| | Eastbound | | | Westbound | | | Northbound | | | Southbound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | L | T | R | L | T | R | L | T | R | L | T | R |
| Init Unmet | 0.0 | 0.0 | | 0.0 | 0.0 | | | 0.0 | | 0.0 | 0.0 | |
| Arriv. Type | 3 | 3 | | 3 | 3 | | | 3 | | 3 | 3 | |
| Unit Ext. | 3.0 | 3.0 | | 3.0 | 3.0 | | | 3.0 | | 3.0 | 3.0 | |
| I Factor | | 1.000 | | | 1.000 | | | 1.000 | | | 1.000 | |
| Lost Time | 2.0 | 2.0 | | 2.0 | 2.0 | | | 2.0 | | 2.0 | 2.0 | |
| Ext of g | 2.0 | 2.0 | | 2.0 | 2.0 | | | 2.0 | | 2.0 | 2.0 | |
| Ped Min g | | 3.2 | | | 3.2 | | | 3.2 | | | 3.2 | |

## PHASE DATA

| Phase Combination | | 1 | 2 | 3 | 4 | | | 5 | 6 | 7 | 8 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| EB | Left | A | A | | | NB | Left | A | | | |
| | Thru | A | A | | | | Thru | A | | | |
| | Right | A | A | | | | Right | A | | | |
| | Peds | | | | | | Peds | | | | |
| WB | Left | | A | | | SB | Left | | A | | |
| | Thru | | A | | | | Thru | | A | | |
| | Right | | A | | | | Right | | A | | |
| | Peds | | | | | | Peds | | | | |
| NB | Right | | | | | EB | Right | | | | |
| SB | Right | | | | | WB | Right | | | | |
| Green | | 9.0 | 58.0 | | | | | 4.0 | 32.0 | | |
| Yellow | | 3.0 | 4.0 | | | | | 3.0 | 3.0 | | |
| All Red | | 0.0 | 2.0 | | | | | 1.0 | 1.0 | | |

Cycle Length: 120.0 secs

## VOLUME ADJUSTMENT AND SATURATION FLOW WORKSHEET

Volume Adjustment

| | Eastbound | | | Westbound | | | Northbound | | | Southbound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | L | T | R | L | T | R | L | T | R | L | T | R |
| Volume, V | 293 | 886 | 14 | 4 | 554 | 115 | 3 | 6 | 12 | 329 | 10 | 339 |
| PHF | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| Adj flow | 308 | 933 | 15 | 4 | 583 | 121 | 3 | 6 | 13 | 346 | 11 | 327 |
| No. Lanes | 1 | 1 | 0 | 1 | 1 | 0 | 0 | 1 | 0 | 1 | 1 | 0 |
| Lane group | L | TR | | L | TR | | | LTR | | L | TR | |
| Adj flow | 308 | 948 | | 4 | 704 | | | 22 | | 346 | 338 | |
| Prop LTs | 1.000 | 0.000 | | 1.000 | 0.000 | | | 0.136 | | | 0.000 | |
| Prop RTs | | 0.016 | | | 0.172 | | | 0.591 | | | 0.967 | |

Saturation Flow Rate (see Exhibit 16-7 to determine the adjustment factors)

| | Eastbound | | | Westbound | | | Northbound | | | Southbound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| LG | L | TR | | L | TR | | | LTR | | L | TR | |
| So | 1900 | 1900 | | 1900 | 1900 | | | 1900 | | 1900 | 1900 | |
| Lanes | 1 | 1 | 0 | 1 | 1 | 0 | 0 | 1 | 0 | 1 | 1 | 0 |
| fW | 1.000 | 1.000 | | 1.000 | 1.000 | | | 1.000 | | 1.000 | 1.000 | |
| fHV | 0.952 | 0.951 | | 1.000 | 0.909 | | | 0.914 | | 0.943 | 0.954 | |
| fG | 1.000 | 1.000 | | 1.000 | 1.000 | | | 1.000 | | 1.000 | 1.000 | |
| fP | 1.000 | 1.000 | | 1.000 | 1.000 | | | 1.000 | | 1.000 | 1.000 | |
| fBB | 1.000 | 1.000 | | 1.000 | 1.000 | | | 1.000 | | 1.000 | 1.000 | |
| fA | 1.000 | 1.000 | | 1.000 | 1.000 | | | 1.000 | | 1.000 | 1.000 | |
| fLU | 1.000 | 1.000 | | 1.000 | 1.000 | | | 1.000 | | 1.000 | 1.000 | |
| fRT | | 0.998 | | | 0.974 | | | 0.920 | | | 0.855 | |
| fLT | 0.950 | 1.000 | | 0.111 | 1.000 | | | 0.993 | | 0.950 | 1.000 | |
| Sec. | 0.150 | | | | | | | | | | | |
| fLpb | 1.000 | 1.000 | | 1.000 | 1.000 | | | 1.000 | | 1.000 | 1.000 | |
| fRpb | | 1.000 | | | 1.000 | | | 1.000 | | | 1.000 | |
| S | 1719 | 1803 | | 211 | 1683 | | | 1588 | | 1703 | 1549 | |
| Sec. | 272 | | | | | | | | | | | |

## CAPACITY AND LOS WORKSHEET

Capacity Analysis and Lane Group Capacity

| Appr/ Mvmt | Lane Group | Adj Flow Rate (v) | Adj Sat Flow Rate (s) | Flow Ratio (v/s) | Green Ratio (g/C) | --Lane Group-- Capacity (c) | v/c Ratio |
|---|---|---|---|---|---|---|---|
| Eastbound | | | | | | | |
| Prot | | 129 | 1719 | # 0.08 | 0.075 | 129 | 1.00 |
| Perm | | 179 | 272 | # 0.66 | 0.533 | 145 | 1.23 |
| Left | L | 308 | | | 0.61 | 274 | 1.12 |
| Prot | | | | | | | |
| Perm | | | | | | | |
| Thru | TR | 948 | 1803 | 0.53 | 0.58 | 1052 | 0.90 |
| Right | | | | | | | |
| Westbound | | | | | | | |
| Prot | | | | | | | |
| Perm | | | | | | | |
| Left | L | 4 | 211 | 0.02 | 0.48 | 102 | 0.04 |
| Prot | | | | | | | |
| Perm | | | | | | | |
| Thru | TR | 704 | 1683 | 0.42 | 0.48 | 813 | 0.87 |
| Right | | | | | | | |
| Northbound | | | | | | | |
| Prot | | | | | | | |
| Perm | | | | | | | |
| Left | | | | | | | |
| Prot | | | | | | | |
| Perm | | | | | | | |
| Thru | LTR | 22 | 1588 | # 0.01 | 0.03 | 53 | 0.42 |
| Right | | | | | | | |
| Southbound | | | | | | | |
| Prot | | | | | | | |
| Perm | | | | | | | |
| Left | L | 346 | 1703 | 0.20 | 0.27 | 454 | 0.76 |
| Prot | | | | | | | |
| Perm | | | | | | | |
| Thru | TR | 338 | 1549 | # 0.22 | 0.27 | 413 | 0.82 |
| Right | | | | | | | |

Sum of flow ratios for critical lane groups, Yc = Sum (v/s) = 0.97
Total lost time per cycle, L = 14.00 sec
Critical flow rate to capacity ratio, Xc = (Yc)(C)/(C-L) = 1.09

Control Delay and LOS Determination

| Appr/ Lane Grp | Ratios v/c | Ratios g/C | Unf Del d1 | Prog Adj Fact | Lane Grp Cap | Incremental Factor k | Incremental Del d2 | Res Del d3 | Lane Group Delay | Lane Group LOS | Approach Delay | Approach LOS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Eastbound | | | | | | | | | | | | |
| L | 1.12 | 0.61 | 21.8 | 1.000 | 274 | 0.50 | 92.0 | 0.0 | 113.8 | F | | |
| TR | 0.90 | 0.58 | 22.0 | 1.000 | 1052 | 0.42 | 10.6 | 0.0 | 32.6 | C | 52.5 | D |
| Westbound | | | | | | | | | | | | |
| L | 0.04 | 0.48 | 16.3 | 1.000 | 102 | 0.11 | 0.2 | 0.0 | 16.5 | B | | |
| TR | 0.87 | 0.48 | 27.5 | 1.000 | 813 | 0.40 | 9.7 | 0.0 | 37.3 | D | 37.2 | D |
| Northbound | | | | | | | | | | | | |
| LTR | 0.42 | 0.03 | 56.9 | 1.000 | 53 | 0.11 | 5.2 | 0.0 | 62.1 | E | 62.1 | E |
| Southbound | | | | | | | | | | | | |
| L | 0.76 | 0.27 | 40.5 | 1.000 | 454 | 0.31 | 7.5 | 0.0 | 48.0 | D | | |
| TR | 0.82 | 0.27 | 41.3 | 1.000 | 413 | 0.36 | 12.2 | 0.0 | 53.5 | D | 50.7 | D |

Intersection delay = 48.1 (sec/veh) Intersection LOS = D

## SUPPLEMENTAL PERMITTED LT WORKSHEET
for exclusive lefts

Input

| | EB | WB | NB | SB |
|---|---|---|---|---|
| Opposed by Single(S) or Multiple(M) lane approach | | | | |
| Cycle length, C 120.0 sec | | | | |
| Total actual green time for LT lane group, G (s) | 70.0 | 58.0 | | |
| Effective permitted green time for LT lane group, g(s) | 64.0 | 58.0 | | |
| Opposing effective green time, go (s) | 58.0 | 70.0 | | |
| Number of lanes in LT lane group, N | 1 | 1 | | |
| Number of lanes in opposing approach, No | 1 | 1 | | |
| Adjusted LT flow rate, VLT (veh/h) | 308 | 4 | | |
| Proportion of LT in LT lane group, PLT | 1.000 | 1.000 | | |
| Proportion of LT in opposing flow, PLTo | 0.00 | 0.00 | | |
| Adjusted opposing flow rate, Vo (veh/h) | 704 | 948 | | |
| Lost time for LT lane group, tL | 6.00 | 6.00 | | |
| Computation | | | | |
| LT volume per cycle, LTC=VLTC/3600 | 10.27 | 0.13 | | |
| Opposing lane util. factor, fLUo | 1.000 | 1.000 | 1.000 | 1.000 |
| Opposing flow, Volc=VoC/[3600(No)fLUo] (veh/ln/cyc) | 23.47 | 31.60 | | |
| gf=G[exp(- a * (LTC ** b)]-tl, gf<=g | 0.0 | 0.0 | | |
| Opposing platoon ratio, Rpo (refer Exhibit 16-11) | 1.00 | 1.00 | | |
| Opposing Queue Ratio, qro=Max[1-Rpo(go/C),0] | 0.52 | 0.42 | | |
| gq, (see Exhibit C16-4,5,6,7,8) | 39.82 | 37.63 | | |
| gu=g-gq if gq>=gf, or = g-gf if gq<gf | 24.18 | 20.37 | | |
| n=Max(gq-gf)/2,0) | 19.91 | 18.82 | | |
| PTHo=1-PLTo | 1.00 | 1.00 | | |
| PL*=PLT[1+(N-1)g/(gf+gu/EL1+4.24)] | 1.00 | 1.00 | | |
| EL1 (refer to Exhibit C16-3) | 2.52 | 3.16 | | |
| EL2=Max((1-Ptho**n)/Plto, 1.0) | | | | |
| fmin=2(1+PL)/g or fmin=2(1+Pl)/g | 0.06 | 0.07 | | |
| gdiff=max(gq-gf,0) | 0.00 | 0.00 | | |
| fm=[gf/g]+[gu/g]/[1+PL(EL1-1)], (min=fmin;max=1.00) | 0.15 | 0.11 | | |
| flt=fm=[gf/g]+[gu/g]/[1+PL(EL1-1)]+[gdiff/g]/[1+PL(EL2-1)],(fmin<=fm<=1.00) | | | | |
| or flt=[fm+0.91(N-1)]/N** | | | | |
| Left-turn adjustment, fLT | 0.150 | 0.111 | | |

For special case of single-lane approach opposed by multilane approach, see text.

* If Pl>=1 for shared left-turn lanes with N>1, then assume de-facto left-turn lane and redo calculations.

** For permitted left-turns with multiple exclusive left-turn lanes, flt=fm.

For special case of multilane approach opposed by single-lane approach or when gf>gq, see text.

## SUPPLEMENTAL PERMITTED LT WORKSHEET
for shared lefts

Input

| | EB | WB | NB | SB |
|---|---|---|---|---|
| Opposed by Single(S) or Multiple(M) lane approach | | | | |
| Cycle length, C 120.0 sec | | | | |
| Total actual green time for LT lane group, G (s) | | | | |
| Effective permitted green time for LT lane group, g(s) | | | | |
| Opposing effective green time, go (s) | | | | |
| Number of lanes in LT lane group, N | | | | |

Number of lanes in opposing approach, No
Adjusted LT flow rate, VLT (veh/h)
Proportion of LT in LT lane group, PLT 0.000 0.000 0.136 0.000
Proportion of LT in opposing flow, PLTo
Adjusted opposing flow rate, Vo (veh/h)
Lost time for LT lane group, tL
Computation
LT volume per cycle, LTC=VLTC/3600
Opposing lane util. factor, fLUo 1.000 1.000 1.000 1.000
Opposing flow, Volc=VoC/[3600(No)fLUo] (veh/ln/cyc)
gf=G[exp(- a * (LTC ** b))]-tl, gf<=g
Opposing platoon ratio, Rpo (refer Exhibit 16-11)
Opposing Queue Ratio, qro=Max[1-Rpo(go/C),0]
gq, (see Exhibit C16-4,5,6,7,8)
gu=g-gq if gq>=gf, or = g-gf if gq<gf
n=Max(gq-gf)/2,0)
PTHo=1-PLTo
PL*=PLT[1+(N-1)g/(gf+gu/EL1+4.24)]
EL1 (refer to Exhibit C16-3)
EL2=Max((1-Ptho**n)/Plto, 1.0)
fmin=2(1+PL)/g or fmin=2(1+Pl)/g
gdiff=max(gq-gf,0)
fm=[gf/g]+[gu/g]/[1+PL(EL1-1)], (min=fmin;max=1.00)
flt=fm=[gf/g]+[gu/g]/[1+PL(EL1-1)]+[gdiff/g]/[1+PL(EL2-1)],(fmin<=fm<=1.00)
or flt=[fm+0.91(N-1)]/N**
Left-turn adjustment, fLT

For special case of single-lane approach opposed by multilane approach, see text.
* If Pl>=1 for shared left-turn lanes with N>1, then assume de-facto left-turn lane and redo calculations.
** For permitted left-turns with multiple exclusive left-turn lanes, flt=fm.
For special case of multilane approach opposed by single-lane approach or when gf>gq, see text.

## SUPPLEMENTAL PEDESTRIAN-BICYCLE EFFECTS WORKSHEET

Permitted Left Turns

| | EB | WB | NB | SB |
|---|---|---|---|---|
| Effective pedestrian green time, gp (s) | | | | |
| Conflicting pedestrian volume, Vped (p/h) | | | | |
| Pedestrian flow rate, Vpedg (p/h) | | | | |
| OCCpedg | | | | |
| Opposing queue clearing green, gq (s) | | | | |
| Eff. ped. green consumed by opp. veh. queue, gq/gp | | | | |
| OCCpedu | | | | |
| Opposing flow rate, Vo (veh/h) | | | | |
| OCCr | | | | |
| Number of cross-street receiving lanes, Nrec | | | | |
| Number of turning lanes, Nturn | | | | |
| ApbT | | | | |
| Proportion of left turns, PLT | | | | |
| Proportion of left turns using protected phase, PLTA | | | | |
| Left-turn adjustment, fLpb | | | | |
| Permitted Right Turns | | | | |
| Effective pedestrian green time, gp (s) | | | | |
| Conflicting pedestrian volume, Vped (p/h) | | | | |
| Conflicting bicycle volume, Vbic (bicycles/h) | | | | |
| Vpedg | | | | |
| OCCpedg | | | | |
| Effective green, g (s) | | | | |
| Vbicg | | | | |

OCCbicg
OCCr
Number of cross-street receiving lanes, Nrec
Number of turning lanes, Nturn
ApbT
Proportion right-turns, PRT
Proportion right-turns using protected phase, PRTA
Right turn adjustment, fRpb

## SUPPLEMENTAL UNIFORM DELAY WORKSHEET

| | | EBLT | WBLT | NBLT | SBLT |
|---|---|---|---|---|---|
| Cycle length, C | 120.0 sec | | | | |
| Adj. LT vol from Vol Adjustment Worksheet, v | | 308 | | | |
| v/c ratio from Capacity Worksheet, X | | 1.12 | | | |
| Protected phase effective green interval, g (s) | | 9.0 | | | |
| Opposing queue effective green interval, gq | | 39.82 | | | |
| Unopposed green interval, gu | | 24.18 | | | |
| Red time r=(C-g-gq-gu) | | 47.0 | | | |
| Arrival rate, qa=v/(3600(max[X,1.0])) | | 0.08 | | | |
| Protected ph. departure rate, Sp=s/3600 | | 0.478 | | | |
| Permitted ph. departure rate, Ss=s(gq+gu)/(gu*3600) | | 0.20 | | | |
| XPerm | | 1.01 | | | |
| XProt | | 0.99 | | | |
| Case | | 3 | | | |
| Queue at beginning of green arrow, Qa | | 3.61 | | | |
| Queue at beginning of unsaturated green, Qu | | 3.03 | | | |
| Residual queue, Qr | | 0.04 | | | |
| Uniform Delay, d1 | | 21.8 | | | |

## DELAY/LOS WORKSHEET WITH INITIAL QUEUE

| Appr/ Lane Group | Initial Unmet Demand Q veh | Dur. Unmet Demand t hrs. | Uniform Delay Unadj. ds | Uniform Delay Adj. d1 sec | Initial Queue Param. u | Final Unmet Demand Q veh | Initial Queue Delay d3 sec | Lane Group Delay d sec |
|---|---|---|---|---|---|---|---|---|
| Eastbound | | | | | | | | |
| L | 0.0 | 0.00 | | 21.8 | 0.00 | 8.5 | 0.0 | 113.8 |
| TR | 0.0 | 0.00 | 25.0 | 22.0 | 0.00 | 0.0 | 0.0 | 32.6 |
| | 0.0 | | | | | | 0.0 | |
| Westbound | | | | | | | | |
| L | 0.0 | 0.00 | 31.0 | 16.3 | 0.00 | 0.0 | 0.0 | 16.5 |
| TR | 0.0 | 0.00 | 31.0 | 27.5 | 0.00 | 0.0 | 0.0 | 37.3 |
| | 0.0 | | | | | | 0.0 | |
| Northbound | | | | | | | | |
| | 0.0 | | | | | | 0.0 | |
| LTR | 0.0 | 0.00 | 58.0 | 56.9 | 0.00 | 0.0 | 0.0 | 62.1 |
| | 0.0 | | | | | | 0.0 | |
| Southbound | | | | | | | | |
| L | 0.0 | 0.00 | 44.0 | 40.5 | 0.00 | 0.0 | 0.0 | 48.0 |
| TR | 0.0 | 0.00 | 44.0 | 41.3 | 0.00 | 0.0 | 0.0 | 53.5 |
| | 0.0 | | | | | | 0.0 | |

Intersection Delay 48.1 sec/veh Intersection LOS D

## BACK OF QUEUE WORKSHEET

| | Eastbound | | | Westbound | | | Northbound | | | Southbound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| LaneGroup | L | TR | | L | TR | | | LTR | | L | TR | |
| Init Queue | 0.0 | 0.0 | | 0.0 | 0.0 | | | 0.0 | | 0.0 | 0.0 | |
| Flow Rate | 308 | 948 | | 4 | 704 | | | 22 | | 346 | 338 | |
| So | 1900 | 1900 | | 1900 | 1900 | | | 1900 | | 1900 | 1900 | |
| No.Lanes | 1 | 1 | 0 | 1 | 1 | 0 | 0 | 1 | 0 | 1 | 1 | 0 |
| SL | 450 | 1803 | | 211 | 1683 | | | 1588 | | 1703 | 1549 | |
| LnCapacity | 274 | 1052 | | 102 | 813 | | | 53 | | 454 | 413 | |
| Flow Ratio | 0.7 | 0.5 | | 0.0 | 0.4 | | | 0.0 | | 0.2 | 0.2 | |
| v/c Ratio | 1.12 | 0.90 | | 0.04 | 0.87 | | | 0.42 | | 0.76 | 0.82 | |
| Grn Ratio | 0.61 | 0.58 | | 0.48 | 0.48 | | | 0.03 | | 0.27 | 0.27 | |
| I Factor | | 1.000 | | | 1.000 | | | 1.000 | | | 1.000 | |
| AT or PVG | 3 | 3 | | 3 | 3 | | | 3 | | 3 | 3 | |
| Pltn Ratio | 1.00 | 1.00 | | 1.00 | 1.00 | | | 1.00 | | 1.00 | 1.00 | |
| PF2 | 1.00 | 1.00 | | 1.00 | 1.00 | | | 1.00 | | 1.00 | 1.00 | |
| Q1 | 4.3 | 27.8 | | 0.1 | 20.9 | | | 0.7 | | 10.6 | 10.6 | |
| kB | 0.4 | 0.8 | | 0.2 | 0.7 | | | 0.1 | | 0.5 | 0.5 | |
| Q2 | 6.4 | 5.4 | | 0.0 | 3.7 | | | 0.1 | | 1.5 | 1.8 | |
| Q Average | 10.8 | 33.2 | | 0.1 | 24.5 | | | 0.8 | | 12.1 | 12.4 | |
| Q Spacing | 25.0 | 25.0 | | 25.0 | 25.0 | | | 25.0 | | 25.0 | 25.0 | |
| Q Storage | 0 | 0 | | 0 | 0 | | | 0 | | 0 | 0 | |
| Q S Ratio | | | | | | | | | | | | |
| 70th Percentile Output: | | | | | | | | | | | | |
| fB% | 1.2 | 1.1 | | 1.2 | 1.2 | | | 1.2 | | 1.2 | 1.2 | |
| BOQ | 12.7 | 38.0 | | 0.1 | 28.3 | | | 1.0 | | 14.2 | 14.5 | |
| QSRatio | | | | | | | | | | | | |
| 85th Percentile Output: | | | | | | | | | | | | |
| fB% | 1.5 | 1.4 | | 1.6 | 1.4 | | | 1.6 | | 1.5 | 1.5 | |
| BOQ | 16.3 | 46.4 | | 0.1 | 35.1 | | | 1.3 | | 18.1 | 18.6 | |
| QSRatio | | | | | | | | | | | | |
| 90th Percentile Output: | | | | | | | | | | | | |
| fB% | 1.6 | 1.5 | | 1.8 | 1.5 | | | 1.8 | | 1.6 | 1.6 | |
| BOQ | 17.6 | 49.0 | | 0.1 | 37.2 | | | 1.5 | | 19.6 | 20.0 | |
| QSRatio | | | | | | | | | | | | |
| 95th Percentile Output: | | | | | | | | | | | | |
| fB% | 1.8 | 1.6 | | 2.1 | 1.7 | | | 2.1 | | 1.8 | 1.8 | |
| BOQ | 19.7 | 52.9 | | 0.2 | 40.6 | | | 1.7 | | 21.8 | 22.3 | |
| QSRatio | | | | | | | | | | | | |
| 98th Percentile Output: | | | | | | | | | | | | |
| fB% | 2.1 | 1.8 | | 2.7 | 1.9 | | | 2.6 | | 2.1 | 2.1 | |
| BOQ | 23.1 | 59.0 | | 0.2 | 45.4 | | | 2.2 | | 25.3 | 25.8 | |
| QSRatio | | | | | | | | | | | | |

## ERROR MESSAGES

No errors to report.

HCS+: Signalized Intersections Release 5.5

Analyst: JM
Agency: KLOA, Inc.
Date: 5/14/2012
Period: P.M. Peak Hour
Project ID: 12-141
E/W St: IL 120

Inter.: IL 120/Hainesville Road
Area Type: All other areas
Jurisd: IDOT
Year : Year 2016 Future Traffic

N/S St: Hainesville Road

SIGNALIZED INTERSECTION SUMMARY

| | Eastbound | | | Westbound | | | Northbound | | | Southbound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | L | T | R | L | T | R | L | T | R | L | T | R |
| No. Lanes | 1 | 1 | 0 | 1 | 1 | 0 | 0 | 1 | 0 | 1 | 1 | 0 |
| LGConfig | L | TR | | L | TR | | | LTR | | L | TR | |
| Volume | 309 | 734 | 2 | 7 | 793 | 132 | 13 | 12 | 11 | 130 | 6 | 390 |
| Lane Width | 12.0 | 12.0 | | 12.0 | 12.0 | | | 12.0 | | 12.0 | 12.0 | |
| RTOR Vol | | | 0 | | | 0 | | | 0 | | | 39 |

Duration 0.25 Area Type: All other areas

Signal Operations

| Phase Combination | 1 | 2 | 3 | 4 | | | 5 | 6 | 7 | 8 |
|---|---|---|---|---|---|---|---|---|---|---|
| EB Left | A | A | | | NB | Left | A | | | |
| Thru | A | A | | | | Thru | A | | | |
| Right | A | A | | | | Right | A | | | |
| Peds | | | | | | Peds | | | | |
| WB Left | | A | | | SB | Left | | A | | |
| Thru | | A | | | | Thru | | A | | |
| Right | | A | | | | Right | | A | | |
| Peds | | | | | | Peds | | | | |
| NB Right | | | | | EB | Right | | | | |
| SB Right | | | | | WB | Right | | | | |
| Green | 22.0 | 87.0 | | | | | 4.0 | 30.0 | | |
| Yellow | 3.0 | 4.0 | | | | | 3.0 | 3.0 | | |
| All Red | 0.0 | 2.0 | | | | | 1.0 | 1.0 | | |

Cycle Length: 160.0 secs

Intersection Performance Summary

| Appr/ Lane Grp | Lane Group Capacity | Adj Sat Flow Rate (s) | Ratios v/c | Ratios g/C | Lane Group Delay | Lane Group LOS | Approach Delay | Approach LOS |
|---|---|---|---|---|---|---|---|---|
| Eastbound | | | | | | | | |
| L | 287 | 1752 | 1.13 | 0.72 | 153.2 | F | | |
| TR | 1278 | 1826 | 0.61 | 0.70 | 13.3 | B | 54.7 | D |
| Westbound | | | | | | | | |
| L | 316 | 582 | 0.02 | 0.54 | 16.9 | B | | |
| TR | 956 | 1759 | 1.02 | 0.54 | 70.4 | E | 70.0 | E |
| Northbound | | | | | | | | |
| LTR | 39 | 1573 | 1.00 | 0.03 | 222.1 | F | 222.1 | F |
| Southbound | | | | | | | | |
| L | 329 | 1752 | 0.42 | 0.19 | 58.1 | E | | |
| TR | 294 | 1569 | 1.28 | 0.19 | 212.8 | F | 171.4 | F |

Intersection Delay = 85.6 (sec/veh) Intersection LOS = F

Phone: Fax:
E-Mail:

## OPERATIONAL ANALYSIS

Analyst: JM
Agency/Co.: KLOA, Inc.
Date Performed: 5/14/2012
Analysis Time Period: P.M. Peak Hour
Intersection: IL 120/Hainesville Road
Area Type: All other areas
Jurisdiction: IDOT
Analysis Year: Year 2016 Future Traffic
Project ID: 12-141
E/W St: IL 120 N/S St: Hainesville Road

## VOLUME DATA

| | Eastbound | | | Westbound | | | Northbound | | | Southbound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | L | T | R | L | T | R | L | T | R | L | T | R |
| Volume | 309 | 734 | 2 | 7 | 793 | 132 | 13 | 12 | 11 | 130 | 6 | 390 |
| % Heavy Veh | 3 | 4 | 0 | 14 | 6 | 4 | 0 | 8 | 36 | 3 | 17 | 3 |
| PHF | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| PK 15 Vol | 81 | 193 | 1 | 2 | 209 | 35 | 4 | 3 | 3 | 34 | 2 | 103 |
| Hi Ln Vol | | | | | | | | | | | | |
| % Grade | | 0 | | | 0 | | | 0 | | | 0 | |
| Ideal Sat | 1900 | 1900 | | 1900 | 1900 | | | 1900 | | 1900 | 1900 | |
| ParkExist | | | | | | | | | | | | |
| NumPark | | | | | | | | | | | | |
| No. Lanes | 1 | 1 | 0 | 1 | 1 | 0 | 0 | 1 | 0 | 1 | 1 | 0 |
| LGConfig | L | TR | | L | TR | | | LTR | | L | TR | |
| Lane Width | 12.0 | 12.0 | | 12.0 | 12.0 | | | 12.0 | | 12.0 | 12.0 | |
| RTOR Vol | | | 0 | | | 0 | | | 0 | | | 39 |
| Adj Flow | 325 | 775 | | 7 | 974 | | | 39 | | 137 | 375 | |
| %InSharedLn | | | | | | | | | | | | |
| Prop LTs | 1.000 | 0.000 | | 1.000 | 0.000 | | | 0.359 | | | 0.000 | |
| Prop RTs | | 0.003 | | | 0.143 | | | 0.308 | | | 0.984 | |
| Peds Bikes | | 0 | | | 0 | | | 0 | | | 0 | |
| Buses | 0 | 0 | | 0 | 0 | | | 0 | | 0 | 0 | |
| %InProtPhase | 0.0 | | | | | | | | | | | |
| Duration | 0.25 | | Area Type: All other areas | | | | | | | | | |

## OPERATING PARAMETERS

| | Eastbound | | | Westbound | | | Northbound | | | Southbound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | L | T | R | L | T | R | L | T | R | L | T | R |
| Init Unmet | 0.0 | 0.0 | | 0.0 | 0.0 | | | 0.0 | | 0.0 | 0.0 | |
| Arriv. Type | 3 | 3 | | 3 | 3 | | | 3 | | 3 | 3 | |
| Unit Ext. | 3.0 | 3.0 | | 3.0 | 3.0 | | | 3.0 | | 3.0 | 3.0 | |
| I Factor | | 1.000 | | | 1.000 | | | 1.000 | | | 1.000 | |
| Lost Time | 2.0 | 2.0 | | 2.0 | 2.0 | | | 2.0 | | 2.0 | 2.0 | |
| Ext of g | 2.0 | 2.0 | | 2.0 | 2.0 | | | 2.0 | | 2.0 | 2.0 | |
| Ped Min g | | 3.2 | | | 3.2 | | | 3.2 | | | 3.2 | |

## PHASE DATA

| Phase Combination | | 1 | 2 | 3 | 4 | | | 5 | 6 | 7 | 8 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| EB | Left | A | A | | | NB | Left | A | | | |
| | Thru | A | A | | | | Thru | A | | | |
| | Right | A | A | | | | Right | A | | | |
| | Peds | | | | | | Peds | | | | |
| WB | Left | | A | | | SB | Left | | A | | |
| | Thru | | A | | | | Thru | | A | | |
| | Right | | A | | | | Right | | A | | |
| | Peds | | | | | | Peds | | | | |
| NB | Right | | | | | EB | Right | | | | |
| SB | Right | | | | | WB | Right | | | | |
| Green | | 22.0 | 87.0 | | | | | 4.0 | 30.0 | | |
| Yellow | | 3.0 | 4.0 | | | | | 3.0 | 3.0 | | |
| All Red | | 0.0 | 2.0 | | | | | 1.0 | 1.0 | | |

Cycle Length: 160.0 secs

## VOLUME ADJUSTMENT AND SATURATION FLOW WORKSHEET

Volume Adjustment

| | Eastbound | | | Westbound | | | Northbound | | | Southbound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | L | T | R | L | T | R | L | T | R | L | T | R |
| Volume, V | 309 | 734 | 2 | 7 | 793 | 132 | 13 | 12 | 11 | 130 | 6 | 390 |
| PHF | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| Adj flow | 325 | 773 | 2 | 7 | 835 | 139 | 14 | 13 | 12 | 137 | 6 | 369 |
| No. Lanes | 1 | 1 | 0 | 1 | 1 | 0 | 0 | 1 | 0 | 1 | 1 | 0 |
| Lane group | L | TR | | L | TR | | | LTR | | L | TR | |
| Adj flow | 325 | 775 | | 7 | 974 | | | 39 | | 137 | 375 | |
| Prop LTs | 1.000 | 0.000 | | 1.000 | 0.000 | | | 0.359 | | | 0.000 | |
| Prop RTs | | 0.003 | | | 0.143 | | | 0.308 | | | 0.984 | |

Saturation Flow Rate (see Exhibit 16-7 to determine the adjustment factors)

| | Eastbound | | | Westbound | | | Northbound | | | Southbound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| LG | L | TR | | L | TR | | | LTR | | L | TR | |
| So | 1900 | 1900 | | 1900 | 1900 | | | 1900 | | 1900 | 1900 | |
| Lanes | 1 | 1 | 0 | 1 | 1 | 0 | 0 | 1 | 0 | 1 | 1 | 0 |
| fW | 1.000 | 1.000 | | 1.000 | 1.000 | | | 1.000 | | 1.000 | 1.000 | |
| fHV | 0.971 | 0.962 | | 0.877 | 0.946 | | | 0.879 | | 0.971 | 0.969 | |
| fG | 1.000 | 1.000 | | 1.000 | 1.000 | | | 1.000 | | 1.000 | 1.000 | |
| fP | 1.000 | 1.000 | | 1.000 | 1.000 | | | 1.000 | | 1.000 | 1.000 | |
| fBB | 1.000 | 1.000 | | 1.000 | 1.000 | | | 1.000 | | 1.000 | 1.000 | |
| fA | 1.000 | 1.000 | | 1.000 | 1.000 | | | 1.000 | | 1.000 | 1.000 | |
| fLU | 1.000 | 1.000 | | 1.000 | 1.000 | | | 1.000 | | 1.000 | 1.000 | |
| fRT | | 1.000 | | | 0.979 | | | 0.958 | | | 0.852 | |
| fLT | 0.950 | 1.000 | | 0.349 | 1.000 | | | 0.982 | | 0.950 | 1.000 | |
| Sec. | 0.043 | | | | | | | | | | | |
| fLpb | 1.000 | 1.000 | | 1.000 | 1.000 | | | 1.000 | | 1.000 | 1.000 | |
| fRpb | | 1.000 | | | 1.000 | | | 1.000 | | | 1.000 | |
| S | 1752 | 1826 | | 582 | 1759 | | | 1573 | | 1752 | 1569 | |
| Sec. | 79 | | | | | | | | | | | |

## CAPACITY AND LOS WORKSHEET

Capacity Analysis and Lane Group Capacity

| Appr/ Mvmt | Lane Group | Adj Flow Rate (v) | Adj Sat Flow Rate (s) | Flow Ratio (v/s) | Green Ratio (g/C) | --Lane Group-- Capacity (c) | v/c Ratio |
|---|---|---|---|---|---|---|---|
| Eastbound | | | | | | | |
| Prot | | 241 | 1752 | # 0.14 | 0.138 | 241 | 1.00 |
| Perm | | 84 | 79 | # 1.06 | 0.581 | 46 | 1.83 |
| Left | L | 325 | | | 0.72 | 287 | 1.13 |
| Prot | | | | | | | |
| Perm | | | | | | | |
| Thru | TR | 775 | 1826 | 0.42 | 0.70 | 1278 | 0.61 |
| Right | | | | | | | |
| Westbound | | | | | | | |
| Prot | | | | | | | |
| Perm | | | | | | | |
| Left | L | 7 | 582 | 0.01 | 0.54 | 316 | 0.02 |
| Prot | | | | | | | |
| Perm | | | | | | | |
| Thru | TR | 974 | 1759 | 0.55 | 0.54 | 956 | 1.02 |
| Right | | | | | | | |
| Northbound | | | | | | | |
| Prot | | | | | | | |
| Perm | | | | | | | |
| Left | | | | | | | |
| Prot | | | | | | | |
| Perm | | | | | | | |
| Thru | LTR | 39 | 1573 | # 0.02 | 0.03 | 39 | 1.00 |
| Right | | | | | | | |
| Southbound | | | | | | | |
| Prot | | | | | | | |
| Perm | | | | | | | |
| Left | L | 137 | 1752 | 0.08 | 0.19 | 329 | 0.42 |
| Prot | | | | | | | |
| Perm | | | | | | | |
| Thru | TR | 375 | 1569 | # 0.24 | 0.19 | 294 | 1.28 |
| Right | | | | | | | |

Sum of flow ratios for critical lane groups, Yc = Sum (v/s) = 1.46
Total lost time per cycle, L = 14.00 sec
Critical flow rate to capacity ratio, Xc = (Yc)(C)/(C-L) = 1.61

Control Delay and LOS Determination

| Appr/ Lane Grp | Ratios v/c | Ratios g/C | Unf Del d1 | Prog Adj Fact | Lane Grp Cap | Incremental Factor k | Incremental Del d2 | Res Del d3 | Lane Group Delay | Lane Group LOS | Approach Delay | Approach LOS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Eastbound | | | | | | | | | | | | |
| L | 1.13 | 0.72 | 59.5 | 1.000 | 287 | 0.50 | 93.7 | 0.0 | 153.2 | F | | |
| TR | 0.61 | 0.70 | 12.5 | 1.000 | 1278 | 0.19 | 0.8 | 0.0 | 13.3 | B | 54.7 | D |
| Westbound | | | | | | | | | | | | |
| L | 0.02 | 0.54 | 16.9 | 1.000 | 316 | 0.11 | 0.0 | 0.0 | 16.9 | B | | |
| TR | 1.02 | 0.54 | 36.5 | 1.000 | 956 | 0.50 | 33.9 | 0.0 | 70.4 | E | 70.0 | E |
| Northbound | | | | | | | | | | | | |
| LTR | 1.00 | 0.03 | 78.0 | 1.000 | 39 | 0.50 | 144.1 | 0.0 | 222.1 | F | 222.1 | F |
| Southbound | | | | | | | | | | | | |
| L | 0.42 | 0.19 | 57.3 | 1.000 | 329 | 0.11 | 0.9 | 0.0 | 58.1 | E | | |
| TR | 1.28 | 0.19 | 65.0 | 1.000 | 294 | 0.50 | 147.8 | 0.0 | 212.8 | F | 171.4 | F |

Intersection delay = 85.6 (sec/veh) Intersection LOS = F

## SUPPLEMENTAL PERMITTED LT WORKSHEET
for exclusive lefts

Input

| | EB | WB | NB | SB |
|---|---|---|---|---|
| Opposed by Single(S) or Multiple(M) lane approach | | | | |
| Cycle length, C 160.0 sec | | | | |
| Total actual green time for LT lane group, G (s) | 112.0 | 87.0 | | |
| Effective permitted green time for LT lane group, g(s) | 93.0 | 87.0 | | |
| Opposing effective green time, go (s) | 87.0 | 112.0 | | |
| Number of lanes in LT lane group, N | 1 | 1 | | |
| Number of lanes in opposing approach, No | 1 | 1 | | |
| Adjusted LT flow rate, VLT (veh/h) | 325 | 7 | | |
| Proportion of LT in LT lane group, PLT | 1.000 | 1.000 | | |
| Proportion of LT in opposing flow, PLTo | 0.00 | 0.00 | | |
| Adjusted opposing flow rate, Vo (veh/h) | 974 | 775 | | |
| Lost time for LT lane group, tL | 6.00 | 6.00 | | |
| Computation | | | | |
| LT volume per cycle, LTC=VLTC/3600 | 14.44 | 0.31 | | |
| Opposing lane util. factor, fLUo | 1.000 | 1.000 | 1.000 | 1.000 |
| Opposing flow, Volc=VoC/[3600(No)fLUo] (veh/ln/cyc) | 43.29 | 34.44 | | |
| gf=G[exp(- a * (LTC ** b)]-tl, gf<=g | 0.0 | 0.0 | | |
| Opposing platoon ratio, Rpo (refer Exhibit 16-11) | 1.00 | 1.00 | | |
| Opposing Queue Ratio, qro=Max[1-Rpo(go/C),0] | 0.46 | 0.30 | | |
| gq, (see Exhibit C16-4,5,6,7,8) | 86.08 | 5.29 | | |
| gu=g-gq if gq>=gf, or = g-gf if gq<gf | 6.92 | 81.71 | | |
| n=Max(gq-gf)/2,0) | 43.04 | 2.65 | | |
| PTHo=1-PLTo | 1.00 | 1.00 | | |
| PL*=PLT[1+(N-1)g/(gf+gu/EL1+4.24)] | 1.00 | 1.00 | | |
| EL1 (refer to Exhibit C16-3) | 3.24 | 2.69 | | |
| EL2=Max((1-Ptho**n)/Plto, 1.0) | | | | |
| fmin=2(1+PL)/g or fmin=2(1+Pl)/g | 0.04 | 0.05 | | |
| gdiff=max(gq-gf,0) | 0.00 | 0.00 | | |
| fm=[gf/g]+[gu/g]/[1+PL(EL1-1)], (min=fmin;max=1.00) | 0.04 | 0.35 | | |
| flt=fm=[gf/g]+[gu/g]/[1+PL(EL1-1)]+[gdiff/g]/[1+PL(EL2-1)],(fmin<=fm<=1.00) | | | | |
| or flt=[fm+0.91(N-1)]/N** | | | | |
| Left-turn adjustment, fLT | 0.043 | 0.349 | | |

For special case of single-lane approach opposed by multilane approach, see text.

* If Pl>=1 for shared left-turn lanes with N>1, then assume de-facto left-turn lane and redo calculations.

** For permitted left-turns with multiple exclusive left-turn lanes, flt=fm.

For special case of multilane approach opposed by single-lane approach or when gf>gq, see text.

## SUPPLEMENTAL PERMITTED LT WORKSHEET
for shared lefts

Input

| | EB | WB | NB | SB |
|---|---|---|---|---|
| Opposed by Single(S) or Multiple(M) lane approach | | | | |
| Cycle length, C 160.0 sec | | | | |
| Total actual green time for LT lane group, G (s) | | | | |
| Effective permitted green time for LT lane group, g(s) | | | | |
| Opposing effective green time, go (s) | | | | |
| Number of lanes in LT lane group, N | | | | |

Number of lanes in opposing approach, No
Adjusted LT flow rate, VLT (veh/h)
Proportion of LT in LT lane group, PLT 0.000 0.000 0.359 0.000
Proportion of LT in opposing flow, PLTo
Adjusted opposing flow rate, Vo (veh/h)
Lost time for LT lane group, tL
Computation
LT volume per cycle, LTC=VLTC/3600
Opposing lane util. factor, fLUo 1.000 1.000 1.000 1.000
Opposing flow, Volc=VoC/[3600(No)fLUo] (veh/ln/cyc)
gf=G[exp(- a * (LTC ** b))]-tl, gf<=g
Opposing platoon ratio, Rpo (refer Exhibit 16-11)
Opposing Queue Ratio, qro=Max[1-Rpo(go/C),0]
gq, (see Exhibit C16-4,5,6,7,8)
gu=g-gq if gq>=gf, or = g-gf if gq<gf
n=Max(gq-gf)/2,0)
PTHo=1-PLTo
PL*=PLT[1+(N-1)g/(gf+gu/EL1+4.24)]
EL1 (refer to Exhibit C16-3)
EL2=Max((1-Ptho**n)/Plto, 1.0)
fmin=2(1+PL)/g or fmin=2(1+Pl)/g
gdiff=max(gq-gf,0)
fm=[gf/g]+[gu/g]/[1+PL(EL1-1)], (min=fmin;max=1.00)
flt=fm=[gf/g]+[gu/g]/[1+PL(EL1-1)]+[gdiff/g]/[1+PL(EL2-1)],(fmin<=fm<=1.00)
or flt=[fm+0.91(N-1)]/N**
Left-turn adjustment, fLT

For special case of single-lane approach opposed by multilane approach, see text.
* If Pl>=1 for shared left-turn lanes with N>1, then assume de-facto left-turn lane and redo calculations.
** For permitted left-turns with multiple exclusive left-turn lanes, flt=fm.
For special case of multilane approach opposed by single-lane approach or when gf>gq, see text.

## SUPPLEMENTAL PEDESTRIAN-BICYCLE EFFECTS WORKSHEET

Permitted Left Turns

| | EB | WB | NB | SB |
|---|---|---|---|---|
| Effective pedestrian green time, gp (s) | | | | |
| Conflicting pedestrian volume, Vped (p/h) | | | | |
| Pedestrian flow rate, Vpedg (p/h) | | | | |
| OCCpedg | | | | |
| Opposing queue clearing green, gq (s) | | | | |
| Eff. ped. green consumed by opp. veh. queue, gq/gp | | | | |
| OCCpedu | | | | |
| Opposing flow rate, Vo (veh/h) | | | | |
| OCCr | | | | |
| Number of cross-street receiving lanes, Nrec | | | | |
| Number of turning lanes, Nturn | | | | |
| ApbT | | | | |
| Proportion of left turns, PLT | | | | |
| Proportion of left turns using protected phase, PLTA | | | | |
| Left-turn adjustment, fLpb | | | | |
| Permitted Right Turns | | | | |
| Effective pedestrian green time, gp (s) | | | | |
| Conflicting pedestrian volume, Vped (p/h) | | | | |
| Conflicting bicycle volume, Vbic (bicycles/h) | | | | |
| Vpedg | | | | |
| OCCpedg | | | | |
| Effective green, g (s) | | | | |
| Vbicg | | | | |

OCCbicg
OCCr
Number of cross-street receiving lanes, Nrec
Number of turning lanes, Nturn
ApbT
Proportion right-turns, PRT
Proportion right-turns using protected phase, PRTA
Right turn adjustment, fRpb

## SUPPLEMENTAL UNIFORM DELAY WORKSHEET

| | | EBLT | WBLT | NBLT | SBLT |
|---|---|---|---|---|---|
| Cycle length, C | 160.0 sec | | | | |
| Adj. LT vol from Vol Adjustment Worksheet, v | | 325 | | | |
| v/c ratio from Capacity Worksheet, X | | 1.13 | | | |
| Protected phase effective green interval, g (s) | | 22.0 | | | |
| Opposing queue effective green interval, gq | | 86.08 | | | |
| Unopposed green interval, gu | | 6.92 | | | |
| Red time r=(C-g-gq-gu) | | 45.0 | | | |
| Arrival rate, qa=v/(3600(max[X,1.0])) | | 0.08 | | | |
| Protected ph. departure rate, Sp=s/3600 | | 0.487 | | | |
| Permitted ph. departure rate, Ss=s(gq+gu)/(gu*3600) | | 0.29 | | | |
| XPerm | | 3.63 | | | |
| XProt | | 0.50 | | | |
| Case | | 3 | | | |
| Queue at beginning of green arrow, Qa | | 8.96 | | | |
| Queue at beginning of unsaturated green, Qu | | 6.86 | | | |
| Residual queue, Qr | | 5.37 | | | |
| Uniform Delay, d1 | | 59.5 | | | |

## DELAY/LOS WORKSHEET WITH INITIAL QUEUE

| Appr/ Lane Group | Initial Unmet Demand Q veh | Dur. Unmet Demand t hrs. | Uniform Delay Unadj. ds | Uniform Delay Adj. d1 sec | Initial Queue Param. u | Final Unmet Demand Q veh | Initial Queue Delay d3 sec | Lane Group Delay d sec |
|---|---|---|---|---|---|---|---|---|
| Eastbound | | | | | | | | |
| L | 0.0 | 0.00 | | 59.5 | 0.00 | 9.5 | 0.0 | 153.2 |
| TR | 0.0 | 0.00 | 24.0 | 12.5 | 0.00 | 0.0 | 0.0 | 13.3 |
| | 0.0 | | | | | | 0.0 | |
| Westbound | | | | | | | | |
| L | 0.0 | 0.00 | 36.5 | 16.9 | 0.00 | 0.0 | 0.0 | 16.9 |
| TR | 0.0 | 0.00 | 36.5 | 36.5 | 0.00 | 4.5 | 0.0 | 70.4 |
| | 0.0 | | | | | | 0.0 | |
| Northbound | | | | | | | | |
| | 0.0 | | | | | | 0.0 | |
| LTR | 0.0 | 0.00 | 78.0 | 78.0 | 0.00 | 0.0 | 0.0 | 222.1 |
| | 0.0 | | | | | | 0.0 | |
| Southbound | | | | | | | | |
| L | 0.0 | 0.00 | 65.0 | 57.3 | 0.00 | 0.0 | 0.0 | 58.1 |
| TR | 0.0 | 0.00 | 65.0 | 65.0 | 0.00 | 20.3 | 0.0 | 212.8 |
| | 0.0 | | | | | | 0.0 | |

Intersection Delay 85.6 sec/veh Intersection LOS F

## BACK OF QUEUE WORKSHEET

| | Eastbound | | | Westbound | | | Northbound | | | Southbound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| LaneGroup | L | TR | | L | TR | | | LTR | | L | TR | |
| Init Queue | 0.0 | 0.0 | | 0.0 | 0.0 | | | 0.0 | | 0.0 | 0.0 | |
| Flow Rate | 325 | 775 | | 7 | 974 | | | 39 | | 137 | 375 | |
| So | 1900 | 1900 | | 1900 | 1900 | | | 1900 | | 1900 | 1900 | |
| No.Lanes | 1 | 1 | 0 | 1 | 1 | 0 | 0 | 1 | 0 | 1 | 1 | 0 |
| SL | 399 | 1826 | | 582 | 1759 | | | 1573 | | 1752 | 1569 | |
| LnCapacity | 287 | 1278 | | 316 | 956 | | | 39 | | 329 | 294 | |
| Flow Ratio | 0.8 | 0.4 | | 0.0 | 0.6 | | | 0.0 | | 0.1 | 0.2 | |
| v/c Ratio | 1.13 | 0.61 | | 0.02 | 1.02 | | | 1.00 | | 0.42 | 1.28 | |
| Grn Ratio | 0.72 | 0.70 | | 0.54 | 0.54 | | | 0.03 | | 0.19 | 0.19 | |
| I Factor | | 1.000 | | | 1.000 | | | 1.000 | | | 1.000 | |
| AT or PVG | 3 | 3 | | 3 | 3 | | | 3 | | 3 | 3 | |
| Pltn Ratio | 1.00 | 1.00 | | 1.00 | 1.00 | | | 1.00 | | 1.00 | 1.00 | |
| PF2 | 1.00 | 1.00 | | 1.00 | 1.00 | | | 1.00 | | 1.00 | 1.00 | |
| Q1 | 4.7 | 18.0 | | 0.1 | 43.3 | | | 1.7 | | 5.4 | 16.7 | |
| kB | 0.5 | 1.1 | | 0.5 | 0.9 | | | 0.1 | | 0.5 | 0.5 | |
| Q2 | 7.3 | 1.7 | | 0.0 | 11.9 | | | 0.8 | | 0.4 | 12.0 | |
| Q Average | 12.0 | 19.6 | | 0.2 | 55.2 | | | 2.6 | | 5.7 | 28.6 | |
| Q Spacing | 25.0 | 25.0 | | 25.0 | 25.0 | | | 25.0 | | 25.0 | 25.0 | |
| Q Storage | 0 | 0 | | 0 | 0 | | | 0 | | 0 | 0 | |
| Q S Ratio | | | | | | | | | | | | |
| 70th Percentile Output: | | | | | | | | | | | | |
| fB% | 1.2 | 1.2 | | 1.2 | 1.1 | | | 1.2 | | 1.2 | 1.1 | |
| BOQ | 14.1 | 22.8 | | 0.2 | 62.1 | | | 3.1 | | 6.8 | 32.9 | |
| QSRatio | | | | | | | | | | | | |
| 85th Percentile Output: | | | | | | | | | | | | |
| fB% | 1.5 | 1.5 | | 1.6 | 1.3 | | | 1.6 | | 1.5 | 1.4 | |
| BOQ | 18.0 | 28.6 | | 0.2 | 74.4 | | | 4.0 | | 8.9 | 40.5 | |
| QSRatio | | | | | | | | | | | | |
| 90th Percentile Output: | | | | | | | | | | | | |
| fB% | 1.6 | 1.5 | | 1.8 | 1.4 | | | 1.8 | | 1.7 | 1.5 | |
| BOQ | 19.4 | 30.5 | | 0.3 | 78.7 | | | 4.5 | | 9.7 | 42.8 | |
| QSRatio | | | | | | | | | | | | |
| 95th Percentile Output: | | | | | | | | | | | | |
| fB% | 1.8 | 1.7 | | 2.1 | 1.5 | | | 2.0 | | 1.9 | 1.6 | |
| BOQ | 21.7 | 33.4 | | 0.3 | 84.4 | | | 5.2 | | 11.1 | 46.4 | |
| QSRatio | | | | | | | | | | | | |
| 98th Percentile Output: | | | | | | | | | | | | |
| fB% | 2.1 | 1.9 | | 2.7 | 1.7 | | | 2.5 | | 2.3 | 1.8 | |
| BOQ | 25.1 | 37.7 | | 0.4 | 94.7 | | | 6.5 | | 13.4 | 51.8 | |
| QSRatio | | | | | | | | | | | | |

## ERROR MESSAGES

No errors to report.

HCS+: Signalized Intersections Release 5.5

Analyst: JM
Agency: KLOA, Inc.
Date: 10/18/2012
Period: A.M. Peak Hour
Project ID: 12-141
E/W St: IL 120

Inter.: IL 120/IL 134
Area Type: All other areas
Jurisd: IDOT
Year : Year 2016 Future Traffic

N/S St: IL 134

SIGNALIZED INTERSECTION SUMMARY

| | Eastbound | | | Westbound | | | Northbound | | | Southbound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | L | T | R | L | T | R | L | T | R | L | T | R |
| No. Lanes | 1 | 1 | 0 | 1 | 1 | 0 | 0 | 1 | 0 | 0 | 1 | 0 |
| LGConfig | L | TR | | L | T | | | LTR | | | LTR | |
| Volume | 9 | 735 | 1 | 2 | 720 | | 0 | 1 | 1 | 450 | 1 | 28 |
| Lane Width | 12.0 | 12.0 | | 12.0 | 12.0 | | | 12.0 | | | 12.0 | |
| RTOR Vol | | | 0 | | | | | | 0 | | | 0 |

Duration 0.25 Area Type: All other areas

Signal Operations

| Phase Combination | 1 | 2 | 3 | 4 | | | 5 | 6 | 7 | 8 |
|---|---|---|---|---|---|---|---|---|---|---|
| EB Left | A | | | | NB | Left | A | | | |
| Thru | A | | | | | Thru | A | | | |
| Right | A | | | | | Right | A | | | |
| Peds | | | | | | Peds | | | | |
| WB Left | A | | | | SB | Left | | A | | |
| Thru | A | | | | | Thru | | A | | |
| Right | | | | | | Right | | A | | |
| Peds | | | | | | Peds | | | | |
| NB Right | | | | | EB | Right | | | | |
| SB Right | | | | | WB | Right | | | | |
| Green | 69.0 | | | | | | 2.0 | 35.0 | | |
| Yellow | 4.0 | | | | | | 3.0 | 3.0 | | |
| All Red | 2.0 | | | | | | 1.0 | 1.0 | | |

Cycle Length: 120.0 secs

Intersection Performance Summary

| Appr/ Lane Grp | Lane Group Capacity | Adj Sat Flow Rate (s) | Ratios v/c | Ratios g/C | Lane Group Delay | Lane Group LOS | Approach Delay | Approach LOS |
|---|---|---|---|---|---|---|---|---|
| Eastbound | | | | | | | | |
| L | 227 | 394 | 0.04 | 0.57 | 11.2 | B | | |
| TR | 1051 | 1827 | 0.74 | 0.57 | 21.6 | C | 21.5 | C |
| Westbound | | | | | | | | |
| L | 143 | 249 | 0.01 | 0.57 | 11.0 | B | | |
| T | 1011 | 1759 | 0.75 | 0.57 | 22.2 | C | 22.2 | C |
| Northbound | | | | | | | | |
| LTR | 30 | 1772 | 0.07 | 0.02 | 59.0 | E | 59.0 | E |
| Southbound | | | | | | | | |
| LTR | 490 | 1681 | 1.03 | 0.29 | 90.7 | F | 90.7 | F |

Intersection Delay = 38.8 (sec/veh) Intersection LOS = D

Phone: Fax:
E-Mail:

## OPERATIONAL ANALYSIS

| | |
|---|---|
| Analyst: | JM |
| Agency/Co.: | KLOA, Inc. |
| Date Performed: | 10/18/2012 |
| Analysis Time Period: | A.M. Peak Hour |
| Intersection: | IL 120/IL 134 |
| Area Type: | All other areas |
| Jurisdiction: | IDOT |
| Analysis Year: | Year 2016 Future Traffic |

Project ID: 12-141
E/W St: IL 120 N/S St: IL 134

## VOLUME DATA

| | Eastbound | | | Westbound | | | Northbound | | | Southbound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | L | T | R | L | T | R | L | T | R | L | T | R |
| Volume | 9 | 735 | 1 | 2 | 720 | | 0 | 1 | 1 | 450 | 1 | 28 |
| % Heavy Veh | 0 | 4 | 0 | 50 | 8 | | 0 | 0 | 0 | 6 | 0 | 26 |
| PHF | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| PK 15 Vol | 3 | 193 | 1 | 1 | 189 | | 0 | 1 | 1 | 118 | 1 | 7 |
| Hi Ln Vol | | | | | | | | | | | | |
| % Grade | | 0 | | | 0 | | | 0 | | | 0 | |
| Ideal Sat | 1900 | 1900 | | 1900 | 1900 | | | 1900 | | | 1900 | |
| ParkExist | | | | | | | | | | | | |
| NumPark | | | | | | | | | | | | |
| No. Lanes | 1 | 1 | 0 | 1 | 1 | 0 | 0 | 1 | 0 | 0 | 1 | 0 |
| LGConfig | L | TR | | L | T | | | LTR | | | LTR | |
| Lane Width | 12.0 | 12.0 | | 12.0 | 12.0 | | | 12.0 | | | 12.0 | |
| RTOR Vol | | | 0 | | | | | | 0 | | | 0 |
| Adj Flow | 9 | 775 | | 2 | 758 | | | 2 | | | 504 | |
| %InSharedLn | | | | | | | | | | | | |
| Prop LTs | 1.000 | 0.000 | | 1.000 | 0.000 | | | 0.000 | | | 0.940 | |
| Prop RTs | | 0.001 | | | 0.000 | | | 0.500 | | | 0.058 | |
| Peds Bikes | | 0 | | | 0 | | | 0 | | | 0 | |
| Buses | 0 | 0 | | 0 | 0 | | | 0 | | | 0 | |
| %InProtPhase | | | | | | | | | | | | |

Duration 0.25 Area Type: All other areas

## OPERATING PARAMETERS

| | Eastbound | | | Westbound | | | Northbound | | | Southbound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | L | T | R | L | T | R | L | T | R | L | T | R |
| Init Unmet | 0.0 | 0.0 | | 0.0 | 0.0 | | | 0.0 | | | 0.0 | |
| Arriv. Type | 3 | 3 | | 3 | 3 | | | 3 | | | 3 | |
| Unit Ext. | 3.0 | 3.0 | | 3.0 | 3.0 | | | 3.0 | | | 3.0 | |
| I Factor | | 1.000 | | | 1.000 | | | 1.000 | | | 1.000 | |
| Lost Time | 2.0 | 2.0 | | 2.0 | 2.0 | | | 2.0 | | | 2.0 | |
| Ext of g | 2.0 | 2.0 | | 2.0 | 2.0 | | | 2.0 | | | 2.0 | |
| Ped Min g | | 3.2 | | | 3.2 | | | 3.2 | | | 3.2 | |

## PHASE DATA

| Phase Combination | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|---|---|---|---|---|---|---|---|---|
| EB Left | A | | | | NB Left | A | | |
| Thru | A | | | | Thru | A | | |
| Right | A | | | | Right | A | | |
| Peds | | | | | Peds | | | |
| WB Left | A | | | | SB Left | | A | |
| Thru | A | | | | Thru | | A | |
| Right | | | | | Right | | A | |
| Peds | | | | | Peds | | | |
| NB Right | | | | | EB Right | | | |
| SB Right | | | | | WB Right | | | |
| Green | 69.0 | | | | | 2.0 | 35.0 | |
| Yellow | 4.0 | | | | | 3.0 | 3.0 | |
| All Red | 2.0 | | | | | 1.0 | 1.0 | |

Cycle Length: 120.0 secs

## VOLUME ADJUSTMENT AND SATURATION FLOW WORKSHEET

Volume Adjustment

| | Eastbound | | | Westbound | | | Northbound | | | Southbound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | L | T | R | L | T | R | L | T | R | L | T | R |
| Volume, V | 9 | 735 | 1 | 2 | 720 | | 0 | 1 | 1 | 450 | 1 | 28 |
| PHF | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| Adj flow | 9 | 774 | 1 | 2 | 758 | | 0 | 1 | 1 | 474 | 1 | 29 |
| No. Lanes | 1 | 1 | 0 | 1 | 1 | 0 | 0 | 1 | 0 | 0 | 1 | 0 |
| Lane group | L | TR | | L | T | | | LTR | | | LTR | |
| Adj flow | 9 | 775 | | 2 | 758 | | | 2 | | | 504 | |
| Prop LTs | 1.000 | 0.000 | | 1.000 | 0.000 | | | 0.000 | | | 0.940 | |
| Prop RTs | | 0.001 | | | 0.000 | | | 0.500 | | | 0.058 | |

Saturation Flow Rate (see Exhibit 16-7 to determine the adjustment factors)

| | Eastbound | | | Westbound | | | Northbound | | | Southbound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| LG | L | TR | | L | T | | | LTR | | | LTR | |
| So | 1900 | 1900 | | 1900 | 1900 | | | 1900 | | | 1900 | |
| Lanes | 1 | 1 | 0 | 1 | 1 | 0 | 0 | 1 | 0 | 0 | 1 | 0 |
| fW | 1.000 | 1.000 | | 1.000 | 1.000 | | | 1.000 | | | 1.000 | |
| fHV | 1.000 | 0.962 | | 0.667 | 0.926 | | | 1.000 | | | 0.933 | |
| fG | 1.000 | 1.000 | | 1.000 | 1.000 | | | 1.000 | | | 1.000 | |
| fP | 1.000 | 1.000 | | 1.000 | 1.000 | | | 1.000 | | | 1.000 | |
| fBB | 1.000 | 1.000 | | 1.000 | 1.000 | | | 1.000 | | | 1.000 | |
| fA | 1.000 | 1.000 | | 1.000 | 1.000 | | | 1.000 | | | 1.000 | |
| fLU | 1.000 | 1.000 | | 1.000 | 1.000 | | | 1.000 | | | 1.000 | |
| fRT | | 1.000 | | | 1.000 | | | 0.933 | | | 0.992 | |
| fLT | 0.208 | 1.000 | | 0.196 | 1.000 | | | 1.000 | | | 0.955 | |
| Sec. | | | | | | | | | | | | |
| fLpb | 1.000 | 1.000 | | 1.000 | 1.000 | | | 1.000 | | | 1.000 | |
| fRpb | | 1.000 | | | 1.000 | | | 1.000 | | | 1.000 | |
| S | 394 | 1827 | | 249 | 1759 | | | 1772 | | | 1681 | |
| Sec. | | | | | | | | | | | | |

## CAPACITY AND LOS WORKSHEET

Capacity Analysis and Lane Group Capacity

| Appr/ Mvmt | Lane Group | Adj Flow Rate (v) | Adj Sat Flow Rate (s) | Flow Ratio (v/s) | Green Ratio (g/C) | --Lane Group-- Capacity (c) | v/c Ratio |
|---|---|---|---|---|---|---|---|
| Eastbound | | | | | | | |
| Prot | | | | | | | |
| Perm | | | | | | | |
| Left | L | 9 | 394 | 0.02 | 0.57 | 227 | 0.04 |
| Prot | | | | | | | |
| Perm | | | | | | | |
| Thru | TR | 775 | 1827 | 0.42 | 0.57 | 1051 | 0.74 |
| Right | | | | | | | |
| Westbound | | | | | | | |
| Prot | | | | | | | |
| Perm | | | | | | | |
| Left | L | 2 | 249 | 0.01 | 0.57 | 143 | 0.01 |
| Prot | | | | | | | |
| Perm | | | | | | | |
| Thru | T | 758 | 1759 | # 0.43 | 0.57 | 1011 | 0.75 |
| Right | | | | | | | |
| Northbound | | | | | | | |
| Prot | | | | | | | |
| Perm | | | | | | | |
| Left | | | | | | | |
| Prot | | | | | | | |
| Perm | | | | | | | |
| Thru | LTR | 2 | 1772 | # 0.00 | 0.02 | 30 | 0.07 |
| Right | | | | | | | |
| Southbound | | | | | | | |
| Prot | | | | | | | |
| Perm | | | | | | | |
| Left | | | | | | | |
| Prot | | | | | | | |
| Perm | | | | | | | |
| Thru | LTR | 504 | 1681 | # 0.30 | 0.29 | 490 | 1.03 |
| Right | | | | | | | |

Sum of flow ratios for critical lane groups, Yc = Sum (v/s) = 0.73
Total lost time per cycle, L = 14.00 sec
Critical flow rate to capacity ratio, Xc = (Yc)(C)/(C-L) = 0.83

Control Delay and LOS Determination

| Appr/ Lane Grp | Ratios v/c | Ratios g/C | Unf Del d1 | Prog Adj Fact | Lane Grp Cap | Incremental Factor k | Incremental Del d2 | Res Del d3 | Lane Group Delay | Lane Group LOS | Approach Delay | Approach LOS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Eastbound | | | | | | | | | | | | |
| L | 0.04 | 0.57 | 11.1 | 1.000 | 227 | 0.11 | 0.1 | 0.0 | 11.2 | B | | |
| TR | 0.74 | 0.57 | 18.8 | 1.000 | 1051 | 0.30 | 2.8 | 0.0 | 21.6 | C | 21.5 | C |
| Westbound | | | | | | | | | | | | |
| L | 0.01 | 0.57 | 10.9 | 1.000 | 143 | 0.11 | 0.0 | 0.0 | 11.0 | B | | |
| T | 0.75 | 0.57 | 19.1 | 1.000 | 1011 | 0.30 | 3.2 | 0.0 | 22.2 | C | 22.2 | C |
| Northbound | | | | | | | | | | | | |
| LTR | 0.07 | 0.02 | 58.1 | 1.000 | 30 | 0.11 | 0.9 | 0.0 | 59.0 | E | 59.0 | E |
| Southbound | | | | | | | | | | | | |
| LTR | 1.03 | 0.29 | 42.5 | 1.000 | 490 | 0.50 | 48.2 | 0.0 | 90.7 | F | 90.7 | F |

Intersection delay = 38.8 (sec/veh) Intersection LOS = D

## SUPPLEMENTAL PERMITTED LT WORKSHEET
for exclusive lefts

Input

| | EB | WB | NB | SB |
|---|---|---|---|---|
| Opposed by Single(S) or Multiple(M) lane approach | | | | |
| Cycle length, C 120.0 sec | | | | |
| Total actual green time for LT lane group, G (s) | 69.0 | 69.0 | | |
| Effective permitted green time for LT lane group, g(s) | 69.0 | 69.0 | | |
| Opposing effective green time, go (s) | 69.0 | 69.0 | | |
| Number of lanes in LT lane group, N | 1 | 1 | | |
| Number of lanes in opposing approach, No | 1 | 1 | | |
| Adjusted LT flow rate, VLT (veh/h) | 9 | 2 | | |
| Proportion of LT in LT lane group, PLT | 1.000 | 1.000 | | |
| Proportion of LT in opposing flow, PLTo | 0.00 | 0.00 | | |
| Adjusted opposing flow rate, Vo (veh/h) | 758 | 775 | | |
| Lost time for LT lane group, tL | 6.00 | 6.00 | | |
| Computation | | | | |
| LT volume per cycle, LTC=VLTC/3600 | 0.30 | 0.07 | | |
| Opposing lane util. factor, fLUo | 1.000 | 1.000 | 1.000 | 1.000 |
| Opposing flow, Volc=VoC/[3600(No)fLUo] (veh/ln/cyc) | 25.27 | 25.83 | | |
| gf=G[exp(- a * (LTC ** b))]-tl, gf<=g | 0.0 | 0.0 | | |
| Opposing platoon ratio, Rpo (refer Exhibit 16-11) | 1.00 | 1.00 | | |
| Opposing Queue Ratio, qro=Max[1-Rpo(go/C),0] | 0.43 | 0.43 | | |
| gq, (see Exhibit C16-4,5,6,7,8) | 31.10 | 32.56 | | |
| gu=g-gq if gq>=gf, or = g-gf if gq<gf | 37.90 | 36.44 | | |
| n=Max(gq-gf)/2,0) | 15.55 | 16.28 | | |
| PTHo=1-PLTo | 1.00 | 1.00 | | |
| PL*=PLT[1+(N-1)g/(gf+gu/EL1+4.24)] | 1.00 | 1.00 | | |
| EL1 (refer to Exhibit C16-3) | 2.65 | 2.69 | | |
| EL2=Max((1-Ptho**n)/Plto, 1.0) | | | | |
| fmin=2(1+PL)/g or fmin=2(1+Pl)/g | 0.06 | 0.06 | | |
| gdiff=max(gq-gf,0) | 0.00 | 0.00 | | |
| fm=[gf/g]+[gu/g]/[1+PL(EL1-1)], (min=fmin;max=1.00) | 0.21 | 0.20 | | |
| flt=fm=[gf/g]+[gu/g]/[1+PL(EL1-1)]+[gdiff/g]/[1+PL(EL2-1)],(fmin<=fm<=1.00) | | | | |
| or flt=[fm+0.91(N-1)]/N** | | | | |
| Left-turn adjustment, fLT | 0.208 | 0.196 | | |

For special case of single-lane approach opposed by multilane approach, see text.

* If Pl>=1 for shared left-turn lanes with N>1, then assume de-facto left-turn lane and redo calculations.

** For permitted left-turns with multiple exclusive left-turn lanes, flt=fm.

For special case of multilane approach opposed by single-lane approach or when gf>gq, see text.

## SUPPLEMENTAL PERMITTED LT WORKSHEET
for shared lefts

Input

| | EB | WB | NB | SB |
|---|---|---|---|---|
| Opposed by Single(S) or Multiple(M) lane approach | | | | |
| Cycle length, C 120.0 sec | | | | |
| Total actual green time for LT lane group, G (s) | | | | |
| Effective permitted green time for LT lane group, g(s) | | | | |
| Opposing effective green time, go (s) | | | | |
| Number of lanes in LT lane group, N | | | | |

Number of lanes in opposing approach, No
Adjusted LT flow rate, VLT (veh/h)
Proportion of LT in LT lane group, PLT 0.000 0.000 0.000 0.940
Proportion of LT in opposing flow, PLTo
Adjusted opposing flow rate, Vo (veh/h)
Lost time for LT lane group, tL
Computation
LT volume per cycle, LTC=VLTC/3600
Opposing lane util. factor, fLUo 1.000 1.000 1.000 1.000
Opposing flow, Volc=VoC/[3600(No)fLUo] (veh/ln/cyc)
gf=G[exp(- a * (LTC ** b))]-tl, gf<=g
Opposing platoon ratio, Rpo (refer Exhibit 16-11)
Opposing Queue Ratio, qro=Max[1-Rpo(go/C),0]
gq, (see Exhibit C16-4,5,6,7,8)
gu=g-gq if gq>=gf, or = g-gf if gq<gf
n=Max(gq-gf)/2,0)
PTHo=1-PLTo
PL*=PLT[1+(N-1)g/(gf+gu/EL1+4.24)]
EL1 (refer to Exhibit C16-3)
EL2=Max((1-Ptho**n)/Plto, 1.0)
fmin=2(1+PL)/g or fmin=2(1+Pl)/g
gdiff=max(gq-gf,0)
fm=[gf/g]+[gu/g]/[1+PL(EL1-1)], (min=fmin;max=1.00)
flt=fm=[gf/g]+[gu/g]/[1+PL(EL1-1)]+[gdiff/g]/[1+PL(EL2-1)],(fmin<=fm<=1.00)
or flt=[fm+0.91(N-1)]/N**
Left-turn adjustment, fLT

For special case of single-lane approach opposed by multilane approach, see text.
* If Pl>=1 for shared left-turn lanes with N>1, then assume de-facto left-turn lane and redo calculations.
** For permitted left-turns with multiple exclusive left-turn lanes, flt=fm.
For special case of multilane approach opposed by single-lane approach or when gf>gq, see text.

SUPPLEMENTAL PEDESTRIAN-BICYCLE EFFECTS WORKSHEET

Permitted Left Turns

| | EB | WB | NB | SB |
|---|---|---|---|---|
| Effective pedestrian green time, gp (s) | | | | |
| Conflicting pedestrian volume, Vped (p/h) | | | | |
| Pedestrian flow rate, Vpedg (p/h) | | | | |
| OCCpedg | | | | |
| Opposing queue clearing green, gq (s) | | | | |
| Eff. ped. green consumed by opp. veh. queue, gq/gp | | | | |
| OCCpedu | | | | |
| Opposing flow rate, Vo (veh/h) | | | | |
| OCCr | | | | |
| Number of cross-street receiving lanes, Nrec | | | | |
| Number of turning lanes, Nturn | | | | |
| ApbT | | | | |
| Proportion of left turns, PLT | | | | |
| Proportion of left turns using protected phase, PLTA | | | | |
| Left-turn adjustment, fLpb | | | | |
| Permitted Right Turns | | | | |
| Effective pedestrian green time, gp (s) | | | | |
| Conflicting pedestrian volume, Vped (p/h) | | | | |
| Conflicting bicycle volume, Vbic (bicycles/h) | | | | |
| Vpedg | | | | |
| OCCpedg | | | | |
| Effective green, g (s) | | | | |
| Vbicg | | | | |

OCCbicg
OCCr
Number of cross-street receiving lanes, Nrec
Number of turning lanes, Nturn
ApbT
Proportion right-turns, PRT
Proportion right-turns using protected phase, PRTA
Right turn adjustment, fRpb

## SUPPLEMENTAL UNIFORM DELAY WORKSHEET

| | | EBLT | WBLT | NBLT | SBLT |
|---|---|---|---|---|---|
| Cycle length, C | 120.0 sec | | | | |
| Adj. LT vol from Vol Adjustment Worksheet, v | | | | | |
| v/c ratio from Capacity Worksheet, X | | | | | |
| Protected phase effective green interval, g (s) | | | | | |
| Opposing queue effective green interval, gq | | | | | |
| Unopposed green interval, gu | | | | | |
| Red time r=(C-g-gq-gu) | | | | | |
| Arrival rate, qa=v/(3600(max[X,1.0])) | | | | | |
| Protected ph. departure rate, Sp=s/3600 | | | | | |
| Permitted ph. departure rate, Ss=s(gq+gu)/(gu*3600) | | | | | |
| XPerm | | | | | |
| XProt | | | | | |
| Case | | | | | |
| Queue at beginning of green arrow, Qa | | | | | |
| Queue at beginning of unsaturated green, Qu | | | | | |
| Residual queue, Qr | | | | | |
| Uniform Delay, d1 | | | | | |

## DELAY/LOS WORKSHEET WITH INITIAL QUEUE

| Appr/ Lane Group | Initial Unmet Demand Q veh | Dur. Unmet Demand t hrs. | Uniform Delay Unadj. ds | Uniform Delay Adj. d1 sec | Initial Queue Param. u | Final Unmet Demand Q veh | Initial Queue Delay d3 sec | Lane Group Delay d sec |
|---|---|---|---|---|---|---|---|---|
| Eastbound | | | | | | | | |
| L | 0.0 | 0.00 | 25.5 | 11.1 | 0.00 | 0.0 | 0.0 | 11.2 |
| TR | 0.0 | 0.00 | 25.5 | 18.8 | 0.00 | 0.0 | 0.0 | 21.6 |
| | 0.0 | | | | | | 0.0 | |
| Westbound | | | | | | | | |
| L | 0.0 | 0.00 | 25.5 | 10.9 | 0.00 | 0.0 | 0.0 | 11.0 |
| T | 0.0 | 0.00 | 25.5 | 19.1 | 0.00 | 0.0 | 0.0 | 22.2 |
| | 0.0 | | | | | | 0.0 | |
| Northbound | | | | | | | | |
| | 0.0 | | | | | | 0.0 | |
| LTR | 0.0 | 0.00 | 59.0 | 58.1 | 0.00 | 0.0 | 0.0 | 59.0 |
| | 0.0 | | | | | | 0.0 | |
| Southbound | | | | | | | | |
| | 0.0 | | | | | | 0.0 | |
| LTR | 0.0 | 0.00 | 42.5 | 42.5 | 0.00 | 3.5 | 0.0 | 90.7 |
| | 0.0 | | | | | | 0.0 | |

Intersection Delay 38.8 sec/veh Intersection LOS D

## BACK OF QUEUE WORKSHEET

| | Eastbound | | | Westbound | | | Northbound | | | Southbound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| LaneGroup | L | TR | | L | T | | | LTR | | | LTR | |
| Init Queue | 0.0 | 0.0 | | 0.0 | 0.0 | | | 0.0 | | | 0.0 | |
| Flow Rate | 9 | 775 | | 2 | 758 | | | 2 | | | 504 | |
| So | 1900 | 1900 | | 1900 | 1900 | | | 1900 | | | 1900 | |
| No.Lanes | 1 | 1 | 0 | 1 | 1 | 0 | 0 | 1 | 0 | 0 | 1 | 0 |
| SL | 394 | 1827 | | 249 | 1759 | | | 1772 | | | 1681 | |
| LnCapacity | 227 | 1051 | | 143 | 1011 | | | 30 | | | 490 | |
| Flow Ratio | 0.0 | 0.4 | | 0.0 | 0.4 | | | 0.0 | | | 0.3 | |
| v/c Ratio | 0.04 | 0.74 | | 0.01 | 0.75 | | | 0.07 | | | 1.03 | |
| Grn Ratio | 0.57 | 0.57 | | 0.57 | 0.57 | | | 0.02 | | | 0.29 | |
| I Factor | | 1.000 | | | 1.000 | | | 1.000 | | | 1.000 | |
| AT or PVG | 3 | 3 | | 3 | 3 | | | 3 | | | 3 | |
| Pltn Ratio | 1.00 | 1.00 | | 1.00 | 1.00 | | | 1.00 | | | 1.00 | |
| PF2 | 1.00 | 1.00 | | 1.00 | 1.00 | | | 1.00 | | | 1.00 | |
| Q1 | 0.1 | 19.1 | | 0.0 | 18.9 | | | 0.1 | | | 16.8 | |
| kB | 0.3 | 0.8 | | 0.3 | 0.8 | | | 0.1 | | | 0.5 | |
| Q2 | 0.0 | 2.2 | | 0.0 | 2.3 | | | 0.0 | | | 6.7 | |
| Q Average | 0.1 | 21.3 | | 0.0 | 21.2 | | | 0.1 | | | 23.5 | |
| Q Spacing | 25.0 | 25.0 | | 25.0 | 25.0 | | | 25.0 | | | 25.0 | |
| Q Storage | 0 | 0 | | 0 | 0 | | | 0 | | | 0 | |
| Q S Ratio | | | | | | | | | | | | |
| 70th Percentile Output: | | | | | | | | | | | | |
| fB% | 1.2 | 1.2 | | 1.2 | 1.2 | | | 1.2 | | | 1.2 | |
| BOQ | 0.2 | 24.7 | | 0.0 | 24.5 | | | 0.1 | | | 27.2 | |
| QSRatio | | | | | | | | | | | | |
| 85th Percentile Output: | | | | | | | | | | | | |
| fB% | 1.6 | 1.4 | | 1.6 | 1.4 | | | 1.6 | | | 1.4 | |
| BOQ | 0.2 | 30.8 | | 0.1 | 30.7 | | | 0.1 | | | 33.8 | |
| QSRatio | | | | | | | | | | | | |
| 90th Percentile Output: | | | | | | | | | | | | |
| fB% | 1.8 | 1.5 | | 1.8 | 1.5 | | | 1.8 | | | 1.5 | |
| BOQ | 0.3 | 32.7 | | 0.1 | 32.6 | | | 0.1 | | | 35.9 | |
| QSRatio | | | | | | | | | | | | |
| 95th Percentile Output: | | | | | | | | | | | | |
| fB% | 2.1 | 1.7 | | 2.1 | 1.7 | | | 2.1 | | | 1.7 | |
| BOQ | 0.3 | 35.8 | | 0.1 | 35.7 | | | 0.2 | | | 39.1 | |
| QSRatio | | | | | | | | | | | | |
| 98th Percentile Output: | | | | | | | | | | | | |
| fB% | 2.7 | 1.9 | | 2.7 | 1.9 | | | 2.7 | | | 1.9 | |
| BOQ | 0.4 | 40.3 | | 0.1 | 40.2 | | | 0.2 | | | 43.9 | |
| QSRatio | | | | | | | | | | | | |

## ERROR MESSAGES

No errors to report.

HCS+: Signalized Intersections Release 5.5

Analyst: JM
Agency: KLOA, Inc.
Date: 10/18/2012
Period: P.M. Peak Hour
Project ID: 12-141
E/W St: IL 120

Inter.: IL 120/IL 134
Area Type: All other areas
Jurisd: IDOT
Year : Year 2016 Future Traffic

N/S St: IL 134

SIGNALIZED INTERSECTION SUMMARY

| | Eastbound | | | Westbound | | | Northbound | | | Southbound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | L | T | R | L | T | R | L | T | R | L | T | R |
| No. Lanes | 1 | 1 | 0 | 1 | 1 | 0 | 0 | 1 | 0 | 0 | 1 | 0 |
| LGConfig | L | TR | | L | T | | | LTR | | | LTR | |
| Volume | 29 | 797 | 0 | 2 | 773 | | 2 | 2 | 3 | 240 | 2 | 26 |
| Lane Width | 12.0 | 12.0 | | 12.0 | 12.0 | | | 12.0 | | | 12.0 | |
| RTOR Vol | | | 0 | | | | | | 0 | | | 0 |

Duration 0.25 Area Type: All other areas

Signal Operations

| Phase Combination | 1 | 2 | 3 | 4 | | | 5 | 6 | 7 | 8 |
|---|---|---|---|---|---|---|---|---|---|---|
| EB Left | A | | | | NB | Left | A | | | |
| Thru | A | | | | | Thru | A | | | |
| Right | A | | | | | Right | A | | | |
| Peds | | | | | | Peds | | | | |
| WB Left | A | | | | SB | Left | | A | | |
| Thru | A | | | | | Thru | | A | | |
| Right | | | | | | Right | | A | | |
| Peds | | | | | | Peds | | | | |
| NB Right | | | | | EB | Right | | | | |
| SB Right | | | | | WB | Right | | | | |
| Green | 100.0 | | | | | | 4.0 | 42.0 | | |
| Yellow | 4.0 | | | | | | 3.0 | 3.0 | | |
| All Red | 2.0 | | | | | | 1.0 | 1.0 | | |

Cycle Length: 160.0 secs

Intersection Performance Summary

| Appr/ Lane Grp | Lane Group Capacity | Adj Sat Flow Rate (s) | Ratios v/c | Ratios g/C | Lane Group Delay | Lane Group LOS | Approach Delay | Approach LOS |
|---|---|---|---|---|---|---|---|---|
| Eastbound | | | | | | | | |
| L | 225 | 360 | 0.14 | 0.63 | 12.6 | B | | |
| TR | 1153 | 1845 | 0.73 | 0.63 | 23.0 | C | 22.6 | C |
| Westbound | | | | | | | | |
| L | 223 | 357 | 0.01 | 0.63 | 11.3 | B | | |
| T | 1120 | 1792 | 0.73 | 0.63 | 23.0 | C | 23.0 | C |
| Northbound | | | | | | | | |
| LTR | 44 | 1765 | 0.16 | 0.03 | 78.0 | E | 78.0 | E |
| Southbound | | | | | | | | |
| LTR | 445 | 1697 | 0.63 | 0.26 | 55.1 | E | 55.1 | E |

Intersection Delay = 27.6 (sec/veh) Intersection LOS = C

HCS+: Signalized Intersections Release 5.5

Analyst: JM
Agency: KLOA, Inc.
Date: 5/14/2013
Period: P.M. Peak Hour
Project ID: 12-141
E/W St: IL 120

Inter.: IL 120/IL 134
Area Type: All other areas
Jurisd: IDOT
Year : Year 2016 Future Traffic

N/S St: IL 134

SIGNALIZED INTERSECTION SUMMARY

| | Eastbound | | | Westbound | | | Northbound | | | Southbound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | L | T | R | L | T | R | L | T | R | L | T | R |
| No. Lanes | 1 | 1 | 0 | 1 | 1 | 0 | 0 | 1 | 0 | 0 | 1 | 0 |
| LGConfig | L | TR | | L | T | | | LTR | | | LTR | |
| Volume | 29 | 797 | 0 | 2 | 774 | | 2 | 2 | 3 | 240 | 2 | 26 |
| Lane Width | 12.0 | 12.0 | | 12.0 | 12.0 | | | 12.0 | | | 12.0 | |
| RTOR Vol | | | 0 | | | | | | 0 | | | 0 |

Duration 0.25 Area Type: All other areas

Signal Operations

| Phase Combination | 1 | 2 | 3 | 4 | | | 5 | 6 | 7 | 8 |
|---|---|---|---|---|---|---|---|---|---|---|
| EB Left | A | | | | NB | Left | A | | | |
| Thru | A | | | | | Thru | A | | | |
| Right | A | | | | | Right | A | | | |
| Peds | | | | | | Peds | | | | |
| WB Left | A | | | | SB | Left | | A | | |
| Thru | A | | | | | Thru | | A | | |
| Right | | | | | | Right | | A | | |
| Peds | | | | | | Peds | | | | |
| NB Right | | | | | EB | Right | | | | |
| SB Right | | | | | WB | Right | | | | |
| Green | 100.0 | | | | | | 4.0 | 42.0 | | |
| Yellow | 4.0 | | | | | | 3.0 | 3.0 | | |
| All Red | 2.0 | | | | | | 1.0 | 1.0 | | |

Cycle Length: 160.0 secs

Intersection Performance Summary

| Appr/ Lane Grp | Lane Group Capacity | Adj Sat Flow Rate (s) | Ratios v/c | Ratios g/C | Lane Group Delay | Lane Group LOS | Approach Delay | Approach LOS |
|---|---|---|---|---|---|---|---|---|
| Eastbound | | | | | | | | |
| L | 224 | 359 | 0.14 | 0.63 | 12.6 | B | | |
| TR | 1153 | 1845 | 0.73 | 0.63 | 23.0 | C | 22.6 | C |
| Westbound | | | | | | | | |
| L | 223 | 357 | 0.01 | 0.63 | 11.3 | B | | |
| T | 1120 | 1792 | 0.73 | 0.63 | 23.1 | C | 23.0 | C |
| Northbound | | | | | | | | |
| LTR | 44 | 1765 | 0.16 | 0.03 | 78.0 | E | 78.0 | E |
| Southbound | | | | | | | | |
| LTR | 445 | 1697 | 0.63 | 0.26 | 55.1 | E | 55.1 | E |

Intersection Delay = 27.6 (sec/veh) Intersection LOS = C

Phone: Fax:
E-Mail:

## OPERATIONAL ANALYSIS

Analyst: JM
Agency/Co.: KLOA, Inc.
Date Performed: 5/14/2013
Analysis Time Period: P.M. Peak Hour
Intersection: IL 120/IL 134
Area Type: All other areas
Jurisdiction: IDOT
Analysis Year: Year 2016 Future Traffic
Project ID: 12-141
E/W St: IL 120 N/S St: IL 134

## VOLUME DATA

| | Eastbound | | | Westbound | | | Northbound | | | Southbound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | L | T | R | L | T | R | L | T | R | L | T | R |
| Volume | 29 | 797 | 0 | 2 | 774 | | 2 | 2 | 3 | 240 | 2 | 26 |
| % Heavy Veh | 7 | 3 | 0 | 0 | 6 | | 0 | 0 | 0 | 6 | 0 | 4 |
| PHF | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| PK 15 Vol | 8 | 210 | 0 | 1 | 204 | | 1 | 1 | 1 | 63 | 1 | 7 |
| Hi Ln Vol | | | | | | | | | | | | |
| % Grade | | 0 | | | 0 | | | 0 | | | 0 | |
| Ideal Sat | 1900 | 1900 | | 1900 | 1900 | | | 1900 | | | 1900 | |
| ParkExist | | | | | | | | | | | | |
| NumPark | | | | | | | | | | | | |
| No. Lanes | 1 | 1 | 0 | 1 | 1 | 0 | 0 | 1 | 0 | 0 | 1 | 0 |
| LGConfig | L | TR | | L | T | | | LTR | | | LTR | |
| Lane Width | 12.0 | 12.0 | | 12.0 | 12.0 | | | 12.0 | | | 12.0 | |
| RTOR Vol | | | 0 | | | | | | 0 | | | 0 |
| Adj Flow | 31 | 839 | | 2 | 815 | | | 7 | | | 282 | |
| %InSharedLn | | | | | | | | | | | | |
| Prop LTs | 1.000 | 0.000 | | 1.000 | 0.000 | | | 0.286 | | | 0.897 | |
| Prop RTs | | 0.000 | | | 0.000 | | 0.429 | | | 0.096 | | |
| Peds Bikes | | 0 | | | 0 | | 0 | | | 0 | | |
| Buses | 0 | 0 | | 0 | 0 | | | 0 | | | 0 | |
| %InProtPhase | | | | | | | | | | | | |

Duration 0.25 Area Type: All other areas

## OPERATING PARAMETERS

| | Eastbound | | | Westbound | | | Northbound | | | Southbound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | L | T | R | L | T | R | L | T | R | L | T | R |
| Init Unmet | 0.0 | 0.0 | | 0.0 | 0.0 | | | 0.0 | | | 0.0 | |
| Arriv. Type | 3 | 3 | | 3 | 3 | | | 3 | | | 3 | |
| Unit Ext. | 3.0 | 3.0 | | 3.0 | 3.0 | | | 3.0 | | | 3.0 | |
| I Factor | | 1.000 | | | 1.000 | | | 1.000 | | | 1.000 | |
| Lost Time | 2.0 | 2.0 | | 2.0 | 2.0 | | | 2.0 | | | 2.0 | |
| Ext of g | 2.0 | 2.0 | | 2.0 | 2.0 | | | 2.0 | | | 2.0 | |
| Ped Min g | | 3.2 | | | 3.2 | | | 3.2 | | | 3.2 | |

## PHASE DATA

| Phase Combination | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|---|---|---|---|---|---|---|---|---|
| EB Left | A | | | | NB Left | A | | |
| Thru | A | | | | Thru | A | | |
| Right | A | | | | Right | A | | |
| Peds | | | | | Peds | | | |
| WB Left | A | | | | SB Left | | A | |
| Thru | A | | | | Thru | | A | |
| Right | | | | | Right | | A | |
| Peds | | | | | Peds | | | |
| NB Right | | | | | EB Right | | | |
| SB Right | | | | | WB Right | | | |
| Green | 100.0 | | | | 4.0 | 42.0 | | |
| Yellow | 4.0 | | | | 3.0 | 3.0 | | |
| All Red | 2.0 | | | | 1.0 | 1.0 | | |

Cycle Length: 160.0 secs

## VOLUME ADJUSTMENT AND SATURATION FLOW WORKSHEET

Volume Adjustment

| | Eastbound | | | Westbound | | | Northbound | | | Southbound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | L | T | R | L | T | R | L | T | R | L | T | R |
| Volume, V | 29 | 797 | 0 | 2 | 774 | | 2 | 2 | 3 | 240 | 2 | 26 |
| PHF | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| Adj flow | 31 | 839 | 0 | 2 | 815 | | 2 | 2 | 3 | 253 | 2 | 27 |
| No. Lanes | 1 | 1 | 0 | 1 | 1 | 0 | 0 | 1 | 0 | 0 | 1 | 0 |
| Lane group | L | TR | | L | T | | | LTR | | | LTR | |
| Adj flow | 31 | 839 | | 2 | 815 | | | 7 | | | 282 | |
| Prop LTs | 1.000 | 0.000 | | 1.000 | 0.000 | | | 0.286 | | | 0.897 | |
| Prop RTs | | 0.000 | | | 0.000 | | | 0.429 | | | 0.096 | |

Saturation Flow Rate (see Exhibit 16-7 to determine the adjustment factors)

| | Eastbound | | | Westbound | | | Northbound | | | Southbound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| LG | L | TR | | L | T | | | LTR | | | LTR | |
| So | 1900 | 1900 | | 1900 | 1900 | | | 1900 | | | 1900 | |
| Lanes | 1 | 1 | 0 | 1 | 1 | 0 | 0 | 1 | 0 | 0 | 1 | 0 |
| fW | 1.000 | 1.000 | | 1.000 | 1.000 | | | 1.000 | | | 1.000 | |
| fHV | 0.935 | 0.971 | | 1.000 | 0.943 | | | 1.000 | | | 0.945 | |
| fG | 1.000 | 1.000 | | 1.000 | 1.000 | | | 1.000 | | | 1.000 | |
| fP | 1.000 | 1.000 | | 1.000 | 1.000 | | | 1.000 | | | 1.000 | |
| fBB | 1.000 | 1.000 | | 1.000 | 1.000 | | | 1.000 | | | 1.000 | |
| fA | 1.000 | 1.000 | | 1.000 | 1.000 | | | 1.000 | | | 1.000 | |
| fLU | 1.000 | 1.000 | | 1.000 | 1.000 | | | 1.000 | | | 1.000 | |
| fRT | | 1.000 | | | 1.000 | | | 0.942 | | | 0.987 | |
| fLT | 0.202 | 1.000 | | 0.188 | 1.000 | | | 0.986 | | | 0.957 | |
| Sec. | | | | | | | | | | | | |
| fLpb | 1.000 | 1.000 | | 1.000 | 1.000 | | | 1.000 | | | 1.000 | |
| fRpb | | 1.000 | | | 1.000 | | | 1.000 | | | 1.000 | |
| S | 359 | 1845 | | 357 | 1792 | | | 1765 | | | 1697 | |
| Sec. | | | | | | | | | | | | |

## CAPACITY AND LOS WORKSHEET

Capacity Analysis and Lane Group Capacity

| Appr/ Mvmt | Lane Group | Adj Flow Rate (v) | Adj Sat Flow Rate (s) | Flow Ratio (v/s) | Green Ratio (g/C) | --Lane Group-- Capacity (c) | v/c Ratio |
|---|---|---|---|---|---|---|---|
| Eastbound | | | | | | | |
| Prot | | | | | | | |
| Perm | | | | | | | |
| Left | L | 31 | 359 | 0.09 | 0.63 | 224 | 0.14 |
| Prot | | | | | | | |
| Perm | | | | | | | |
| Thru | TR | 839 | 1845 | 0.45 | 0.63 | 1153 | 0.73 |
| Right | | | | | | | |
| Westbound | | | | | | | |
| Prot | | | | | | | |
| Perm | | | | | | | |
| Left | L | 2 | 357 | 0.01 | 0.63 | 223 | 0.01 |
| Prot | | | | | | | |
| Perm | | | | | | | |
| Thru | T | 815 | 1792 | # 0.45 | 0.63 | 1120 | 0.73 |
| Right | | | | | | | |
| Northbound | | | | | | | |
| Prot | | | | | | | |
| Perm | | | | | | | |
| Left | | | | | | | |
| Prot | | | | | | | |
| Perm | | | | | | | |
| Thru | LTR | 7 | 1765 | # 0.00 | 0.03 | 44 | 0.16 |
| Right | | | | | | | |
| Southbound | | | | | | | |
| Prot | | | | | | | |
| Perm | | | | | | | |
| Left | | | | | | | |
| Prot | | | | | | | |
| Perm | | | | | | | |
| Thru | LTR | 282 | 1697 | # 0.17 | 0.26 | 445 | 0.63 |
| Right | | | | | | | |

Sum of flow ratios for critical lane groups, Yc = Sum (v/s) = 0.62
Total lost time per cycle, L = 14.00 sec
Critical flow rate to capacity ratio, Xc = (Yc)(C)/(C-L) = 0.68

Control Delay and LOS Determination

| Appr/ Lane Grp | Ratios v/c | Ratios g/C | Unf Del d1 | Prog Adj Fact | Lane Grp Cap | Incremental Factor k | Incremental Del d2 | Res Del d3 | Lane Group Delay | Lane Group LOS | Approach Delay | Approach LOS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Eastbound | | | | | | | | | | | | |
| L | 0.14 | 0.63 | 12.3 | 1.000 | 224 | 0.11 | 0.3 | 0.0 | 12.6 | B | | |
| TR | 0.73 | 0.63 | 20.6 | 1.000 | 1153 | 0.29 | 2.4 | 0.0 | 23.0 | C | 22.6 | C |
| Westbound | | | | | | | | | | | | |
| L | 0.01 | 0.63 | 11.3 | 1.000 | 223 | 0.11 | 0.0 | 0.0 | 11.3 | B | | |
| T | 0.73 | 0.63 | 20.6 | 1.000 | 1120 | 0.29 | 2.4 | 0.0 | 23.1 | C | 23.0 | C |
| Northbound | | | | | | | | | | | | |
| LTR | 0.16 | 0.03 | 76.4 | 1.000 | 44 | 0.11 | 1.7 | 0.0 | 78.0 | E | 78.0 | E |
| Southbound | | | | | | | | | | | | |
| LTR | 0.63 | 0.26 | 52.2 | 1.000 | 445 | 0.21 | 2.9 | 0.0 | 55.1 | E | 55.1 | E |

Intersection delay = 27.6 (sec/veh) Intersection LOS = C

## SUPPLEMENTAL PERMITTED LT WORKSHEET
for exclusive lefts

Input

| | EB | WB | NB | SB |
|---|---|---|---|---|
| Opposed by Single(S) or Multiple(M) lane approach | | | | |
| Cycle length, C 160.0 sec | | | | |
| Total actual green time for LT lane group, G (s) | 100.0 | 100.0 | | |
| Effective permitted green time for LT lane group, g(s) | 100.0 | 100.0 | | |
| Opposing effective green time, go (s) | 100.0 | 100.0 | | |
| Number of lanes in LT lane group, N | 1 | 1 | | |
| Number of lanes in opposing approach, No | 1 | 1 | | |
| Adjusted LT flow rate, VLT (veh/h) | 31 | 2 | | |
| Proportion of LT in LT lane group, PLT | 1.000 | 1.000 | | |
| Proportion of LT in opposing flow, PLTo | 0.00 | 0.00 | | |
| Adjusted opposing flow rate, Vo (veh/h) | 815 | 839 | | |
| Lost time for LT lane group, tL | 6.00 | 6.00 | | |
| Computation | | | | |
| LT volume per cycle, LTC=VLTC/3600 | 1.38 | 0.09 | | |
| Opposing lane util. factor, fLUo | 1.000 | 1.000 | 1.000 | 1.000 |
| Opposing flow, Volc=VoC/[3600(No)fLUo] (veh/ln/cyc) | 36.22 | 37.29 | | |
| gf=G[exp(- a * (LTC ** b))]-tl, gf<=g | 0.0 | 0.0 | | |
| Opposing platoon ratio, Rpo (refer Exhibit 16-11) | 1.00 | 1.00 | | |
| Opposing Queue Ratio, qro=Max[1-Rpo(go/C),0] | 0.38 | 0.38 | | |
| gq, (see Exhibit C16-4,5,6,7,8) | 43.64 | 46.38 | | |
| gu=g-gq if gq>=gf, or = g-gf if gq<gf | 56.36 | 53.62 | | |
| n=Max(gq-gf)/2,0) | 21.82 | 23.19 | | |
| PTHo=1-PLTo | 1.00 | 1.00 | | |
| PL*=PLT[1+(N-1)g/(gf+gu/EL1+4.24)] | 1.00 | 1.00 | | |
| EL1 (refer to Exhibit C16-3) | 2.79 | 2.85 | | |
| EL2=Max((1-Ptho**n)/Plto, 1.0) | | | | |
| fmin=2(1+PL)/g or fmin=2(1+Pl)/g | 0.04 | 0.04 | | |
| gdiff=max(gq-gf,0) | 0.00 | 0.00 | | |
| fm=[gf/g]+[gu/g]/[1+PL(EL1-1)], (min=fmin;max=1.00) | 0.20 | 0.19 | | |
| flt=fm=[gf/g]+[gu/g]/[1+PL(EL1-1)]+[gdiff/g]/[1+PL(EL2-1)],(fmin<=fm<=1.00) | | | | |
| or flt=[fm+0.91(N-1)]/N** | | | | |
| Left-turn adjustment, fLT | 0.202 | 0.188 | | |

For special case of single-lane approach opposed by multilane approach, see text.

* If Pl>=1 for shared left-turn lanes with N>1, then assume de-facto left-turn lane and redo calculations.

** For permitted left-turns with multiple exclusive left-turn lanes, flt=fm.

For special case of multilane approach opposed by single-lane approach or when gf>gq, see text.

## SUPPLEMENTAL PERMITTED LT WORKSHEET
for shared lefts

Input

| | EB | WB | NB | SB |
|---|---|---|---|---|
| Opposed by Single(S) or Multiple(M) lane approach | | | | |
| Cycle length, C 160.0 sec | | | | |
| Total actual green time for LT lane group, G (s) | | | | |
| Effective permitted green time for LT lane group, g(s) | | | | |
| Opposing effective green time, go (s) | | | | |
| Number of lanes in LT lane group, N | | | | |

Number of lanes in opposing approach, No
Adjusted LT flow rate, VLT (veh/h)
Proportion of LT in LT lane group, PLT 0.000 0.000 0.286 0.897
Proportion of LT in opposing flow, PLTo
Adjusted opposing flow rate, Vo (veh/h)
Lost time for LT lane group, tL
Computation
LT volume per cycle, LTC=VLTC/3600
Opposing lane util. factor, fLUo 1.000 1.000 1.000 1.000
Opposing flow, Volc=VoC/[3600(No)fLUo] (veh/ln/cyc)
gf=G[exp(- a * (LTC ** b))]-tl, gf<=g
Opposing platoon ratio, Rpo (refer Exhibit 16-11)
Opposing Queue Ratio, qro=Max[1-Rpo(go/C),0]
gq, (see Exhibit C16-4,5,6,7,8)
gu=g-gq if gq>=gf, or = g-gf if gq<gf
n=Max(gq-gf)/2,0)
PTHo=1-PLTo
PL*=PLT[1+(N-1)g/(gf+gu/EL1+4.24)]
EL1 (refer to Exhibit C16-3)
EL2=Max((1-Ptho**n)/Plto, 1.0)
fmin=2(1+PL)/g or fmin=2(1+Pl)/g
gdiff=max(gq-gf,0)
fm=[gf/g]+[gu/g]/[1+PL(EL1-1)], (min=fmin;max=1.00)
flt=fm=[gf/g]+[gu/g]/[1+PL(EL1-1)]+[gdiff/g]/[1+PL(EL2-1)],(fmin<=fm<=1.00)
or flt=[fm+0.91(N-1)]/N**
Left-turn adjustment, fLT

For special case of single-lane approach opposed by multilane approach, see text.
* If Pl>=1 for shared left-turn lanes with N>1, then assume de-facto left-turn lane and redo calculations.
** For permitted left-turns with multiple exclusive left-turn lanes, flt=fm.
For special case of multilane approach opposed by single-lane approach or when gf>gq, see text.

## SUPPLEMENTAL PEDESTRIAN-BICYCLE EFFECTS WORKSHEET

Permitted Left Turns

| | EB | WB | NB | SB |
|---|---|---|---|---|
| Effective pedestrian green time, gp (s) | | | | |
| Conflicting pedestrian volume, Vped (p/h) | | | | |
| Pedestrian flow rate, Vpedg (p/h) | | | | |
| OCCpedg | | | | |
| Opposing queue clearing green, gq (s) | | | | |
| Eff. ped. green consumed by opp. veh. queue, gq/gp | | | | |
| OCCpedu | | | | |
| Opposing flow rate, Vo (veh/h) | | | | |
| OCCr | | | | |
| Number of cross-street receiving lanes, Nrec | | | | |
| Number of turning lanes, Nturn | | | | |
| ApbT | | | | |
| Proportion of left turns, PLT | | | | |
| Proportion of left turns using protected phase, PLTA | | | | |
| Left-turn adjustment, fLpb | | | | |
| Permitted Right Turns | | | | |
| Effective pedestrian green time, gp (s) | | | | |
| Conflicting pedestrian volume, Vped (p/h) | | | | |
| Conflicting bicycle volume, Vbic (bicycles/h) | | | | |
| Vpedg | | | | |
| OCCpedg | | | | |
| Effective green, g (s) | | | | |
| Vbicg | | | | |

OCCbicg
OCCr
Number of cross-street receiving lanes, Nrec
Number of turning lanes, Nturn
ApbT
Proportion right-turns, PRT
Proportion right-turns using protected phase, PRTA
Right turn adjustment, fRpb

## SUPPLEMENTAL UNIFORM DELAY WORKSHEET

| | | | EBLT | WBLT | NBLT | SBLT |
|---|---|---|---|---|---|---|
| Cycle length, C | 160.0 | sec | | | | |
| Adj. LT vol from Vol Adjustment Worksheet, v | | | | | | |
| v/c ratio from Capacity Worksheet, X | | | | | | |
| Protected phase effective green interval, g (s) | | | | | | |
| Opposing queue effective green interval, gq | | | | | | |
| Unopposed green interval, gu | | | | | | |
| Red time r=(C-g-gq-gu) | | | | | | |
| Arrival rate, qa=v/(3600(max[X,1.0])) | | | | | | |
| Protected ph. departure rate, Sp=s/3600 | | | | | | |
| Permitted ph. departure rate, Ss=s(gq+gu)/(gu*3600) | | | | | | |
| XPerm | | | | | | |
| XProt | | | | | | |
| Case | | | | | | |
| Queue at beginning of green arrow, Qa | | | | | | |
| Queue at beginning of unsaturated green, Qu | | | | | | |
| Residual queue, Qr | | | | | | |
| Uniform Delay, d1 | | | | | | |

## DELAY/LOS WORKSHEET WITH INITIAL QUEUE

| Appr/ Lane Group | Initial Unmet Demand Q veh | Dur. Unmet Demand t hrs. | Uniform Delay Unadj. ds | Uniform Delay Adj. d1 sec | Initial Queue Param. u | Final Unmet Demand Q veh | Initial Queue Delay d3 sec | Lane Group Delay d sec |
|---|---|---|---|---|---|---|---|---|
| Eastbound | | | | | | | | |
| L | 0.0 | 0.00 | 30.0 | 12.3 | 0.00 | 0.0 | 0.0 | 12.6 |
| TR | 0.0 | 0.00 | 30.0 | 20.6 | 0.00 | 0.0 | 0.0 | 23.0 |
| | 0.0 | | | | | | 0.0 | |
| Westbound | | | | | | | | |
| L | 0.0 | 0.00 | 30.0 | 11.3 | 0.00 | 0.0 | 0.0 | 11.3 |
| T | 0.0 | 0.00 | 30.0 | 20.6 | 0.00 | 0.0 | 0.0 | 23.1 |
| | 0.0 | | | | | | 0.0 | |
| Northbound | | | | | | | | |
| | 0.0 | | | | | | 0.0 | |
| LTR | 0.0 | 0.00 | 78.0 | 76.4 | 0.00 | 0.0 | 0.0 | 78.0 |
| | 0.0 | | | | | | 0.0 | |
| Southbound | | | | | | | | |
| | 0.0 | | | | | | 0.0 | |
| LTR | 0.0 | 0.00 | 59.0 | 52.2 | 0.00 | 0.0 | 0.0 | 55.1 |
| | 0.0 | | | | | | 0.0 | |

Intersection Delay 27.6 sec/veh Intersection LOS C

## BACK OF QUEUE WORKSHEET

| | Eastbound | | | Westbound | | | Northbound | | | Southbound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| LaneGroup | L | TR | | L | T | | | LTR | | | LTR | |
| Init Queue | 0.0 | 0.0 | | 0.0 | 0.0 | | | 0.0 | | | 0.0 | |
| Flow Rate | 31 | 839 | | 2 | 815 | | | 7 | | | 282 | |
| So | 1900 | 1900 | | 1900 | 1900 | | | 1900 | | | 1900 | |
| No.Lanes | 1 | 1 | 0 | 1 | 1 | 0 | 0 | 1 | 0 | 0 | 1 | 0 |
| SL | 359 | 1845 | | 357 | 1792 | | | 1765 | | | 1697 | |
| LnCapacity | 224 | 1153 | | 223 | 1120 | | | 44 | | | 445 | |
| Flow Ratio | 0.1 | 0.5 | | 0.0 | 0.5 | | | 0.0 | | | 0.2 | |
| v/c Ratio | 0.14 | 0.73 | | 0.01 | 0.73 | | | 0.16 | | | 0.63 | |
| Grn Ratio | 0.63 | 0.63 | | 0.63 | 0.63 | | | 0.03 | | | 0.26 | |
| I Factor | | 1.000 | | | 1.000 | | | 1.000 | | | 1.000 | |
| AT or PVG | 3 | 3 | | 3 | 3 | | | 3 | | | 3 | |
| Pltn Ratio | 1.00 | 1.00 | | 1.00 | 1.00 | | | 1.00 | | | 1.00 | |
| PF2 | 1.00 | 1.00 | | 1.00 | 1.00 | | | 1.00 | | | 1.00 | |
| Q1 | 0.6 | 25.6 | | 0.0 | 24.9 | | | 0.3 | | | 11.1 | |
| kB | 0.4 | 1.1 | | 0.4 | 1.0 | | | 0.1 | | | 0.6 | |
| Q2 | 0.1 | 2.7 | | 0.0 | 2.6 | | | 0.0 | | | 1.0 | |
| Q Average | 0.6 | 28.3 | | 0.0 | 27.5 | | | 0.3 | | | 12.1 | |
| Q Spacing | 25.0 | 25.0 | | 25.0 | 25.0 | | | 25.0 | | | 25.0 | |
| Q Storage | 0 | 0 | | 0 | 0 | | | 0 | | | 0 | |
| Q S Ratio | | | | | | | | | | | | |
| 70th Percentile Output: | | | | | | | | | | | | |
| fB% | 1.2 | 1.1 | | 1.2 | 1.2 | | | 1.2 | | | 1.2 | |
| BOQ | 0.8 | 32.5 | | 0.0 | 31.7 | | | 0.4 | | | 14.2 | |
| QSRatio | | | | | | | | | | | | |
| 85th Percentile Output: | | | | | | | | | | | | |
| fB% | 1.6 | 1.4 | | 1.6 | 1.4 | | | 1.6 | | | 1.5 | |
| BOQ | 1.0 | 40.1 | | 0.1 | 39.1 | | | 0.5 | | | 18.1 | |
| QSRatio | | | | | | | | | | | | |
| 90th Percentile Output: | | | | | | | | | | | | |
| fB% | 1.8 | 1.5 | | 1.8 | 1.5 | | | 1.8 | | | 1.6 | |
| BOQ | 1.1 | 42.4 | | 0.1 | 41.3 | | | 0.6 | | | 19.5 | |
| QSRatio | | | | | | | | | | | | |
| 95th Percentile Output: | | | | | | | | | | | | |
| fB% | 2.1 | 1.6 | | 2.1 | 1.6 | | | 2.1 | | | 1.8 | |
| BOQ | 1.3 | 46.0 | | 0.1 | 44.9 | | | 0.7 | | | 21.8 | |
| QSRatio | | | | | | | | | | | | |
| 98th Percentile Output: | | | | | | | | | | | | |
| fB% | 2.7 | 1.8 | | 2.7 | 1.8 | | | 2.7 | | | 2.1 | |
| BOQ | 1.7 | 51.3 | | 0.1 | 50.1 | | | 0.9 | | | 25.3 | |
| QSRatio | | | | | | | | | | | | |

## ERROR MESSAGES

No errors to report.

HCS+: Signalized Intersections Release 5.5

Analyst: JM
Agency: KLOA, Inc.
Date: 5/13/2013
Period: A.M. Peak Hour
Project ID: 12-141
E/W St: IL 120

Inter.: IL 120 & Cedar Lake Road
Area Type: All other areas
Jurisd: IDOT
Year : Total Traffic

N/S St: Cedra Lake Road

SIGNALIZED INTERSECTION SUMMARY

| | Eastbound | | | Westbound | | | Northbound | | | Southbound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | L | T | R | L | T | R | L | T | R | L | T | R |
| No. Lanes | 1 | 1 | 0 | 1 | 1 | 0 | 1 | 2 | 0 | 1 | 2 | 0 |
| LGConfig | L | TR | | L | TR | | L | TR | | L | TR | |
| Volume | 101 | 595 | 48 | 81 | 657 | 31 | 30 | 90 | 42 | 13 | 122 | 132 |
| Lane Width | 12.0 | 12.0 | | 12.0 | 12.0 | | 12.0 | 12.0 | | 12.0 | 12.0 | |
| RTOR Vol | | | 0 | | | 0 | | | 0 | | | 0 |

Duration 0.25 Area Type: All other areas

Signal Operations

| Phase Combination | 1 | 2 | 3 | 4 | | | 5 | 6 | 7 | 8 |
|---|---|---|---|---|---|---|---|---|---|---|
| EB Left | A | A | | | NB | Left | A | A | | |
| Thru | | A | | | | Thru | | A | | |
| Right | | A | | | | Right | | A | | |
| Peds | | | | | | Peds | | | | |
| WB Left | A | A | | | SB | Left | A | A | | |
| Thru | | A | | | | Thru | | A | | |
| Right | | A | | | | Right | | A | | |
| Peds | | | | | | Peds | | | | |
| NB Right | | | | | EB | Right | | | | |
| SB Right | | | | | WB | Right | | | | |
| Green | 12.0 | 50.0 | | | | | 12.0 | 18.0 | | |
| Yellow | 3.0 | 4.5 | | | | | 3.0 | 4.5 | | |
| All Red | 0.0 | 1.5 | | | | | 0.0 | 1.5 | | |

Cycle Length: 110.0 secs

Intersection Performance Summary

| Appr/ Lane Grp | Lane Group Capacity | Adj Sat Flow Rate (s) | Ratios v/c | Ratios g/C | Lane Group Delay | Lane Group LOS | Approach Delay | Approach LOS |
|---|---|---|---|---|---|---|---|---|
| Eastbound | | | | | | | | |
| L | 290 | 1736 | 0.37 | 0.62 | 18.1 | B | | |
| TR | 794 | 1747 | 0.85 | 0.45 | 35.6 | D | 33.2 | C |
| Westbound | | | | | | | | |
| L | 280 | 1504 | 0.30 | 0.62 | 16.0 | B | | |
| TR | 779 | 1713 | 0.93 | 0.45 | 46.0 | D | 42.9 | D |
| Northbound | | | | | | | | |
| L | 351 | 1752 | 0.09 | 0.33 | 25.8 | C | | |
| TR | 529 | 3235 | 0.26 | 0.16 | 40.5 | D | 37.7 | D |
| Southbound | | | | | | | | |
| L | 372 | 1570 | 0.04 | 0.33 | 25.2 | C | | |
| TR | 517 | 3157 | 0.52 | 0.16 | 42.9 | D | 42.1 | D |

Intersection Delay = 38.6 (sec/veh) Intersection LOS = D

Phone: Fax:
E-Mail:

## OPERATIONAL ANALYSIS

Analyst: JM
Agency/Co.: KLOA, Inc.
Date Performed: 5/13/2013
Analysis Time Period: A.M. Peak Hour
Intersection: IL 120 & Cedar Lake Road
Area Type: All other areas
Jurisdiction: IDOT
Analysis Year: Total Traffic
Project ID: 12-141
E/W St: IL 120 N/S St: Cedra Lake Road

## VOLUME DATA

| | Eastbound | | | Westbound | | | Northbound | | | Southbound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | L | T | R | L | T | R | L | T | R | L | T | R |
| Volume | 101 | 595 | 48 | 81 | 657 | 31 | 30 | 90 | 42 | 13 | 122 | 132 |
| % Heavy Veh | 4 | 8 | 2 | 20 | 10 | 13 | 3 | 4 | 12 | 15 | 2 | 9 |
| PHF | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| PK 15 Vol | 27 | 157 | 13 | 21 | 173 | 8 | 8 | 24 | 11 | 4 | 32 | 35 |
| Hi Ln Vol | | | | | | | | | | | | |
| % Grade | | 0 | | | 0 | | | 0 | | | 0 | |
| Ideal Sat | 1900 | 1900 | | 1900 | 1900 | | 1900 | 1900 | | 1900 | 1900 | |
| ParkExist | | | | | | | | | | | | |
| NumPark | | | | | | | | | | | | |
| No. Lanes | 1 | 1 | 0 | 1 | 1 | 0 | 1 | 2 | 0 | 1 | 2 | 0 |
| LGConfig | L | TR | | L | TR | | L | TR | | L | TR | |
| Lane Width | 12.0 | 12.0 | | 12.0 | 12.0 | | 12.0 | 12.0 | | 12.0 | 12.0 | |
| RTOR Vol | | | 0 | | | 0 | | | 0 | | | 0 |
| Adj Flow | 106 | 677 | | 85 | 725 | | 32 | 139 | | 14 | 267 | |
| %InSharedLn | | | | | | | | | | | | |
| Prop LTs | 1.000 | 0.000 | | 1.000 | 0.000 | | 1.000 | 0.000 | | 1.000 | 0.000 | |
| Prop RTs | | 0.075 | | | 0.046 | | | 0.317 | | | 0.521 | |
| Peds Bikes | | 0 | | | 0 | | | 0 | | | 0 | |
| Buses | 0 | 0 | | 0 | 0 | | 0 | 0 | | 0 | 0 | |
| %InProtPhase | 0.0 | | | 0.0 | | | 0.0 | | | 0.0 | | |

Duration 0.25 Area Type: All other areas

## OPERATING PARAMETERS

| | Eastbound | | | Westbound | | | Northbound | | | Southbound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | L | T | R | L | T | R | L | T | R | L | T | R |
| Init Unmet | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | |
| Arriv. Type | 3 | 3 | | 3 | 3 | | 3 | 3 | | 3 | 3 | |
| Unit Ext. | 3.0 | 3.0 | | 3.0 | 3.0 | | 3.0 | 3.0 | | 3.0 | 3.0 | |
| I Factor | | 1.000 | | | 1.000 | | | 1.000 | | | 1.000 | |
| Lost Time | 2.0 | 2.0 | | 2.0 | 2.0 | | 2.0 | 2.0 | | 2.0 | 2.0 | |
| Ext of g | 2.0 | 2.0 | | 2.0 | 2.0 | | 2.0 | 2.0 | | 2.0 | 2.0 | |
| Ped Min g | | 3.2 | | | 3.2 | | | 3.2 | | | 3.2 | |

## PHASE DATA

| Phase Combination | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|---|---|---|---|---|---|---|---|---|
| EB Left | A | A | | | NB Left | A | A | |
| Thru | | A | | | Thru | | A | |
| Right | | A | | | Right | | A | |
| Peds | | | | | Peds | | | |
| WB Left | A | A | | | SB Left | A | A | |
| Thru | | A | | | Thru | | A | |
| Right | | A | | | Right | | A | |
| Peds | | | | | Peds | | | |
| NB Right | | | | | EB Right | | | |
| SB Right | | | | | WB Right | | | |
| Green | 12.0 | 50.0 | | | 12.0 | 18.0 | | |
| Yellow | 3.0 | 4.5 | | | 3.0 | 4.5 | | |
| All Red | 0.0 | 1.5 | | | 0.0 | 1.5 | | |

Cycle Length: 110.0 secs

## VOLUME ADJUSTMENT AND SATURATION FLOW WORKSHEET

Volume Adjustment

| | Eastbound | | | Westbound | | | Northbound | | | Southbound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | L | T | R | L | T | R | L | T | R | L | T | R |
| Volume, V | 101 | 595 | 48 | 81 | 657 | 31 | 30 | 90 | 42 | 13 | 122 | 132 |
| PHF | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| Adj flow | 106 | 626 | 51 | 85 | 692 | 33 | 32 | 95 | 44 | 14 | 128 | 139 |
| No. Lanes | 1 | 1 | 0 | 1 | 1 | 0 | 1 | 2 | 0 | 1 | 2 | 0 |
| Lane group | L | TR | | L | TR | | L | TR | | L | TR | |
| Adj flow | 106 | 677 | | 85 | 725 | | 32 | 139 | | 14 | 267 | |
| Prop LTs | 1.000 | 0.000 | | 1.000 | 0.000 | | 1.000 | 0.000 | | 1.000 | 0.000 | |
| Prop RTs | 0.075 | | | 0.046 | | | 0.317 | | | 0.521 | | |

Saturation Flow Rate (see Exhibit 16-7 to determine the adjustment factors)

| | Eastbound | | | Westbound | | | Northbound | | | Southbound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| LG | L | TR | | L | TR | | L | TR | | L | TR | |
| So | 1900 | 1900 | | 1900 | 1900 | | 1900 | 1900 | | 1900 | 1900 | |
| Lanes | 1 | 1 | 0 | 1 | 1 | 0 | 1 | 2 | 0 | 1 | 2 | 0 |
| fW | 1.000 | 1.000 | | 1.000 | 1.000 | | 1.000 | 1.000 | | 1.000 | 1.000 | |
| fHV | 0.962 | 0.930 | | 0.833 | 0.908 | | 0.971 | 0.939 | | 0.870 | 0.947 | |
| fG | 1.000 | 1.000 | | 1.000 | 1.000 | | 1.000 | 1.000 | | 1.000 | 1.000 | |
| fP | 1.000 | 1.000 | | 1.000 | 1.000 | | 1.000 | 1.000 | | 1.000 | 1.000 | |
| fBB | 1.000 | 1.000 | | 1.000 | 1.000 | | 1.000 | 1.000 | | 1.000 | 1.000 | |
| fA | 1.000 | 1.000 | | 1.000 | 1.000 | | 1.000 | 1.000 | | 1.000 | 1.000 | |
| fLU | 1.000 | 1.000 | | 1.000 | 1.000 | | 1.000 | 0.952 | | 1.000 | 0.952 | |
| fRT | | 0.989 | | | 0.993 | | | 0.953 | | | 0.922 | |
| fLT | 0.950 | 1.000 | | 0.950 | 1.000 | | 0.950 | 1.000 | | 0.950 | 1.000 | |
| Sec. | 0.108 | | | 0.144 | | | 0.397 | | | 0.556 | | |
| fLpb | 1.000 | 1.000 | | 1.000 | 1.000 | | 1.000 | 1.000 | | 1.000 | 1.000 | |
| fRpb | | 1.000 | | | 1.000 | | | 1.000 | | | 1.000 | |
| S | 1736 | 1747 | | 1504 | 1713 | | 1752 | 3235 | | 1570 | 3157 | |
| Sec. | 198 | | | 228 | | | 733 | | | 919 | | |

## CAPACITY AND LOS WORKSHEET

Capacity Analysis and Lane Group Capacity

| Appr/ Mvmt | Lane Group | Adj Flow Rate (v) | Adj Sat Flow Rate (s) | Flow Ratio (v/s) | Green Ratio (g/C) | --Lane Group-- Capacity (c) | v/c Ratio |
|---|---|---|---|---|---|---|---|
| Eastbound | | | | | | | |
| Prot | | 106 | 1736 | # 0.06 | 0.109 | 189 | 0.56 |
| Perm | | 0 | 198 | 0.00 | 0.509 | 101 | 0.00 |
| Left | L | 106 | | | 0.62 | 290 | 0.37 |
| Prot | | | | | | | |
| Perm | | | | | | | |
| Thru | TR | 677 | 1747 | 0.39 | 0.45 | 794 | 0.85 |
| Right | | | | | | | |
| Westbound | | | | | | | |
| Prot | | 85 | 1504 | 0.06 | 0.109 | 164 | 0.52 |
| Perm | | 0 | 228 | 0.00 | 0.509 | 116 | 0.00 |
| Left | L | 85 | | | 0.62 | 280 | 0.30 |
| Prot | | | | | | | |
| Perm | | | | | | | |
| Thru | TR | 725 | 1713 | # 0.42 | 0.45 | 779 | 0.93 |
| Right | | | | | | | |
| Northbound | | | | | | | |
| Prot | | 32 | 1752 | # 0.02 | 0.109 | 191 | 0.17 |
| Perm | | 0 | 733 | 0.00 | 0.218 | 160 | 0.00 |
| Left | L | 32 | | | 0.33 | 351 | 0.09 |
| Prot | | | | | | | |
| Perm | | | | | | | |
| Thru | TR | 139 | 3235 | 0.04 | 0.16 | 529 | 0.26 |
| Right | | | | | | | |
| Southbound | | | | | | | |
| Prot | | 14 | 1570 | 0.01 | 0.109 | 171 | 0.08 |
| Perm | | 0 | 919 | 0.00 | 0.218 | 201 | 0.00 |
| Left | L | 14 | | | 0.33 | 372 | 0.04 |
| Prot | | | | | | | |
| Perm | | | | | | | |
| Thru | TR | 267 | 3157 | # 0.08 | 0.16 | 517 | 0.52 |
| Right | | | | | | | |

Sum of flow ratios for critical lane groups, Yc = Sum (v/s) = 0.59
Total lost time per cycle, L = 24.00 sec
Critical flow rate to capacity ratio, Xc = (Yc)(C)/(C-L) = 0.75

Control Delay and LOS Determination

| Appr/ Lane Grp | Ratios v/c | Ratios g/C | Unf Del d1 | Prog Adj Fact | Lane Grp Cap | Incremental Factor k | Incremental Del d2 | Res Del d3 | Lane Group Delay | Lane Group LOS | Approach Delay | Approach LOS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Eastbound | | | | | | | | | | | | |
| L | 0.37 | 0.62 | 17.3 | 1.000 | 290 | 0.11 | 0.8 | 0.0 | 18.1 | B | | |
| TR | 0.85 | 0.45 | 26.7 | 1.000 | 794 | 0.39 | 8.9 | 0.0 | 35.6 | D | 33.2 | C |
| Westbound | | | | | | | | | | | | |
| L | 0.30 | 0.62 | 15.3 | 1.000 | 280 | 0.11 | 0.6 | 0.0 | 16.0 | B | | |
| TR | 0.93 | 0.45 | 28.4 | 1.000 | 779 | 0.45 | 17.7 | 0.0 | 46.0 | D | 42.9 | D |
| Northbound | | | | | | | | | | | | |
| L | 0.09 | 0.33 | 25.6 | 1.000 | 351 | 0.11 | 0.1 | 0.0 | 25.8 | C | | |
| TR | 0.26 | 0.16 | 40.2 | 1.000 | 529 | 0.11 | 0.3 | 0.0 | 40.5 | D | 37.7 | D |
| Southbound | | | | | | | | | | | | |
| L | 0.04 | 0.33 | 25.2 | 1.000 | 372 | 0.11 | 0.0 | 0.0 | 25.2 | C | | |
| TR | 0.52 | 0.16 | 42.0 | 1.000 | 517 | 0.12 | 0.9 | 0.0 | 42.9 | D | 42.1 | D |

Intersection delay = 38.6 (sec/veh) Intersection LOS = D

## SUPPLEMENTAL PERMITTED LT WORKSHEET
for exclusive lefts

Input

| | EB | WB | NB | SB |
|---|---|---|---|---|
| Opposed by Single(S) or Multiple(M) lane approach | | | | |
| Cycle length, C 110.0 sec | | | | |
| Total actual green time for LT lane group, G (s) | 65.0 | 65.0 | 33.0 | 33.0 |
| Effective permitted green time for LT lane group, g(s) | 56.0 | 56.0 | 24.0 | 24.0 |
| Opposing effective green time, go (s) | 50.0 | 50.0 | 18.0 | 18.0 |
| Number of lanes in LT lane group, N | 1 | 1 | 1 | 1 |
| Number of lanes in opposing approach, No | 1 | 1 | 2 | 2 |
| Adjusted LT flow rate, VLT (veh/h) | 106 | 85 | 32 | 14 |
| Proportion of LT in LT lane group, PLT | 1.000 | 1.000 | 1.000 | 1.000 |
| Proportion of LT in opposing flow, PLTo | 0.00 | 0.00 | 0.00 | 0.00 |
| Adjusted opposing flow rate, Vo (veh/h) | 725 | 677 | 267 | 139 |
| Lost time for LT lane group, tL | 6.00 | 6.00 | 6.00 | 6.00 |
| Computation | | | | |
| LT volume per cycle, LTC=VLTC/3600 | 3.24 | 2.60 | 0.98 | 0.43 |
| Opposing lane util. factor, fLUo | 1.000 | 1.000 | 0.952 | 0.952 |
| Opposing flow, Volc=VoC/[3600(No)fLUo] (veh/ln/cyc) | 22.15 | 20.69 | 4.28 | 2.23 |
| gf=G[exp(- a * (LTC ** b))]-tl, gf<=g | 0.0 | 0.0 | 0.0 | 0.0 |
| Opposing platoon ratio, Rpo (refer Exhibit 16-11) | 1.00 | 1.00 | 1.00 | 1.00 |
| Opposing Queue Ratio, qro=Max[1-Rpo(go/C),0] | 0.55 | 0.55 | 0.84 | 0.84 |
| gq, (see Exhibit C16-4,5,6,7,8) | 40.47 | 36.17 | 7.77 | 3.89 |
| gu=g-gq if gq>=gf, or = g-gf if gq<gf | 15.53 | 19.83 | 16.23 | 20.11 |
| n=Max(gq-gf)/2,0) | 20.23 | 18.09 | 3.89 | 1.94 |
| PTHo=1-PLTo | 1.00 | 1.00 | 1.00 | 1.00 |
| PL*=PLT[1+(N-1)g/(gf+gu/EL1+4.24)] | 1.00 | 1.00 | 1.00 | 1.00 |
| EL1 (refer to Exhibit C16-3) | 2.57 | 2.45 | 1.70 | 1.51 |
| EL2=Max((1-Ptho**n)/Plto, 1.0) | | | | |
| fmin=2(1+PL)/g or fmin=2(1+Pl)/g | 0.07 | 0.07 | 0.17 | 0.17 |
| gdiff=max(gq-gf,0) | 0.00 | 0.00 | 0.00 | 0.00 |
| fm=[gf/g]+[gu/g]/[1+PL(EL1-1)], (min=fmin;max=1.00) | 0.11 | 0.14 | 0.40 | 0.56 |
| flt=fm=[gf/g]+[gu/g]/[1+PL(EL1-1)]+[gdiff/g]/[1+PL(EL2-1)],(fmin<=fm<=1.00) or flt=[fm+0.91(N-1)]/N** | | | | |
| Left-turn adjustment, fLT | 0.108 | 0.144 | 0.397 | 0.556 |

For special case of single-lane approach opposed by multilane approach, see text.

* If Pl>=1 for shared left-turn lanes with N>1, then assume de-facto left-turn lane and redo calculations.

** For permitted left-turns with multiple exclusive left-turn lanes, flt=fm.

For special case of multilane approach opposed by single-lane approach or when gf>gq, see text.

## SUPPLEMENTAL PERMITTED LT WORKSHEET
for shared lefts

Input

| | EB | WB | NB | SB |
|---|---|---|---|---|
| Opposed by Single(S) or Multiple(M) lane approach | | | | |
| Cycle length, C 110.0 sec | | | | |
| Total actual green time for LT lane group, G (s) | | | | |
| Effective permitted green time for LT lane group, g(s) | | | | |
| Opposing effective green time, go (s) | | | | |
| Number of lanes in LT lane group, N | | | | |

Number of lanes in opposing approach, No
Adjusted LT flow rate, VLT (veh/h)
Proportion of LT in LT lane group, PLT 0.000 0.000 0.000 0.000
Proportion of LT in opposing flow, PLTo
Adjusted opposing flow rate, Vo (veh/h)
Lost time for LT lane group, tL
Computation
LT volume per cycle, LTC=VLTC/3600
Opposing lane util. factor, fLUo 1.000 1.000 0.952 0.952
Opposing flow, Volc=VoC/[3600(No)fLUo] (veh/ln/cyc)
gf=G[exp(- a * (LTC ** b))]-tl, gf<=g
Opposing platoon ratio, Rpo (refer Exhibit 16-11)
Opposing Queue Ratio, qro=Max[1-Rpo(go/C),0]
gq, (see Exhibit C16-4,5,6,7,8)
gu=g-gq if gq>=gf, or = g-gf if gq<gf
n=Max(gq-gf)/2,0)
PTHo=1-PLTo
PL*=PLT[1+(N-1)g/(gf+gu/EL1+4.24)]
EL1 (refer to Exhibit C16-3)
EL2=Max((1-Ptho**n)/Plto, 1.0)
fmin=2(1+PL)/g or fmin=2(1+Pl)/g
gdiff=max(gq-gf,0)
fm=[gf/g]+[gu/g]/[1+PL(EL1-1)], (min=fmin;max=1.00)
flt=fm=[gf/g]+[gu/g]/[1+PL(EL1-1)]+[gdiff/g]/[1+PL(EL2-1)],(fmin<=fm<=1.00)
or flt=[fm+0.91(N-1)]/N**
Left-turn adjustment, fLT

For special case of single-lane approach opposed by multilane approach, see text.
* If Pl>=1 for shared left-turn lanes with N>1, then assume de-facto left-turn lane and redo calculations.
** For permitted left-turns with multiple exclusive left-turn lanes, flt=fm.
For special case of multilane approach opposed by single-lane approach or when gf>gq, see text.

## SUPPLEMENTAL PEDESTRIAN-BICYCLE EFFECTS WORKSHEET

Permitted Left Turns

| | EB | WB | NB | SB |
|---|---|---|---|---|
| Effective pedestrian green time, gp (s) | | | | |
| Conflicting pedestrian volume, Vped (p/h) | | | | |
| Pedestrian flow rate, Vpedg (p/h) | | | | |
| OCCpedg | | | | |
| Opposing queue clearing green, gq (s) | | | | |
| Eff. ped. green consumed by opp. veh. queue, gq/gp | | | | |
| OCCpedu | | | | |
| Opposing flow rate, Vo (veh/h) | | | | |
| OCCr | | | | |
| Number of cross-street receiving lanes, Nrec | | | | |
| Number of turning lanes, Nturn | | | | |
| ApbT | | | | |
| Proportion of left turns, PLT | | | | |
| Proportion of left turns using protected phase, PLTA | | | | |
| Left-turn adjustment, fLpb | | | | |
| Permitted Right Turns | | | | |
| Effective pedestrian green time, gp (s) | | | | |
| Conflicting pedestrian volume, Vped (p/h) | | | | |
| Conflicting bicycle volume, Vbic (bicycles/h) | | | | |
| Vpedg | | | | |
| OCCpedg | | | | |
| Effective green, g (s) | | | | |
| Vbicg | | | | |

OCCbicg
OCCr
Number of cross-street receiving lanes, Nrec
Number of turning lanes, Nturn
ApbT
Proportion right-turns, PRT
Proportion right-turns using protected phase, PRTA
Right turn adjustment, fRpb

## SUPPLEMENTAL UNIFORM DELAY WORKSHEET

| | | EBLT | WBLT | NBLT | SBLT |
|---|---|---|---|---|---|
| Cycle length, C | 110.0 sec | | | | |
| Adj. LT vol from Vol Adjustment Worksheet, v | | 106 | 85 | 32 | 14 |
| v/c ratio from Capacity Worksheet, X | | 0.37 | 0.30 | 0.09 | 0.04 |
| Protected phase effective green interval, g (s) | | 12.0 | 12.0 | 12.0 | 12.0 |
| Opposing queue effective green interval, gq | | 40.47 | 36.17 | 7.77 | 3.89 |
| Unopposed green interval, gu | | 15.53 | 19.83 | 16.23 | 20.11 |
| Red time r=(C-g-gq-gu) | | 42.0 | 42.0 | 74.0 | 74.0 |
| Arrival rate, qa=v/(3600(max[X,1.0])) | | 0.03 | 0.02 | 0.01 | 0.00 |
| Protected ph. departure rate, Sp=s/3600 | | 0.482 | 0.418 | 0.487 | 0.436 |
| Permitted ph. departure rate, Ss=s(gq+gu)/(gu*3600) | | 0.20 | 0.18 | 0.30 | 0.30 |
| XPerm | | 0.54 | 0.37 | 0.04 | 0.02 |
| XProt | | 0.27 | 0.25 | 0.13 | 0.06 |
| Case | | 1 | 1 | 1 | 1 |
| Queue at beginning of green arrow, Qa | | 1.24 | 0.99 | 0.66 | 0.29 |
| Queue at beginning of unsaturated green, Qu | | 1.19 | 0.85 | 0.07 | 0.02 |
| Residual queue, Qr | | 0.00 | 0.00 | 0.00 | 0.00 |
| Uniform Delay, d1 | | 17.3 | 15.3 | 25.6 | 25.2 |

## DELAY/LOS WORKSHEET WITH INITIAL QUEUE

| Appr/ Lane Group | Initial Unmet Demand Q veh | Dur. Unmet Demand t hrs. | Uniform Delay Unadj. ds | Uniform Delay Adj. d1 sec | Initial Queue Param. u | Final Unmet Demand Q veh | Initial Queue Delay d3 sec | Lane Group Delay d sec |
|---|---|---|---|---|---|---|---|---|
| Eastbound | | | | | | | | |
| L | 0.0 | 0.00 | | 17.3 | 0.00 | 0.0 | 0.0 | 18.1 |
| TR | 0.0 | 0.00 | 30.0 | 26.7 | 0.00 | 0.0 | 0.0 | 35.6 |
| | 0.0 | | | | | | 0.0 | |
| Westbound | | | | | | | | |
| L | 0.0 | 0.00 | | 15.3 | 0.00 | 0.0 | 0.0 | 16.0 |
| TR | 0.0 | 0.00 | 30.0 | 28.4 | 0.00 | 0.0 | 0.0 | 46.0 |
| | 0.0 | | | | | | 0.0 | |
| Northbound | | | | | | | | |
| L | 0.0 | 0.00 | | 25.6 | 0.00 | 0.0 | 0.0 | 25.8 |
| TR | 0.0 | 0.00 | 46.0 | 40.2 | 0.00 | 0.0 | 0.0 | 40.5 |
| | 0.0 | | | | | | 0.0 | |
| Southbound | | | | | | | | |
| L | 0.0 | 0.00 | | 25.2 | 0.00 | 0.0 | 0.0 | 25.2 |
| TR | 0.0 | 0.00 | 46.0 | 42.0 | 0.00 | 0.0 | 0.0 | 42.9 |
| | 0.0 | | | | | | 0.0 | |

Intersection Delay 38.6 sec/veh Intersection LOS D

## BACK OF QUEUE WORKSHEET

| | Eastbound | | | Westbound | | | Northbound | | | Southbound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| LaneGroup | L | TR | | L | TR | | L | TR | | L | TR | |
| Init Queue | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | |
| Flow Rate | 106 | 677 | | 85 | 725 | | 32 | 73 | | 14 | 140 | |
| So | 1900 | 1900 | | 1900 | 1900 | | 1900 | 1900 | | 1900 | 1900 | |
| No.Lanes | 1 | 1 | 0 | 1 | 1 | 0 | 1 | 2 | 0 | 1 | 2 | 0 |
| SL | 469 | 1747 | | 453 | 1713 | | 1073 | 1699 | | 1136 | 1658 | |
| LnCapacity | 290 | 794 | | 280 | 779 | | 351 | 277 | | 372 | 271 | |
| Flow Ratio | 0.2 | 0.4 | | 0.2 | 0.4 | | 0.0 | 0.0 | | 0.0 | 0.1 | |
| v/c Ratio | 0.37 | 0.85 | | 0.30 | 0.93 | | 0.09 | 0.26 | | 0.04 | 0.52 | |
| Grn Ratio | 0.62 | 0.45 | | 0.62 | 0.45 | | 0.33 | 0.16 | | 0.33 | 0.16 | |
| I Factor | | 1.000 | | | 1.000 | | | 1.000 | | | 1.000 | |
| AT or PVG | 3 | 3 | | 3 | 3 | | 3 | 3 | | 3 | 3 | |
| Pltn Ratio | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | |
| PF2 | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | |
| Q1 | 1.3 | 18.4 | | 1.0 | 20.9 | | 0.7 | 1.9 | | 0.3 | 3.9 | |
| kB | 0.4 | 0.7 | | 0.4 | 0.7 | | 0.4 | 0.4 | | 0.4 | 0.4 | |
| Q2 | 0.2 | 3.2 | | 0.2 | 5.1 | | 0.0 | 0.1 | | 0.0 | 0.4 | |
| Q Average | 1.5 | 21.6 | | 1.2 | 26.1 | | 0.7 | 2.1 | | 0.3 | 4.3 | |
| Q Spacing | 25.0 | 25.0 | | 25.0 | 25.0 | | 25.0 | 25.0 | | 25.0 | 25.0 | |
| Q Storage | 0 | 0 | | 0 | 0 | | 0 | 0 | | 0 | 0 | |
| Q S Ratio | | | | | | | | | | | | |
| 70th Percentile Output: | | | | | | | | | | | | |
| fB% | 1.2 | 1.2 | | 1.2 | 1.2 | | 1.2 | 1.2 | | 1.2 | 1.2 | |
| BOQ | 1.8 | 25.1 | | 1.4 | 30.0 | | 0.8 | 2.5 | | 0.4 | 5.1 | |
| QSRatio | | | | | | | | | | | | |
| 85th Percentile Output: | | | | | | | | | | | | |
| fB% | 1.6 | 1.4 | | 1.6 | 1.4 | | 1.6 | 1.6 | | 1.6 | 1.6 | |
| BOQ | 2.4 | 31.3 | | 1.9 | 37.2 | | 1.1 | 3.3 | | 0.5 | 6.7 | |
| QSRatio | | | | | | | | | | | | |
| 90th Percentile Output: | | | | | | | | | | | | |
| fB% | 1.8 | 1.5 | | 1.8 | 1.5 | | 1.8 | 1.8 | | 1.8 | 1.7 | |
| BOQ | 2.6 | 33.2 | | 2.1 | 39.3 | | 1.3 | 3.7 | | 0.5 | 7.4 | |
| QSRatio | | | | | | | | | | | | |
| 95th Percentile Output: | | | | | | | | | | | | |
| fB% | 2.1 | 1.7 | | 2.1 | 1.6 | | 2.1 | 2.0 | | 2.1 | 2.0 | |
| BOQ | 3.1 | 36.4 | | 2.4 | 42.8 | | 1.5 | 4.2 | | 0.6 | 8.4 | |
| QSRatio | | | | | | | | | | | | |
| 98th Percentile Output: | | | | | | | | | | | | |
| fB% | 2.6 | 1.9 | | 2.6 | 1.8 | | 2.6 | 2.6 | | 2.7 | 2.4 | |
| BOQ | 3.9 | 40.9 | | 3.1 | 47.8 | | 1.9 | 5.3 | | 0.8 | 10.4 | |
| QSRatio | | | | | | | | | | | | |

## ERROR MESSAGES

No errors to report.

HCS+: Signalized Intersections Release 5.5

Analyst: JM
Agency: KLOA, Inc.
Date: 5/13/2013
Period: P.M. Peak Hour
Project ID: 12-141
E/W St: IL 120

Inter.: IL 120 & Cedar Lake Road
Area Type: All other areas
Jurisd: IDOT
Year : Total Traffic

N/S St: Cedra Lake Road

SIGNALIZED INTERSECTION SUMMARY

| | Eastbound | | | Westbound | | | Northbound | | | Southbound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | L | T | R | L | T | R | L | T | R | L | T | R |
| No. Lanes | 1 | 1 | 0 | 1 | 1 | 0 | 1 | 2 | 0 | 1 | 2 | 0 |
| LGConfig | L | TR | | L | TR | | L | TR | | L | TR | |
| Volume | 160 | 654 | 28 | 64 | 606 | 15 | 47 | 242 | 97 | 22 | 84 | 115 |
| Lane Width | 12.0 | 12.0 | | 12.0 | 12.0 | | 12.0 | 12.0 | | 12.0 | 12.0 | |
| RTOR Vol | | | 0 | | | 0 | | | 0 | | | 0 |

Duration 0.25 Area Type: All other areas

Signal Operations

| Phase Combination | 1 | 2 | 3 | 4 | | | 5 | 6 | 7 | 8 |
|---|---|---|---|---|---|---|---|---|---|---|
| EB Left | A | A | | | NB | Left | A | A | | |
| Thru | | A | | | | Thru | | A | | |
| Right | | A | | | | Right | | A | | |
| Peds | | | | | | Peds | | | | |
| WB Left | A | A | | | SB | Left | A | A | | |
| Thru | | A | | | | Thru | | A | | |
| Right | | A | | | | Right | | A | | |
| Peds | | | | | | Peds | | | | |
| NB Right | | | | | EB | Right | | | | |
| SB Right | | | | | WB | Right | | | | |
| Green | 12.0 | 54.0 | | | | | 12.0 | 24.0 | | |
| Yellow | 3.0 | 4.5 | | | | | 3.0 | 4.5 | | |
| All Red | 0.0 | 1.5 | | | | | 0.0 | 1.5 | | |

Cycle Length: 120.0 secs

Intersection Performance Summary

| Appr/ Lane Grp | Lane Group Capacity | Adj Sat Flow Rate (s) | Ratios v/c | Ratios g/C | Lane Group Delay | Lane Group LOS | Approach Delay | Approach LOS |
|---|---|---|---|---|---|---|---|---|
| Eastbound | | | | | | | | |
| L | 309 | 1703 | 0.54 | 0.60 | 20.3 | C | | |
| TR | 801 | 1781 | 0.90 | 0.45 | 43.0 | D | 38.7 | D |
| Westbound | | | | | | | | |
| L | 244 | 1556 | 0.27 | 0.60 | 19.5 | B | | |
| TR | 775 | 1722 | 0.84 | 0.45 | 37.7 | D | 36.0 | D |
| Northbound | | | | | | | | |
| L | 406 | 1770 | 0.12 | 0.35 | 26.4 | C | | |
| TR | 677 | 3385 | 0.53 | 0.20 | 43.7 | D | 41.6 | D |
| Southbound | | | | | | | | |
| L | 342 | 1805 | 0.07 | 0.35 | 26.3 | C | | |
| TR | 650 | 3252 | 0.32 | 0.20 | 41.3 | D | 39.8 | D |

Intersection Delay = 38.5 (sec/veh) Intersection LOS = D

Phone: Fax:
E-Mail:

## OPERATIONAL ANALYSIS

Analyst: JM
Agency/Co.: KLOA, Inc.
Date Performed: 5/13/2013
Analysis Time Period: P.M. Peak Hour
Intersection: IL 120 & Cedar Lake Road
Area Type: All other areas
Jurisdiction: IDOT
Analysis Year: Total Traffic
Project ID: 12-141
E/W St: IL 120 N/S St: Cedra Lake Road

## VOLUME DATA

| | Eastbound | | | Westbound | | | Northbound | | | Southbound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | L | T | R | L | T | R | L | T | R | L | T | R |
| Volume | 160 | 654 | 28 | 64 | 606 | 15 | 47 | 242 | 97 | 22 | 84 | 115 |
| % Heavy Veh | 6 | 6 | 7 | 16 | 10 | 8 | 2 | 2 | 3 | 0 | 1 | 2 |
| PHF | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| PK 15 Vol | 42 | 172 | 7 | 17 | 159 | 4 | 12 | 64 | 26 | 6 | 22 | 30 |
| Hi Ln Vol | | | | | | | | | | | | |
| % Grade | | 0 | | | 0 | | | 0 | | | 0 | |
| Ideal Sat | 1900 | 1900 | | 1900 | 1900 | | 1900 | 1900 | | 1900 | 1900 | |
| ParkExist | | | | | | | | | | | | |
| NumPark | | | | | | | | | | | | |
| No. Lanes | 1 | 1 | 0 | 1 | 1 | 0 | 1 | 2 | 0 | 1 | 2 | 0 |
| LGConfig | L | TR | | L | TR | | L | TR | | L | TR | |
| Lane Width | 12.0 | 12.0 | | 12.0 | 12.0 | | 12.0 | 12.0 | | 12.0 | 12.0 | |
| RTOR Vol | | | 0 | | | 0 | | | 0 | | | 0 |
| Adj Flow | 168 | 717 | | 67 | 654 | | 49 | 357 | | 23 | 209 | |
| %InSharedLn | | | | | | | | | | | | |
| Prop LTs | 1.000 | 0.000 | | 1.000 | 0.000 | | 1.000 | 0.000 | | 1.000 | 0.000 | |
| Prop RTs | | 0.040 | | | 0.024 | | | 0.286 | | | 0.579 | |
| Peds Bikes | | 0 | | | 0 | | | 0 | | | 0 | |
| Buses | 0 | 0 | | 0 | 0 | | 0 | 0 | | 0 | 0 | |
| %InProtPhase | 0.0 | | | 0.0 | | | 0.0 | | | 0.0 | | |
| Duration | 0.25 | | Area Type: All other areas | | | | | | | | | |

## OPERATING PARAMETERS

| | Eastbound | | | Westbound | | | Northbound | | | Southbound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | L | T | R | L | T | R | L | T | R | L | T | R |
| Init Unmet | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | |
| Arriv. Type | 3 | 3 | | 3 | 3 | | 3 | 3 | | 3 | 3 | |
| Unit Ext. | 3.0 | 3.0 | | 3.0 | 3.0 | | 3.0 | 3.0 | | 3.0 | 3.0 | |
| I Factor | | 1.000 | | | 1.000 | | | 1.000 | | | 1.000 | |
| Lost Time | 2.0 | 2.0 | | 2.0 | 2.0 | | 2.0 | 2.0 | | 2.0 | 2.0 | |
| Ext of g | 2.0 | 2.0 | | 2.0 | 2.0 | | 2.0 | 2.0 | | 2.0 | 2.0 | |
| Ped Min g | | 3.2 | | | 3.2 | | | 3.2 | | | 3.2 | |

## PHASE DATA

| Phase Combination | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|---|---|---|---|---|---|---|---|---|
| EB Left | A | A | | | NB Left | A | A | |
| Thru | | A | | | Thru | | A | |
| Right | | A | | | Right | | A | |
| Peds | | | | | Peds | | | |
| WB Left | A | A | | | SB Left | A | A | |
| Thru | | A | | | Thru | | A | |
| Right | | A | | | Right | | A | |
| Peds | | | | | Peds | | | |
| NB Right | | | | | EB Right | | | |
| SB Right | | | | | WB Right | | | |
| Green | 12.0 | 54.0 | | | 12.0 | 24.0 | | |
| Yellow | 3.0 | 4.5 | | | 3.0 | 4.5 | | |
| All Red | 0.0 | 1.5 | | | 0.0 | 1.5 | | |

Cycle Length: 120.0 secs

## VOLUME ADJUSTMENT AND SATURATION FLOW WORKSHEET

Volume Adjustment

| | Eastbound | | | Westbound | | | Northbound | | | Southbound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | L | T | R | L | T | R | L | T | R | L | T | R |
| Volume, V | 160 | 654 | 28 | 64 | 606 | 15 | 47 | 242 | 97 | 22 | 84 | 115 |
| PHF | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| Adj flow | 168 | 688 | 29 | 67 | 638 | 16 | 49 | 255 | 102 | 23 | 88 | 121 |
| No. Lanes | 1 | 1 | 0 | 1 | 1 | 0 | 1 | 2 | 0 | 1 | 2 | 0 |
| Lane group | L | TR | | L | TR | | L | TR | | L | TR | |
| Adj flow | 168 | 717 | | 67 | 654 | | 49 | 357 | | 23 | 209 | |
| Prop LTs | 1.000 | 0.000 | | 1.000 | 0.000 | | 1.000 | 0.000 | | 1.000 | 0.000 | |
| Prop RTs | 0.040 | | | 0.024 | | | 0.286 | | | 0.579 | | |

Saturation Flow Rate (see Exhibit 16-7 to determine the adjustment factors)

| | Eastbound | | | Westbound | | | Northbound | | | Southbound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| LG | L | TR | | L | TR | | L | TR | | L | TR | |
| So | 1900 | 1900 | | 1900 | 1900 | | 1900 | 1900 | | 1900 | 1900 | |
| Lanes | 1 | 1 | 0 | 1 | 1 | 0 | 1 | 2 | 0 | 1 | 2 | 0 |
| fW | 1.000 | 1.000 | | 1.000 | 1.000 | | 1.000 | 1.000 | | 1.000 | 1.000 | |
| fHV | 0.943 | 0.943 | | 0.862 | 0.909 | | 0.980 | 0.978 | | 1.000 | 0.984 | |
| fG | 1.000 | 1.000 | | 1.000 | 1.000 | | 1.000 | 1.000 | | 1.000 | 1.000 | |
| fP | 1.000 | 1.000 | | 1.000 | 1.000 | | 1.000 | 1.000 | | 1.000 | 1.000 | |
| fBB | 1.000 | 1.000 | | 1.000 | 1.000 | | 1.000 | 1.000 | | 1.000 | 1.000 | |
| fA | 1.000 | 1.000 | | 1.000 | 1.000 | | 1.000 | 1.000 | | 1.000 | 1.000 | |
| fLU | 1.000 | 1.000 | | 1.000 | 1.000 | | 1.000 | 0.952 | | 1.000 | 0.952 | |
| fRT | | 0.994 | | | 0.996 | | | 0.957 | | | 0.913 | |
| fLT | 0.950 | 1.000 | | 0.950 | 1.000 | | 0.950 | 1.000 | | 0.950 | 1.000 | |
| Sec. | 0.155 | | | 0.107 | | | 0.492 | | | 0.338 | | |
| fLpb | 1.000 | 1.000 | | 1.000 | 1.000 | | 1.000 | 1.000 | | 1.000 | 1.000 | |
| fRpb | | 1.000 | | | 1.000 | | | 1.000 | | | 1.000 | |
| S | 1703 | 1781 | | 1556 | 1722 | | 1770 | 3385 | | 1805 | 3252 | |
| Sec. | 278 | | | 175 | | | 916 | | | 643 | | |

## CAPACITY AND LOS WORKSHEET

Capacity Analysis and Lane Group Capacity

| Appr/ Mvmt | Lane Group | Adj Flow Rate (v) | Adj Sat Flow Rate (s) | Flow Ratio (v/s) | Green Ratio (g/C) | --Lane Group-- Capacity (c) | v/c Ratio |
|---|---|---|---|---|---|---|---|
| Eastbound | | | | | | | |
| Prot | | 168 | 1703 | # 0.10 | 0.100 | 170 | 0.99 |
| Perm | | 0 | 278 | 0.00 | 0.500 | 139 | 0.00 |
| Left | L | 168 | | | 0.60 | 309 | 0.54 |
| Prot | | | | | | | |
| Perm | | | | | | | |
| Thru | TR | 717 | 1781 | # 0.40 | 0.45 | 801 | 0.90 |
| Right | | | | | | | |
| Westbound | | | | | | | |
| Prot | | 67 | 1556 | 0.04 | 0.100 | 156 | 0.43 |
| Perm | | 0 | 175 | 0.00 | 0.500 | 88 | 0.00 |
| Left | L | 67 | | | 0.60 | 244 | 0.27 |
| Prot | | | | | | | |
| Perm | | | | | | | |
| Thru | TR | 654 | 1722 | 0.38 | 0.45 | 775 | 0.84 |
| Right | | | | | | | |
| Northbound | | | | | | | |
| Prot | | 49 | 1770 | # 0.03 | 0.100 | 177 | 0.28 |
| Perm | | 0 | 916 | 0.00 | 0.250 | 229 | 0.00 |
| Left | L | 49 | | | 0.35 | 406 | 0.12 |
| Prot | | | | | | | |
| Perm | | | | | | | |
| Thru | TR | 357 | 3385 | # 0.11 | 0.20 | 677 | 0.53 |
| Right | | | | | | | |
| Southbound | | | | | | | |
| Prot | | 23 | 1805 | 0.01 | 0.100 | 181 | 0.13 |
| Perm | | 0 | 643 | 0.00 | 0.250 | 161 | 0.00 |
| Left | L | 23 | | | 0.35 | 342 | 0.07 |
| Prot | | | | | | | |
| Perm | | | | | | | |
| Thru | TR | 209 | 3252 | 0.06 | 0.20 | 650 | 0.32 |
| Right | | | | | | | |

Sum of flow ratios for critical lane groups, Yc = Sum (v/s) = 0.63
Total lost time per cycle, L = 24.00 sec
Critical flow rate to capacity ratio, Xc = (Yc)(C)/(C-L) = 0.79

Control Delay and LOS Determination

| Appr/ Lane Grp | Ratios v/c | Ratios g/C | Unf Del d1 | Prog Adj Fact | Lane Grp Cap | Incremental Factor k | Incremental Del d2 | Res Del d3 | Lane Group Delay | Lane Group LOS | Approach Delay | Approach LOS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Eastbound | | | | | | | | | | | | |
| L | 0.54 | 0.60 | 18.3 | 1.000 | 309 | 0.14 | 2.0 | 0.0 | 20.3 | C | | |
| TR | 0.90 | 0.45 | 30.4 | 1.000 | 801 | 0.42 | 12.7 | 0.0 | 43.0 | D | 38.7 | D |
| Westbound | | | | | | | | | | | | |
| L | 0.27 | 0.60 | 18.9 | 1.000 | 244 | 0.11 | 0.6 | 0.0 | 19.5 | B | | |
| TR | 0.84 | 0.45 | 29.3 | 1.000 | 775 | 0.38 | 8.5 | 0.0 | 37.7 | D | 36.0 | D |
| Northbound | | | | | | | | | | | | |
| L | 0.12 | 0.35 | 26.2 | 1.000 | 406 | 0.11 | 0.1 | 0.0 | 26.4 | C | | |
| TR | 0.53 | 0.20 | 42.9 | 1.000 | 677 | 0.13 | 0.8 | 0.0 | 43.7 | D | 41.6 | D |
| Southbound | | | | | | | | | | | | |
| L | 0.07 | 0.35 | 26.2 | 1.000 | 342 | 0.11 | 0.1 | 0.0 | 26.3 | C | | |
| TR | 0.32 | 0.20 | 41.0 | 1.000 | 650 | 0.11 | 0.3 | 0.0 | 41.3 | D | 39.8 | D |

Intersection delay = 38.5 (sec/veh) Intersection LOS = D

## SUPPLEMENTAL PERMITTED LT WORKSHEET
for exclusive lefts

Input

| | EB | WB | NB | SB |
|---|---|---|---|---|
| Opposed by Single(S) or Multiple(M) lane approach | | | | |
| Cycle length, C 120.0 sec | | | | |
| Total actual green time for LT lane group, G (s) | 69.0 | 69.0 | 39.0 | 39.0 |
| Effective permitted green time for LT lane group, g(s) | 60.0 | 60.0 | 30.0 | 30.0 |
| Opposing effective green time, go (s) | 54.0 | 54.0 | 24.0 | 24.0 |
| Number of lanes in LT lane group, N | 1 | 1 | 1 | 1 |
| Number of lanes in opposing approach, No | 1 | 1 | 2 | 2 |
| Adjusted LT flow rate, VLT (veh/h) | 168 | 67 | 49 | 23 |
| Proportion of LT in LT lane group, PLT | 1.000 | 1.000 | 1.000 | 1.000 |
| Proportion of LT in opposing flow, PLTo | 0.00 | 0.00 | 0.00 | 0.00 |
| Adjusted opposing flow rate, Vo (veh/h) | 654 | 717 | 209 | 357 |
| Lost time for LT lane group, tL | 6.00 | 6.00 | 6.00 | 6.00 |
| Computation | | | | |
| LT volume per cycle, LTC=VLTC/3600 | 5.60 | 2.23 | 1.63 | 0.77 |
| Opposing lane util. factor, fLUo | 1.000 | 1.000 | 0.952 | 0.952 |
| Opposing flow, Volc=VoC/[3600(No)fLUo] (veh/ln/cyc) | 21.80 | 23.90 | 3.66 | 6.25 |
| gf=G[exp(- a * (LTC ** b))]-tl, gf<=g | 0.0 | 0.0 | 0.0 | 0.0 |
| Opposing platoon ratio, Rpo (refer Exhibit 16-11) | 1.00 | 1.00 | 1.00 | 1.00 |
| Opposing Queue Ratio, qro=Max[1-Rpo(go/C),0] | 0.55 | 0.55 | 0.80 | 0.80 |
| gq, (see Exhibit C16-4,5,6,7,8) | 37.66 | 43.70 | 6.23 | 11.16 |
| gu=g-gq if gq>=gf, or = g-gf if gq<gf | 22.34 | 16.30 | 23.77 | 18.84 |
| n=Max(gq-gf)/2,0) | 18.83 | 21.85 | 3.12 | 5.58 |
| PTHo=1-PLTo | 1.00 | 1.00 | 1.00 | 1.00 |
| PL*=PLT[1+(N-1)g/(gf+gu/EL1+4.24)] | 1.00 | 1.00 | 1.00 | 1.00 |
| EL1 (refer to Exhibit C16-3) | 2.40 | 2.55 | 1.61 | 1.86 |
| EL2=Max((1-Ptho**n)/Plto, 1.0) | | | | |
| fmin=2(1+PL)/g or fmin=2(1+Pl)/g | 0.07 | 0.07 | 0.13 | 0.13 |
| gdiff=max(gq-gf,0) | 0.00 | 0.00 | 0.00 | 0.00 |
| fm=[gf/g]+[gu/g]/[1+PL(EL1-1)], (min=fmin;max=1.00) | 0.15 | 0.11 | 0.49 | 0.34 |
| flt=fm=[gf/g]+[gu/g]/[1+PL(EL1-1)]+[gdiff/g]/[1+PL(EL2-1)],(fmin<=fm<=1.00) | | | | |
| or flt=[fm+0.91(N-1)]/N** | | | | |
| Left-turn adjustment, fLT | 0.155 | 0.107 | 0.492 | 0.338 |

For special case of single-lane approach opposed by multilane approach, see text.

* If Pl>=1 for shared left-turn lanes with N>1, then assume de-facto left-turn lane and redo calculations.

** For permitted left-turns with multiple exclusive left-turn lanes, flt=fm.

For special case of multilane approach opposed by single-lane approach or when gf>gq, see text.

## SUPPLEMENTAL PERMITTED LT WORKSHEET
for shared lefts

Input

| | EB | WB | NB | SB |
|---|---|---|---|---|
| Opposed by Single(S) or Multiple(M) lane approach | | | | |
| Cycle length, C 120.0 sec | | | | |
| Total actual green time for LT lane group, G (s) | | | | |
| Effective permitted green time for LT lane group, g(s) | | | | |
| Opposing effective green time, go (s) | | | | |
| Number of lanes in LT lane group, N | | | | |

Number of lanes in opposing approach, No
Adjusted LT flow rate, VLT (veh/h)
Proportion of LT in LT lane group, PLT 0.000 0.000 0.000 0.000
Proportion of LT in opposing flow, PLTo
Adjusted opposing flow rate, Vo (veh/h)
Lost time for LT lane group, tL
Computation
LT volume per cycle, LTC=VLTC/3600
Opposing lane util. factor, fLUo 1.000 1.000 0.952 0.952
Opposing flow, Volc=VoC/[3600(No)fLUo] (veh/ln/cyc)
gf=G[exp(- a * (LTC ** b))]-tl, gf<=g
Opposing platoon ratio, Rpo (refer Exhibit 16-11)
Opposing Queue Ratio, qro=Max[1-Rpo(go/C),0]
gq, (see Exhibit C16-4,5,6,7,8)
gu=g-gq if gq>=gf, or = g-gf if gq<gf
n=Max(gq-gf)/2,0)
PTHo=1-PLTo
PL*=PLT[1+(N-1)g/(gf+gu/EL1+4.24)]
EL1 (refer to Exhibit C16-3)
EL2=Max((1-Ptho**n)/Plto, 1.0)
fmin=2(1+PL)/g or fmin=2(1+Pl)/g
gdiff=max(gq-gf,0)
fm=[gf/g]+[gu/g]/[1+PL(EL1-1)], (min=fmin;max=1.00)
flt=fm=[gf/g]+[gu/g]/[1+PL(EL1-1)]+[gdiff/g]/[1+PL(EL2-1)],(fmin<=fm<=1.00)
or flt=[fm+0.91(N-1)]/N**
Left-turn adjustment, fLT

For special case of single-lane approach opposed by multilane approach, see text.
* If Pl>=1 for shared left-turn lanes with N>1, then assume de-facto left-turn lane and redo calculations.
** For permitted left-turns with multiple exclusive left-turn lanes, flt=fm.
For special case of multilane approach opposed by single-lane approach or when gf>gq, see text.

## SUPPLEMENTAL PEDESTRIAN-BICYCLE EFFECTS WORKSHEET

Permitted Left Turns

| | EB | WB | NB | SB |
|---|---|---|---|---|
| Effective pedestrian green time, gp (s) | | | | |
| Conflicting pedestrian volume, Vped (p/h) | | | | |
| Pedestrian flow rate, Vpedg (p/h) | | | | |
| OCCpedg | | | | |
| Opposing queue clearing green, gq (s) | | | | |
| Eff. ped. green consumed by opp. veh. queue, gq/gp | | | | |
| OCCpedu | | | | |
| Opposing flow rate, Vo (veh/h) | | | | |
| OCCr | | | | |
| Number of cross-street receiving lanes, Nrec | | | | |
| Number of turning lanes, Nturn | | | | |
| ApbT | | | | |
| Proportion of left turns, PLT | | | | |
| Proportion of left turns using protected phase, PLTA | | | | |
| Left-turn adjustment, fLpb | | | | |
| Permitted Right Turns | | | | |
| Effective pedestrian green time, gp (s) | | | | |
| Conflicting pedestrian volume, Vped (p/h) | | | | |
| Conflicting bicycle volume, Vbic (bicycles/h) | | | | |
| Vpedg | | | | |
| OCCpedg | | | | |
| Effective green, g (s) | | | | |
| Vbicg | | | | |

OCCbicg
OCCr
Number of cross-street receiving lanes, Nrec
Number of turning lanes, Nturn
ApbT
Proportion right-turns, PRT
Proportion right-turns using protected phase, PRTA
Right turn adjustment, fRpb

## SUPPLEMENTAL UNIFORM DELAY WORKSHEET

| | | EBLT | WBLT | NBLT | SBLT |
|---|---|---|---|---|---|
| Cycle length, C | 120.0 sec | | | | |
| Adj. LT vol from Vol Adjustment Worksheet, v | | 168 | 67 | 49 | 23 |
| v/c ratio from Capacity Worksheet, X | | 0.54 | 0.27 | 0.12 | 0.07 |
| Protected phase effective green interval, g (s) | | 12.0 | 12.0 | 12.0 | 12.0 |
| Opposing queue effective green interval, gq | | 37.66 | 43.70 | 6.23 | 11.16 |
| Unopposed green interval, gu | | 22.34 | 16.30 | 23.77 | 18.84 |
| Red time r=(C-g-gq-gu) | | 48.0 | 48.0 | 78.0 | 78.0 |
| Arrival rate, qa=v/(3600(max[X,1.0])) | | 0.05 | 0.02 | 0.01 | 0.01 |
| Protected ph. departure rate, Sp=s/3600 | | 0.473 | 0.432 | 0.492 | 0.501 |
| Permitted ph. departure rate, Ss=s(gq+gu)/(gu*3600) | | 0.21 | 0.18 | 0.32 | 0.28 |
| XPerm | | 0.60 | 0.38 | 0.05 | 0.04 |
| XProt | | 0.49 | 0.22 | 0.21 | 0.10 |
| Case | | 1 | 1 | 1 | 1 |
| Queue at beginning of green arrow, Qa | | 2.24 | 0.89 | 1.06 | 0.50 |
| Queue at beginning of unsaturated green, Qu | | 1.76 | 0.81 | 0.08 | 0.07 |
| Residual queue, Qr | | 0.00 | 0.00 | 0.00 | 0.00 |
| Uniform Delay, d1 | | 18.3 | 18.9 | 26.2 | 26.2 |

## DELAY/LOS WORKSHEET WITH INITIAL QUEUE

| Appr/ Lane Group | Initial Unmet Demand Q veh | Dur. Unmet Demand t hrs. | Uniform Delay Unadj. ds | Uniform Delay Adj. d1 sec | Initial Queue Param. u | Final Unmet Demand Q veh | Initial Queue Delay d3 sec | Lane Group Delay d sec |
|---|---|---|---|---|---|---|---|---|
| Eastbound | | | | | | | | |
| L | 0.0 | 0.00 | | 18.3 | 0.00 | 0.0 | 0.0 | 20.3 |
| TR | 0.0 | 0.00 | 33.0 | 30.4 | 0.00 | 0.0 | 0.0 | 43.0 |
| | 0.0 | | | | | | 0.0 | |
| Westbound | | | | | | | | |
| L | 0.0 | 0.00 | | 18.9 | 0.00 | 0.0 | 0.0 | 19.5 |
| TR | 0.0 | 0.00 | 33.0 | 29.3 | 0.00 | 0.0 | 0.0 | 37.7 |
| | 0.0 | | | | | | 0.0 | |
| Northbound | | | | | | | | |
| L | 0.0 | 0.00 | | 26.2 | 0.00 | 0.0 | 0.0 | 26.4 |
| TR | 0.0 | 0.00 | 48.0 | 42.9 | 0.00 | 0.0 | 0.0 | 43.7 |
| | 0.0 | | | | | | 0.0 | |
| Southbound | | | | | | | | |
| L | 0.0 | 0.00 | | 26.2 | 0.00 | 0.0 | 0.0 | 26.3 |
| TR | 0.0 | 0.00 | 48.0 | 41.0 | 0.00 | 0.0 | 0.0 | 41.3 |
| | 0.0 | | | | | | 0.0 | |

Intersection Delay 38.5 sec/veh Intersection LOS D

## BACK OF QUEUE WORKSHEET

| | Eastbound | | | Westbound | | | Northbound | | | Southbound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| LaneGroup | L | TR | | L | TR | | L | TR | | L | TR | |
| Init Queue | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | |
| Flow Rate | 168 | 717 | | 67 | 654 | | 49 | 187 | | 23 | 109 | |
| So | 1900 | 1900 | | 1900 | 1900 | | 1900 | 1900 | | 1900 | 1900 | |
| No.Lanes | 1 | 1 | 0 | 1 | 1 | 0 | 1 | 2 | 0 | 1 | 2 | 0 |
| SL | 516 | 1781 | | 405 | 1722 | | 1160 | 1777 | | 975 | 1707 | |
| LnCapacity | 309 | 801 | | 244 | 775 | | 406 | 355 | | 342 | 341 | |
| Flow Ratio | 0.3 | 0.4 | | 0.2 | 0.4 | | 0.0 | 0.1 | | 0.0 | 0.1 | |
| v/c Ratio | 0.54 | 0.90 | | 0.27 | 0.84 | | 0.12 | 0.53 | | 0.07 | 0.32 | |
| Grn Ratio | 0.60 | 0.45 | | 0.60 | 0.45 | | 0.35 | 0.20 | | 0.35 | 0.20 | |
| I Factor | | 1.000 | | | 1.000 | | | 1.000 | | | 1.000 | |
| AT or PVG | 3 | 3 | | 3 | 3 | | 3 | 3 | | 3 | 3 | |
| Pltn Ratio | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | |
| PF2 | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | |
| Q1 | 2.4 | 22.0 | | 0.9 | 19.3 | | 1.1 | 5.6 | | 0.5 | 3.1 | |
| kB | 0.4 | 0.7 | | 0.3 | 0.7 | | 0.5 | 0.4 | | 0.4 | 0.4 | |
| Q2 | 0.5 | 4.3 | | 0.1 | 3.1 | | 0.1 | 0.5 | | 0.0 | 0.2 | |
| Q Average | 2.8 | 26.3 | | 1.0 | 22.5 | | 1.1 | 6.1 | | 0.5 | 3.3 | |
| Q Spacing | 25.0 | 25.0 | | 25.0 | 25.0 | | 25.0 | 25.0 | | 25.0 | 25.0 | |
| Q Storage | 0 | 0 | | 0 | 0 | | 0 | 0 | | 0 | 0 | |
| Q S Ratio | | | | | | | | | | | | |
| 70th Percentile Output: | | | | | | | | | | | | |
| fB% | 1.2 | 1.2 | | 1.2 | 1.2 | | 1.2 | 1.2 | | 1.2 | 1.2 | |
| BOQ | 3.4 | 30.3 | | 1.3 | 26.0 | | 1.4 | 7.2 | | 0.6 | 3.9 | |
| QSRatio | | | | | | | | | | | | |
| 85th Percentile Output: | | | | | | | | | | | | |
| fB% | 1.6 | 1.4 | | 1.6 | 1.4 | | 1.6 | 1.5 | | 1.6 | 1.6 | |
| BOQ | 4.4 | 37.5 | | 1.7 | 32.4 | | 1.8 | 9.4 | | 0.8 | 5.2 | |
| QSRatio | | | | | | | | | | | | |
| 90th Percentile Output: | | | | | | | | | | | | |
| fB% | 1.7 | 1.5 | | 1.8 | 1.5 | | 1.8 | 1.7 | | 1.8 | 1.7 | |
| BOQ | 4.9 | 39.7 | | 1.9 | 34.4 | | 2.0 | 10.3 | | 1.0 | 5.7 | |
| QSRatio | | | | | | | | | | | | |
| 95th Percentile Output: | | | | | | | | | | | | |
| fB% | 2.0 | 1.6 | | 2.1 | 1.7 | | 2.1 | 1.9 | | 2.1 | 2.0 | |
| BOQ | 5.7 | 43.2 | | 2.2 | 37.6 | | 2.3 | 11.7 | | 1.1 | 6.6 | |
| QSRatio | | | | | | | | | | | | |
| 98th Percentile Output: | | | | | | | | | | | | |
| fB% | 2.5 | 1.8 | | 2.6 | 1.9 | | 2.6 | 2.3 | | 2.7 | 2.5 | |
| BOQ | 7.1 | 48.3 | | 2.7 | 42.2 | | 3.0 | 14.1 | | 1.4 | 8.2 | |
| QSRatio | | | | | | | | | | | | |

## ERROR MESSAGES

No errors to report.

# TWO-WAY STOP CONTROL SUMMARY

| General Information | | Site Information | |
|---|---|---|---|
| Analyst | *JM* | Intersection | *IL 120 & Porter Drive* |
| Agency/Co. | *KLOA, Inc.* | Jurisdiction | *IDOT* |
| Date Performed | *5/17/2013* | Analysis Year | *Year 2016 Future Traffic* |
| Analysis Time Period | *A.M. Peak Hour* | | |
| Project Description *12-141* | | | |
| East/West Street: *IL 120* | | North/South Street: *Porter Drive* | |
| Intersection Orientation: *East-West* | | Study Period (hrs): *0.25* | |

## Vehicle Volumes and Adjustments

| Major Street | Eastbound | | | Westbound | | |
|---|---|---|---|---|---|---|
| Movement | 1 | 2 | 3 | 4 | 5 | 6 |
| | L | T | R | L | T | R |
| Volume (veh/h) | 53 | 751 | | | 742 | 21 |
| Peak-Hour Factor, PHF | 0.95 | 0.95 | 1.00 | 1.00 | 0.95 | 0.95 |
| Hourly Flow Rate, HFR (veh/h) | 55 | 790 | 0 | 0 | 781 | 22 |
| Percent Heavy Vehicles | 35 | -- | -- | 0 | -- | -- |
| Median Type | Two Way Left Turn Lane | | | | | |
| RT Channelized | | | 0 | | | 0 |
| Lanes | 1 | 1 | 0 | 0 | 1 | 1 |
| Configuration | L | T | | | T | R |
| Upstream Signal | | 0 | | | 0 | |

| Minor Street | Northbound | | | Southbound | | |
|---|---|---|---|---|---|---|
| Movement | 7 | 8 | 9 | 10 | 11 | 12 |
| | L | T | R | L | T | R |
| Volume (veh/h) | | | | 5 | | 71 |
| Peak-Hour Factor, PHF | 1.00 | 1.00 | 1.00 | 0.95 | 1.00 | 0.95 |
| Hourly Flow Rate, HFR (veh/h) | 0 | 0 | 0 | 5 | 0 | 74 |
| Percent Heavy Vehicles | 0 | 0 | 0 | 0 | 0 | 50 |
| Percent Grade (%) | | 0 | | | 0 | |
| Flared Approach | | N | | | N | |
| Storage | | 0 | | | 0 | |
| RT Channelized | | | 0 | | | 0 |
| Lanes | 0 | 0 | 0 | 1 | 0 | 1 |
| Configuration | | | | L | | R |

## Delay, Queue Length, and Level of Service

| Approach | Eastbound | Westbound | Northbound | | | Southbound | | |
|---|---|---|---|---|---|---|---|---|
| Movement | 1 | 4 | 7 | 8 | 9 | 10 | 11 | 12 |
| Lane Configuration | L | | | | | L | | R |
| v (veh/h) | 55 | | | | | 5 | | 74 |
| C (m) (veh/h) | 693 | | | | | 229 | | 328 |
| v/c | 0.08 | | | | | 0.02 | | 0.23 |
| 95% queue length | 0.26 | | | | | 0.07 | | 0.85 |
| Control Delay (s/veh) | 10.6 | | | | | 21.1 | | 19.1 |
| LOS | B | | | | | C | | C |
| Approach Delay (s/veh) | -- | -- | | | | 19.3 | | |
| Approach LOS | -- | -- | | | | C | | |

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# TWO-WAY STOP CONTROL SUMMARY

| General Information | | Site Information | |
|---|---|---|---|
| Analyst | *JM* | Intersection | *IL 120 & Porter Drive* |
| Agency/Co. | *KLOA, Inc.* | Jurisdiction | *IDOT* |
| Date Performed | *5/15/2013* | Analysis Year | *Year 2016 Future Traffic* |
| Analysis Time Period | *P.M. Peak Hour* | | |
| Project Description *12-141* | | | |
| East/West Street: *IL 120* | | North/South Street: *Porter Drive* | |
| Intersection Orientation: *East-West* | | Study Period (hrs): *0.25* | |

## Vehicle Volumes and Adjustments

| Major Street | Eastbound | | | Westbound | | |
|---|---|---|---|---|---|---|
| Movement | 1 | 2 | 3 | 4 | 5 | 6 |
| | L | T | R | L | T | R |
| Volume (veh/h) | *61* | *802* | | | *774* | *36* |
| Peak-Hour Factor, PHF | *0.95* | *0.95* | *1.00* | *1.00* | *0.95* | *0.95* |
| Hourly Flow Rate, HFR (veh/h) | *64* | *844* | *0* | *0* | *814* | *37* |
| Percent Heavy Vehicles | *22* | -- | -- | *0* | -- | -- |
| Median Type | *Two Way Left Turn Lane* | | | | | |
| RT Channelized | | | *0* | | | *0* |
| Lanes | *1* | *1* | *0* | *0* | *1* | *1* |
| Configuration | *L* | *T* | | | *T* | *R* |
| Upstream Signal | | *0* | | | *0* | |

| Minor Street | Northbound | | | Southbound | | |
|---|---|---|---|---|---|---|
| Movement | 7 | 8 | 9 | 10 | 11 | 12 |
| | L | T | R | L | T | R |
| Volume (veh/h) | | | | *15* | | *51* |
| Peak-Hour Factor, PHF | *1.00* | *1.00* | *1.00* | *0.95* | *1.00* | *0.95* |
| Hourly Flow Rate, HFR (veh/h) | *0* | *0* | *0* | *15* | *0* | *53* |
| Percent Heavy Vehicles | *0* | *0* | *0* | *0* | *0* | *50* |
| Percent Grade (%) | | *0* | | | *0* | |
| Flared Approach | | *N* | | | *N* | |
| Storage | | *0* | | | *0* | |
| RT Channelized | | | *0* | | | *0* |
| Lanes | *0* | *0* | *0* | *1* | *0* | *1* |
| Configuration | | | | *L* | | *R* |

## Delay, Queue Length, and Level of Service

| Approach | Eastbound | Westbound | Northbound | | | Southbound | | |
|---|---|---|---|---|---|---|---|---|
| Movement | 1 | 4 | 7 | 8 | 9 | 10 | 11 | 12 |
| Lane Configuration | *L* | | | | | *L* | | *R* |
| v (veh/h) | *64* | | | | | *15* | | *53* |
| C (m) (veh/h) | *708* | | | | | *211* | | *313* |
| v/c | *0.09* | | | | | *0.07* | | *0.17* |
| 95% queue length | *0.30* | | | | | *0.23* | | *0.60* |
| Control Delay (s/veh) | *10.6* | | | | | *23.4* | | *18.8* |
| LOS | *B* | | | | | *C* | | *C* |
| Approach Delay (s/veh) | -- | -- | | | | *19.8* | | |
| Approach LOS | -- | -- | | | | *C* | | |

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Generated: 6/10/2013 10:28 AM

# TWO-WAY STOP CONTROL SUMMARY

| General Information | | Site Information | |
|---|---|---|---|
| Analyst | *JM* | Intersection | *IL 120 & Curran Road* |
| Agency/Co. | *KLOA, Inc.* | Jurisdiction | *IDOT* |
| Date Performed | *5/13/2013* | Analysis Year | *Total Traffic* |
| Analysis Time Period | *A.M. Peak Hour* | | |
| Project Description *12-141* | | | |
| East/West Street: *IL 120* | | North/South Street: *Curran Road* | |
| Intersection Orientation: *East-West* | | Study Period (hrs): *0.25* | |

## Vehicle Volumes and Adjustments

| Major Street | Eastbound | | | Westbound | | |
|---|---|---|---|---|---|---|
| Movement | 1 | 2 | 3 | 4 | 5 | 6 |
| | L | T | R | L | T | R |
| Volume (veh/h) | | 730 | 15 | 28 | 784 | |
| Peak-Hour Factor, PHF | 1.00 | 0.95 | 0.95 | 0.95 | 0.95 | 1.00 |
| Hourly Flow Rate, HFR (veh/h) | 0 | 768 | 15 | 29 | 825 | 0 |
| Percent Heavy Vehicles | 0 | -- | -- | 4 | -- | -- |
| Median Type | Two Way Left Turn Lane | | | | | |
| RT Channelized | | | 0 | | | 0 |
| Lanes | 0 | 1 | 1 | 1 | 1 | 0 |
| Configuration | | T | R | L | T | |
| Upstream Signal | | 0 | | | 0 | |

| Minor Street | Northbound | | | Southbound | | |
|---|---|---|---|---|---|---|
| Movement | 7 | 8 | 9 | 10 | 11 | 12 |
| | L | T | R | L | T | R |
| Volume (veh/h) | 21 | | 60 | | | |
| Peak-Hour Factor, PHF | 0.95 | 1.00 | 0.95 | 1.00 | 1.00 | 1.00 |
| Hourly Flow Rate, HFR (veh/h) | 22 | 0 | 63 | 0 | 0 | 0 |
| Percent Heavy Vehicles | 0 | 0 | 3 | 0 | 0 | 0 |
| Percent Grade (%) | | 0 | | | 0 | |
| Flared Approach | | N | | | N | |
| Storage | | 0 | | | 0 | |
| RT Channelized | | | 0 | | | 0 |
| Lanes | 1 | 0 | 1 | 0 | 0 | 0 |
| Configuration | L | | R | | | |

## Delay, Queue Length, and Level of Service

| Approach | Eastbound | Westbound | Northbound | | | Southbound | | |
|---|---|---|---|---|---|---|---|---|
| Movement | 1 | 4 | 7 | 8 | 9 | 10 | 11 | 12 |
| Lane Configuration | | L | L | | R | | | |
| v (veh/h) | | 29 | 22 | | 63 | | | |
| C (m) (veh/h) | | 826 | 242 | | 400 | | | |
| v/c | | 0.04 | 0.09 | | 0.16 | | | |
| 95% queue length | | 0.11 | 0.30 | | 0.55 | | | |
| Control Delay (s/veh) | | 9.5 | 21.4 | | 15.7 | | | |
| LOS | | A | C | | C | | | |
| Approach Delay (s/veh) | -- | -- | 17.1 | | | | | |
| Approach LOS | -- | -- | C | | | | | |

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# TWO-WAY STOP CONTROL SUMMARY

| General Information | | Site Information | |
|---|---|---|---|
| Analyst | *JM* | Intersection | *IL 120 & Curran Road* |
| Agency/Co. | *KLOA, Inc.* | Jurisdiction | *IDOT* |
| Date Performed | *5/13/2013* | Analysis Year | *TotalTraffic* |
| Analysis Time Period | *P.M. Peak Hour* | | |
| Project Description *12-141* | | | |
| East/West Street: *IL 120* | | North/South Street: *Curran Road* | |
| Intersection Orientation: *East-West* | | Study Period (hrs): *0.25* | |

## Vehicle Volumes and Adjustments

| Major Street | Eastbound | | | Westbound | | |
|---|---|---|---|---|---|---|
| Movement | 1 | 2 | 3 | 4 | 5 | 6 |
| | L | T | R | L | T | R |
| Volume (veh/h) | | *807* | *22* | *54* | *786* | |
| Peak-Hour Factor, PHF | *1.00* | *0.95* | *0.95* | *0.95* | *0.95* | *1.00* |
| Hourly Flow Rate, HFR (veh/h) | *0* | *849* | *23* | *56* | *827* | *0* |
| Percent Heavy Vehicles | *0* | -- | -- | *0* | -- | -- |
| Median Type | *Two Way Left Turn Lane* | | | | | |
| RT Channelized | | | *0* | | | *0* |
| Lanes | *0* | *1* | *1* | *1* | *1* | *0* |
| Configuration | | *T* | *R* | *L* | *T* | |
| Upstream Signal | | *0* | | | *0* | |

| Minor Street | Northbound | | | Southbound | | |
|---|---|---|---|---|---|---|
| Movement | 7 | 8 | 9 | 10 | 11 | 12 |
| | L | T | R | L | T | R |
| Volume (veh/h) | *13* | | *62* | | | |
| Peak-Hour Factor, PHF | *0.95* | *1.00* | *0.95* | *1.00* | *1.00* | *1.00* |
| Hourly Flow Rate, HFR (veh/h) | *13* | *0* | *65* | *0* | *0* | *0* |
| Percent Heavy Vehicles | *15* | *0* | *0* | *0* | *0* | *0* |
| Percent Grade (%) | | *0* | | | *0* | |
| Flared Approach | | *N* | | | *N* | |
| Storage | | *0* | | | *0* | |
| RT Channelized | | | *0* | | | *0* |
| Lanes | *1* | *0* | *1* | *0* | *0* | *0* |
| Configuration | *L* | | *R* | | | |

## Delay, Queue Length, and Level of Service

| Approach | Eastbound | Westbound | Northbound | | | Southbound | | |
|---|---|---|---|---|---|---|---|---|
| Movement | 1 | 4 | 7 | 8 | 9 | 10 | 11 | 12 |
| Lane Configuration | | *L* | *L* | | *R* | | | |
| v (veh/h) | | *56* | *13* | | *65* | | | |
| C (m) (veh/h) | | *782* | *201* | | *364* | | | |
| v/c | | *0.07* | *0.06* | | *0.18* | | | |
| 95% queue length | | *0.23* | *0.21* | | *0.64* | | | |
| Control Delay (s/veh) | | *10.0* | *24.1* | | *17.0* | | | |
| LOS | | *A* | *C* | | *C* | | | |
| Approach Delay (s/veh) | -- | -- | *18.2* | | | | | |
| Approach LOS | -- | -- | *C* | | | | | |

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# TWO-WAY STOP CONTROL SUMMARY

| General Information | | Site Information | |
|---|---|---|---|
| Analyst | JM | Intersection | IL 120 & Wildspring Road |
| Agency/Co. | KLOA, Inc. | Jurisdiction | IDOT |
| Date Performed | 5/13/2013 | Analysis Year | Total Traffic |
| Analysis Time Period | A.M. Peak Hour | | |
| Project Description 12-141 | | | |
| East/West Street: IL 120 | | North/South Street: Wildspring Road | |
| Intersection Orientation: East-West | | Study Period (hrs): 0.25 | |

## Vehicle Volumes and Adjustments

| Major Street | Eastbound | | | Westbound | | |
|---|---|---|---|---|---|---|
| Movement | 1 | 2 | 3 | 4 | 5 | 6 |
| | L | T | R | L | T | R |
| Volume (veh/h) | 6 | 628 | 16 | 79 | 718 | 8 |
| Peak-Hour Factor, PHF | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| Hourly Flow Rate, HFR (veh/h) | 6 | 661 | 16 | 83 | 755 | 8 |
| Percent Heavy Vehicles | 0 | -- | -- | 5 | -- | -- |
| Median Type | Undivided | | | | | |
| RT Channelized | | | 0 | | | 0 |
| Lanes | 1 | 1 | 1 | 1 | 1 | 1 |
| Configuration | L | T | R | L | T | R |
| Upstream Signal | | 0 | | | 0 | |

| Minor Street | Northbound | | | Southbound | | |
|---|---|---|---|---|---|---|
| Movement | 7 | 8 | 9 | 10 | 11 | 12 |
| | L | T | R | L | T | R |
| Volume (veh/h) | 23 | 5 | 91 | 26 | 0 | 29 |
| Peak-Hour Factor, PHF | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| Hourly Flow Rate, HFR (veh/h) | 24 | 5 | 95 | 27 | 0 | 30 |
| Percent Heavy Vehicles | 0 | 0 | 1 | 0 | 0 | 0 |
| Percent Grade (%) | | 0 | | | 0 | |
| Flared Approach | | N | | | N | |
| Storage | | 0 | | | 0 | |
| RT Channelized | | | 0 | | | 0 |
| Lanes | 1 | 1 | 0 | 1 | 1 | 0 |
| Configuration | L | | TR | L | | TR |

## Delay, Queue Length, and Level of Service

| Approach | Eastbound | Westbound | Northbound | | | Southbound | | |
|---|---|---|---|---|---|---|---|---|
| Movement | 1 | 4 | 7 | 8 | 9 | 10 | 11 | 12 |
| Lane Configuration | L | L | L | | TR | L | | TR |
| v (veh/h) | 6 | 83 | 24 | | 100 | 27 | | 30 |
| C (m) (veh/h) | 859 | 901 | 73 | | 389 | 56 | | 412 |
| v/c | 0.01 | 0.09 | 0.33 | | 0.26 | 0.48 | | 0.07 |
| 95% queue length | 0.02 | 0.30 | 1.22 | | 1.01 | 1.85 | | 0.23 |
| Control Delay (s/veh) | 9.2 | 9.4 | 76.8 | | 17.4 | 118.7 | | 14.4 |
| LOS | A | A | F | | C | F | | B |
| Approach Delay (s/veh) | -- | -- | 28.9 | | | 63.8 | | |
| Approach LOS | -- | -- | D | | | F | | |

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# TWO-WAY STOP CONTROL SUMMARY

| General Information | | Site Information | |
|---|---|---|---|
| Analyst | JM | Intersection | IL 120 & Wildspring Road |
| Agency/Co. | KLOA, Inc. | Jurisdiction | IDOT |
| Date Performed | 5/13/2013 | Analysis Year | Total Traffic |
| Analysis Time Period | P.M. Peak Hour | | |
| Project Description | 12-141 | | |
| East/West Street: | IL 120 | North/South Street: | Wildspring Road |
| Intersection Orientation: | East-West | Study Period (hrs): | 0.25 |

## Vehicle Volumes and Adjustments

| Major Street | Eastbound | | | Westbound | | |
|---|---|---|---|---|---|---|
| Movement | 1 | 2 | 3 | 4 | 5 | 6 |
| | L | T | R | L | T | R |
| Volume (veh/h) | 8 | 724 | 39 | 101 | 662 | 36 |
| Peak-Hour Factor, PHF | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| Hourly Flow Rate, HFR (veh/h) | 8 | 762 | 41 | 106 | 696 | 37 |
| Percent Heavy Vehicles | 0 | -- | -- | 0 | -- | -- |
| Median Type | Undivided | | | | | |
| RT Channelized | | | 0 | | | 0 |
| Lanes | 1 | 1 | 1 | 1 | 1 | 1 |
| Configuration | L | T | R | L | T | R |
| Upstream Signal | | 0 | | | 0 | |

| Minor Street | Northbound | | | Southbound | | |
|---|---|---|---|---|---|---|
| Movement | 7 | 8 | 9 | 10 | 11 | 12 |
| | L | T | R | L | T | R |
| Volume (veh/h) | 18 | 2 | 87 | 18 | 1 | 5 |
| Peak-Hour Factor, PHF | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| Hourly Flow Rate, HFR (veh/h) | 18 | 2 | 91 | 18 | 1 | 5 |
| Percent Heavy Vehicles | 12 | 0 | 2 | 0 | 0 | 20 |
| Percent Grade (%) | | 0 | | | 0 | |
| Flared Approach | | N | | | N | |
| Storage | | 0 | | | 0 | |
| RT Channelized | | | 0 | | | 0 |
| Lanes | 1 | 1 | 0 | 1 | 1 | 0 |
| Configuration | L | | TR | L | | TR |

## Delay, Queue Length, and Level of Service

| Approach | Eastbound | Westbound | Northbound | | | Southbound | | |
|---|---|---|---|---|---|---|---|---|
| Movement | 1 | 4 | 7 | 8 | 9 | 10 | 11 | 12 |
| Lane Configuration | L | L | L | | TR | L | | TR |
| v (veh/h) | 8 | 106 | 18 | | 93 | 18 | | 6 |
| C (m) (veh/h) | 881 | 830 | 60 | | 372 | 46 | | 240 |
| v/c | 0.01 | 0.13 | 0.30 | | 0.25 | 0.39 | | 0.03 |
| 95% queue length | 0.03 | 0.44 | 1.07 | | 0.97 | 1.38 | | 0.08 |
| Control Delay (s/veh) | 9.1 | 10.0 | 88.9 | | 17.9 | 126.7 | | 20.4 |
| LOS | A | A | F | | C | F | | C |
| Approach Delay (s/veh) | -- | -- | 29.4 | | | 100.1 | | |
| Approach LOS | -- | -- | D | | | F | | |

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# TWO-WAY STOP CONTROL SUMMARY

| General Information | | Site Information | |
|---|---|---|---|
| Analyst | *JM* | Intersection | *IL 134 & Porter Drive* |
| Agency/Co. | *KLOA, Inc.* | Jurisdiction | *IDOT* |
| Date Performed | *05/17/13* | Analysis Year | *Year 2016 Future Traffic* |
| Analysis Time Period | *A.M. Peak Hour* | | |
| Project Description *12-141* | | | |
| East/West Street: *IL 134* | | North/South Street: *Porter Drive* | |
| Intersection Orientation: *East-West* | | Study Period (hrs): *0.25* | |

## Vehicle Volumes and Adjustments

| Major Street | Eastbound | | | Westbound | | |
|---|---|---|---|---|---|---|
| Movement | 1 | 2 | 3 | 4 | 5 | 6 |
| | L | T | R | L | T | R |
| Volume (veh/h) | | 484 | 52 | 26 | 279 | |
| Peak-Hour Factor, PHF | 1.00 | 0.95 | 0.95 | 0.95 | 0.95 | 1.00 |
| Hourly Flow Rate, HFR (veh/h) | 0 | 509 | 54 | 27 | 293 | 0 |
| Percent Heavy Vehicles | 0 | -- | -- | 12 | -- | -- |
| Median Type | Undivided | | | | | |
| RT Channelized | | | 0 | | | 0 |
| Lanes | 0 | 1 | 0 | 0 | 1 | 0 |
| Configuration | | | TR | LT | | |
| Upstream Signal | | 0 | | | 0 | |

| Minor Street | Northbound | | | Southbound | | |
|---|---|---|---|---|---|---|
| Movement | 7 | 8 | 9 | 10 | 11 | 12 |
| | L | T | R | L | T | R |
| Volume (veh/h) | 44 | | 54 | | | |
| Peak-Hour Factor, PHF | 0.95 | 1.00 | 0.95 | 1.00 | 1.00 | 1.00 |
| Hourly Flow Rate, HFR (veh/h) | 46 | 0 | 56 | 0 | 0 | 0 |
| Percent Heavy Vehicles | 19 | 0 | 11 | 0 | 0 | 0 |
| Percent Grade (%) | | 0 | | | 0 | |
| Flared Approach | | N | | | N | |
| Storage | | 0 | | | 0 | |
| RT Channelized | | | 0 | | | 0 |
| Lanes | 1 | 0 | 1 | 0 | 0 | 0 |
| Configuration | L | | R | | | |

## Delay, Queue Length, and Level of Service

| Approach | Eastbound | Westbound | Northbound | | | Southbound | | |
|---|---|---|---|---|---|---|---|---|
| Movement | 1 | 4 | 7 | 8 | 9 | 10 | 11 | 12 |
| Lane Configuration | | LT | L | | R | | | |
| v (veh/h) | | 27 | 46 | | 56 | | | |
| C (m) (veh/h) | | 960 | 287 | | 527 | | | |
| v/c | | 0.03 | 0.16 | | 0.11 | | | |
| 95% queue length | | 0.09 | 0.56 | | 0.35 | | | |
| Control Delay (s/veh) | | 8.9 | 19.9 | | 12.6 | | | |
| LOS | | A | C | | B | | | |
| Approach Delay (s/veh) | -- | -- | 15.9 | | | | | |
| Approach LOS | -- | -- | C | | | | | |

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# TWO-WAY STOP CONTROL SUMMARY

| General Information | | Site Information | |
|---|---|---|---|
| Analyst | JM | Intersection | IL 134 & Porter Drive |
| Agency/Co. | KLOA, Inc. | Jurisdiction | IDOT |
| Date Performed | 05/17/13 | Analysis Year | Year 2016 Future Traffic |
| Analysis Time Period | A.M. Peak Hour | | |

Project Description 12-141

East/West Street: IL 134 | North/South Street: Porter Drive

Intersection Orientation: East-West | Study Period (hrs): 0.25

## Vehicle Volumes and Adjustments

| Major Street | Eastbound | | | Westbound | | |
|---|---|---|---|---|---|---|
| Movement | 1 | 2 | 3 | 4 | 5 | 6 |
| | L | T | R | L | T | R |
| Volume (veh/h) | | 335 | 47 | 59 | 496 | |
| Peak-Hour Factor, PHF | 1.00 | 0.95 | 0.95 | 0.95 | 0.95 | 1.00 |
| Hourly Flow Rate, HFR (veh/h) | 0 | 352 | 49 | 62 | 522 | 0 |
| Percent Heavy Vehicles | 0 | -- | -- | 7 | -- | -- |
| Median Type | Undivided | | | | | |
| RT Channelized | | | 0 | | | 0 |
| Lanes | 0 | 1 | 0 | 0 | 1 | 0 |
| Configuration | | | TR | LT | | |
| Upstream Signal | | 0 | | | 0 | |

| Minor Street | Northbound | | | Southbound | | |
|---|---|---|---|---|---|---|
| Movement | 7 | 8 | 9 | 10 | 11 | 12 |
| | L | T | R | L | T | R |
| Volume (veh/h) | 61 | | 62 | | | |
| Peak-Hour Factor, PHF | 0.95 | 1.00 | 0.95 | 1.00 | 1.00 | 1.00 |
| Hourly Flow Rate, HFR (veh/h) | 64 | 0 | 65 | 0 | 0 | 0 |
| Percent Heavy Vehicles | 3 | 0 | 3 | 0 | 0 | 0 |
| Percent Grade (%) | | 0 | | | 0 | |
| Flared Approach | | N | | | N | |
| Storage | | 0 | | | 0 | |
| RT Channelized | | | 0 | | | 0 |
| Lanes | 1 | 0 | 1 | 0 | 0 | 0 |
| Configuration | L | | R | | | |

## Delay, Queue Length, and Level of Service

| Approach | Eastbound | Westbound | Northbound | | | Southbound | | |
|---|---|---|---|---|---|---|---|---|
| Movement | 1 | 4 | 7 | 8 | 9 | 10 | 11 | 12 |
| Lane Configuration | | LT | L | | R | | | |
| v (veh/h) | | 62 | 64 | | 65 | | | |
| C (m) (veh/h) | | 1131 | 246 | | 668 | | | |
| v/c | | 0.05 | 0.26 | | 0.10 | | | |
| 95% queue length | | 0.17 | 1.01 | | 0.32 | | | |
| Control Delay (s/veh) | | 8.4 | 24.7 | | 11.0 | | | |
| LOS | | A | C | | B | | | |
| Approach Delay (s/veh) | -- | -- | 17.8 | | | | | |
| Approach LOS | -- | -- | C | | | | | |

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# TWO-WAY STOP CONTROL SUMMARY

| General Information | | Site Information | |
|---|---|---|---|
| Analyst | *JM* | Intersection | *Porter Dr & Cedar Mound Rd* |
| Agency/Co. | *KLOA, Inc.* | Jurisdiction | *IDOT* |
| Date Performed | *05/17/13* | Analysis Year | *Year 2016 Future Traffic* |
| Analysis Time Period | *A.M. Peak Hour* | | |

Project Description *12-141*

East/West Street: *Porter Drive* | North/South Street: *Cedar Mound Road*

Intersection Orientation: *East-West* | Study Period (hrs): *0.25*

## Vehicle Volumes and Adjustments

| Major Street | Eastbound | | | Westbound | | |
|---|---|---|---|---|---|---|
| Movement | 1 | 2 | 3 | 4 | 5 | 6 |
| | L | T | R | L | T | R |
| Volume (veh/h) | | 46 | 30 | 7 | 25 | |
| Peak-Hour Factor, PHF | 1.00 | 0.95 | 0.95 | 0.95 | 0.95 | 1.00 |
| Hourly Flow Rate, HFR (veh/h) | 0 | 48 | 31 | 7 | 26 | 0 |
| Percent Heavy Vehicles | 0 | -- | -- | 0 | -- | -- |
| Median Type | Undivided | | | | | |
| RT Channelized | | | 0 | | | 0 |
| Lanes | 0 | 1 | 0 | 0 | 1 | 0 |
| Configuration | | | TR | LT | | |
| Upstream Signal | | 0 | | | 0 | |

| Minor Street | Northbound | | | Southbound | | |
|---|---|---|---|---|---|---|
| Movement | 7 | 8 | 9 | 10 | 11 | 12 |
| | L | T | R | L | T | R |
| Volume (veh/h) | 60 | | 11 | | | |
| Peak-Hour Factor, PHF | 0.95 | 1.00 | 0.95 | 1.00 | 1.00 | 1.00 |
| Hourly Flow Rate, HFR (veh/h) | 63 | 0 | 11 | 0 | 0 | 0 |
| Percent Heavy Vehicles | 4 | 0 | 22 | 0 | 0 | 0 |
| Percent Grade (%) | | 0 | | | 0 | |
| Flared Approach | | N | | | N | |
| Storage | | 0 | | | 0 | |
| RT Channelized | | | 0 | | | 0 |
| Lanes | 0 | 0 | 0 | 0 | 0 | 0 |
| Configuration | | LR | | | | |

## Delay, Queue Length, and Level of Service

| Approach | Eastbound | Westbound | Northbound | | | Southbound | | |
|---|---|---|---|---|---|---|---|---|
| Movement | 1 | 4 | 7 | 8 | 9 | 10 | 11 | 12 |
| Lane Configuration | | LT | | LR | | | | |
| v (veh/h) | | 7 | | 74 | | | | |
| C (m) (veh/h) | | 1532 | | 894 | | | | |
| v/c | | 0.00 | | 0.08 | | | | |
| 95% queue length | | 0.01 | | 0.27 | | | | |
| Control Delay (s/veh) | | 7.4 | | 9.4 | | | | |
| LOS | | A | | A | | | | |
| Approach Delay (s/veh) | -- | -- | | 9.4 | | | | |
| Approach LOS | -- | -- | | A | | | | |

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# TWO-WAY STOP CONTROL SUMMARY

| General Information | | Site Information | |
|---|---|---|---|
| Analyst | *JM* | Intersection | *Porter Dr & Cedar Mound Rd* |
| Agency/Co. | *KLOA, Inc.* | Jurisdiction | *IDOT* |
| Date Performed | *05/17/13* | Analysis Year | *Year 2016 Future Traffic* |
| Analysis Time Period | *P.M. Peak Hour* | | |

Project Description *12-141*

| | |
|---|---|
| East/West Street: *Porter Drive* | North/South Street: *Cedar Mound Road* |
| Intersection Orientation: *East-West* | Study Period (hrs): *0.25* |

## Vehicle Volumes and Adjustments

| Major Street | Eastbound | | | Westbound | | |
|---|---|---|---|---|---|---|
| Movement | 1 | 2 | 3 | 4 | 5 | 6 |
| | L | T | R | L | T | R |
| Volume (veh/h) | | 13 | 92 | 26 | 61 | |
| Peak-Hour Factor, PHF | 1.00 | 0.95 | 0.95 | 0.95 | 0.95 | 1.00 |
| Hourly Flow Rate, HFR (veh/h) | 0 | 13 | 96 | 27 | 64 | 0 |
| Percent Heavy Vehicles | 0 | -- | -- | 0 | -- | -- |
| Median Type | Undivided | | | | | |
| RT Channelized | | | 0 | | | 0 |
| Lanes | 0 | 1 | 0 | 0 | 1 | 0 |
| Configuration | | | TR | LT | | |
| Upstream Signal | | 0 | | | 0 | |

| Minor Street | Northbound | | | Southbound | | |
|---|---|---|---|---|---|---|
| Movement | 7 | 8 | 9 | 10 | 11 | 12 |
| | L | T | R | L | T | R |
| Volume (veh/h) | 59 | | 6 | | | |
| Peak-Hour Factor, PHF | 0.95 | 1.00 | 0.95 | 1.00 | 1.00 | 1.00 |
| Hourly Flow Rate, HFR (veh/h) | 62 | 0 | 6 | 0 | 0 | 0 |
| Percent Heavy Vehicles | 10 | 0 | 0 | 0 | 0 | 0 |
| Percent Grade (%) | | 0 | | | 0 | |
| Flared Approach | | N | | | N | |
| Storage | | 0 | | | 0 | |
| RT Channelized | | | 0 | | | 0 |
| Lanes | 0 | 0 | 0 | 0 | 0 | 0 |
| Configuration | | LR | | | | |

## Delay, Queue Length, and Level of Service

| Approach | Eastbound | Westbound | Northbound | | | Southbound | | |
|---|---|---|---|---|---|---|---|---|
| Movement | 1 | 4 | 7 | 8 | 9 | 10 | 11 | 12 |
| Lane Configuration | | LT | | LR | | | | |
| v (veh/h) | | 27 | | 68 | | | | |
| C (m) (veh/h) | | 1494 | | 795 | | | | |
| v/c | | 0.02 | | 0.09 | | | | |
| 95% queue length | | 0.06 | | 0.28 | | | | |
| Control Delay (s/veh) | | 7.5 | | 10.0 | | | | |
| LOS | | A | | A | | | | |
| Approach Delay (s/veh) | -- | -- | 10.0 | | | | | |
| Approach LOS | -- | -- | A | | | | | |

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## TWO-WAY STOP CONTROL SUMMARY

| General Information | | Site Information | |
|---|---|---|---|
| Analyst | *JM* | Intersection | *Porter Dr & Groot Industries D* |
| Agency/Co. | *KLOA, Inc.* | Jurisdiction | |
| Date Performed | *05/17/13* | Analysis Year | *Year 2016 Future Traffic* |
| Analysis Time Period | *A.M. Peak Hour* | | |
| Project Description | *12-141* | | |
| East/West Street: | *Groot Industries Dr* | North/South Street: | *Porter Drive* |
| Intersection Orientation: | *North-South* | Study Period (hrs): | *0.25* |

### Vehicle Volumes and Adjustments

| Major Street | Northbound | | | Southbound | | |
|---|---|---|---|---|---|---|
| Movement | 1 | 2 | 3 | 4 | 5 | 6 |
| | L | T | R | L | T | R |
| Volume (veh/h) | 5 | 55 | | | 50 | 3 |
| Peak-Hour Factor, PHF | 0.95 | 0.95 | 1.00 | 1.00 | 0.95 | 0.95 |
| Hourly Flow Rate, HFR (veh/h) | 5 | 57 | 0 | 0 | 52 | 3 |
| Percent Heavy Vehicles | 100 | -- | -- | 0 | -- | -- |
| Median Type | Undivided | | | | | |
| RT Channelized | | | 0 | | | 0 |
| Lanes | 0 | 1 | 0 | 0 | 1 | 0 |
| Configuration | LT | | | | | TR |
| Upstream Signal | | 0 | | | 0 | |

| Minor Street | Eastbound | | | Westbound | | |
|---|---|---|---|---|---|---|
| Movement | 7 | 8 | 9 | 10 | 11 | 12 |
| | L | T | R | L | T | R |
| Volume (veh/h) | 1 | | 0 | | | |
| Peak-Hour Factor, PHF | 0.95 | 1.00 | 0.95 | 1.00 | 1.00 | 1.00 |
| Hourly Flow Rate, HFR (veh/h) | 1 | 0 | 0 | 0 | 0 | 0 |
| Percent Heavy Vehicles | 100 | 0 | 100 | 0 | 0 | 0 |
| Percent Grade (%) | | 0 | | | 0 | |
| Flared Approach | | N | | | N | |
| Storage | | 0 | | | 0 | |
| RT Channelized | | | 0 | | | 0 |
| Lanes | 0 | 0 | 0 | 0 | 0 | 0 |
| Configuration | | LR | | | | |

### Delay, Queue Length, and Level of Service

| Approach | Northbound | Southbound | Westbound | | | Eastbound | | |
|---|---|---|---|---|---|---|---|---|
| Movement | 1 | 4 | 7 | 8 | 9 | 10 | 11 | 12 |
| Lane Configuration | LT | | | | | | LR | |
| v (veh/h) | 5 | | | | | | 1 | |
| C (m) (veh/h) | 1100 | | | | | | 683 | |
| v/c | 0.00 | | | | | | 0.00 | |
| 95% queue length | 0.01 | | | | | | 0.00 | |
| Control Delay (s/veh) | 8.3 | | | | | | 10.3 | |
| LOS | A | | | | | | B | |
| Approach Delay (s/veh) | -- | -- | | | | | 10.3 | |
| Approach LOS | -- | -- | | | | | B | |

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# TWO-WAY STOP CONTROL SUMMARY

| General Information | | Site Information | |
|---|---|---|---|
| Analyst | JM | Intersection | Porter Dr & Groot Industries D |
| Agency/Co. | KLOA, Inc. | Jurisdiction | |
| Date Performed | 05/17/13 | Analysis Year | Year 2016 Future Traffic |
| Analysis Time Period | P.M. Peak Hour | | |

Project Description 12-141

| | |
|---|---|
| East/West Street: Groot Industries Dr | North/South Street: Porter Drive |
| Intersection Orientation: North-South | Study Period (hrs): 0.25 |

## Vehicle Volumes and Adjustments

| Major Street | Northbound | | | Southbound | | |
|---|---|---|---|---|---|---|
| Movement | 1 | 2 | 3 | 4 | 5 | 6 |
| | L | T | R | L | T | R |
| Volume (veh/h) | 14 | 66 | | | 4 | 33 |
| Peak-Hour Factor, PHF | 0.95 | 0.95 | 1.00 | 1.00 | 0.95 | 0.95 |
| Hourly Flow Rate, HFR (veh/h) | 14 | 69 | 0 | 0 | 4 | 34 |
| Percent Heavy Vehicles | 100 | -- | -- | 0 | -- | -- |
| Median Type | Undivided | | | | | |
| RT Channelized | | | 0 | | | 0 |
| Lanes | 0 | 1 | 0 | 0 | 1 | 0 |
| Configuration | LT | | | | | TR |
| Upstream Signal | | 0 | | | 0 | |

| Minor Street | Eastbound | | | Westbound | | |
|---|---|---|---|---|---|---|
| Movement | 7 | 8 | 9 | 10 | 11 | 12 |
| | L | T | R | L | T | R |
| Volume (veh/h) | 19 | | 11 | | | |
| Peak-Hour Factor, PHF | 0.95 | 1.00 | 0.95 | 1.00 | 1.00 | 1.00 |
| Hourly Flow Rate, HFR (veh/h) | 20 | 0 | 11 | 0 | 0 | 0 |
| Percent Heavy Vehicles | 100 | 0 | 100 | 0 | 0 | 0 |
| Percent Grade (%) | | 0 | | | 0 | |
| Flared Approach | | N | | | N | |
| Storage | | 0 | | | 0 | |
| RT Channelized | | | 0 | | | 0 |
| Lanes | 0 | 0 | 0 | 0 | 0 | 0 |
| Configuration | | LR | | | | |

## Delay, Queue Length, and Level of Service

| Approach | Northbound | Southbound | Westbound | | | Eastbound | | |
|---|---|---|---|---|---|---|---|---|
| Movement | 1 | 4 | 7 | 8 | 9 | 10 | 11 | 12 |
| Lane Configuration | LT | | | | | | LR | |
| v (veh/h) | 14 | | | | | | 31 | |
| C (m) (veh/h) | 1119 | | | | | | 727 | |
| v/c | 0.01 | | | | | | 0.04 | |
| 95% queue length | 0.04 | | | | | | 0.13 | |
| Control Delay (s/veh) | 8.3 | | | | | | 10.2 | |
| LOS | A | | | | | | B | |
| Approach Delay (s/veh) | -- | -- | | | | | 10.2 | |
| Approach LOS | -- | -- | | | | | B | |

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## TWO-WAY STOP CONTROL SUMMARY

| General Information | | Site Information | |
|---|---|---|---|
| Analyst | *JM* | Intersection | *Porter Dr & Access Drive* |
| Agency/Co. | *KLOA, Inc.* | Jurisdiction | |
| Date Performed | *05/17/13* | Analysis Year | *Year 2016 Future Traffic* |
| Analysis Time Period | *A.M. Peak Hour* | | |

Project Description *12-141*

| | |
|---|---|
| East/West Street: *Access Dr* | North/South Street: *Porter Drive* |
| Intersection Orientation: *North-South* | Study Period (hrs): *0.25* |

### Vehicle Volumes and Adjustments

| Major Street | Northbound | | | Southbound | | |
|---|---|---|---|---|---|---|
| Movement | 1 | 2 | 3 | 4 | 5 | 6 |
| | L | T | R | L | T | R |
| Volume (veh/h) | | 60 | 14 | 0 | 62 | |
| Peak-Hour Factor, PHF | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| Hourly Flow Rate, HFR (veh/h) | 0 | 63 | 14 | 0 | 65 | 0 |
| Percent Heavy Vehicles | 100 | -- | -- | 100 | -- | -- |
| Median Type | Undivided | | | | | |
| RT Channelized | | | 0 | | | 0 |
| Lanes | 0 | 1 | 0 | 0 | 1 | 0 |
| Configuration | | | TR | LT | | |
| Upstream Signal | | 0 | | | 0 | |

| Minor Street | Eastbound | | | Westbound | | |
|---|---|---|---|---|---|---|
| Movement | 7 | 8 | 9 | 10 | 11 | 12 |
| | L | T | R | L | T | R |
| Volume (veh/h) | | | | 14 | | 0 |
| Peak-Hour Factor, PHF | 0.95 | 1.00 | 0.95 | 0.95 | 1.00 | 0.95 |
| Hourly Flow Rate, HFR (veh/h) | 0 | 0 | 0 | 14 | 0 | 0 |
| Percent Heavy Vehicles | 100 | 0 | 100 | 100 | 0 | 0 |
| Percent Grade (%) | | 0 | | | 0 | |
| Flared Approach | | N | | | N | |
| Storage | | 0 | | | 0 | |
| RT Channelized | | | 0 | | | 0 |
| Lanes | 0 | 0 | 0 | 0 | 0 | 0 |
| Configuration | | | | | LR | |

### Delay, Queue Length, and Level of Service

| Approach | Northbound | Southbound | Westbound | | | Eastbound | | |
|---|---|---|---|---|---|---|---|---|
| Movement | 1 | 4 | 7 | 8 | 9 | 10 | 11 | 12 |
| Lane Configuration | | LT | | LR | | | | |
| v (veh/h) | | 0 | | 14 | | | | |
| C (m) (veh/h) | | 1076 | | 672 | | | | |
| v/c | | 0.00 | | 0.02 | | | | |
| 95% queue length | | 0.00 | | 0.06 | | | | |
| Control Delay (s/veh) | | 8.3 | | 10.5 | | | | |
| LOS | | A | | B | | | | |
| Approach Delay (s/veh) | -- | -- | 10.5 | | | | | |
| Approach LOS | -- | -- | B | | | | | |

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# TWO-WAY STOP CONTROL SUMMARY

| General Information | | Site Information | |
|---|---|---|---|
| Analyst | *JM* | Intersection | *Porter Dr & Access Drive* |
| Agency/Co. | *KLOA, Inc.* | Jurisdiction | |
| Date Performed | *05/17/13* | Analysis Year | *Year 2016 Future Traffic* |
| Analysis Time Period | *P.M. Peak Hour* | | |
| Project Description *12-141* | | | |
| East/West Street: *Access Dr* | | North/South Street: *Porter Drive* | |
| Intersection Orientation: *North-South* | | Study Period (hrs): *0.25* | |

## Vehicle Volumes and Adjustments

| Major Street | Northbound | | | Southbound | | |
|---|---|---|---|---|---|---|
| Movement | 1 | 2 | 3 | 4 | 5 | 6 |
| | L | T | R | L | T | R |
| Volume (veh/h) | | 87 | 10 | 0 | 56 | |
| Peak-Hour Factor, PHF | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| Hourly Flow Rate, HFR (veh/h) | 0 | 91 | 10 | 0 | 58 | 0 |
| Percent Heavy Vehicles | 100 | -- | -- | 100 | -- | -- |
| Median Type | Undivided | | | | | |
| RT Channelized | | | 0 | | | 0 |
| Lanes | 0 | 1 | 0 | 0 | 1 | 0 |
| Configuration | | | TR | LT | | |
| Upstream Signal | | 0 | | | 0 | |

| Minor Street | Eastbound | | | Westbound | | |
|---|---|---|---|---|---|---|
| Movement | 7 | 8 | 9 | 10 | 11 | 12 |
| | L | T | R | L | T | R |
| Volume (veh/h) | | | | 10 | | 0 |
| Peak-Hour Factor, PHF | 0.95 | 1.00 | 0.95 | 0.95 | 1.00 | 0.95 |
| Hourly Flow Rate, HFR (veh/h) | 0 | 0 | 0 | 10 | 0 | 0 |
| Percent Heavy Vehicles | 100 | 0 | 100 | 100 | 0 | 0 |
| Percent Grade (%) | | 0 | | | 0 | |
| Flared Approach | | N | | | N | |
| Storage | | 0 | | | 0 | |
| RT Channelized | | | 0 | | | 0 |
| Lanes | 0 | 0 | 0 | 0 | 0 | 0 |
| Configuration | | | | | LR | |

## Delay, Queue Length, and Level of Service

| Approach | Northbound | Southbound | Westbound | | | Eastbound | | |
|---|---|---|---|---|---|---|---|---|
| Movement | 1 | 4 | 7 | 8 | 9 | 10 | 11 | 12 |
| Lane Configuration | | LT | | LR | | | | |
| v (veh/h) | | 0 | | 10 | | | | |
| C (m) (veh/h) | | 1051 | | 654 | | | | |
| v/c | | 0.00 | | 0.02 | | | | |
| 95% queue length | | 0.00 | | 0.05 | | | | |
| Control Delay (s/veh) | | 8.4 | | 10.6 | | | | |
| LOS | | A | | B | | | | |
| Approach Delay (s/veh) | -- | -- | 10.6 | | | | | |
| Approach LOS | -- | -- | B | | | | | |

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# Crash Data

## 2007-2012 LOG LISTING FOR IL 120

| COUNTY | STREET | INTERSECTING STREET | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 |
|---|---|---|---|---|---|---|---|---|
| LAKE | IL 120 | WILSON RD | 21.52 | 21.52 | 21.52 | 21.56 | 21.56 | 21.56 |
| LAKE | IL 120 | JADE LN | 21.70 | 21.70 | 21.70 | 21.74 | 21.74 | 21.74 |
| LAKE | IL 120 | FAIRFIELD RD | 22.16 | 22.16 | 22.16 | 22.20 | 22.20 | 22.20 |
| LAKE | IL 120 | CENTER LN | 22.24 | 22.24 | 22.24 | 22.28 | 22.28 | 22.28 |
| LAKE | IL 120 | BACON RD | 22.68 | 22.68 | 22.68 | 22.72 | 22.72 | 22.72 |
| LAKE | IL 120 | CEDAR LAKE RD | 22.96 | 22.96 | 22.96 | 23.00 | 23.00 | 23.00 |
| LAKE | IL 120 | WILDSPRING RD | 23.22 | 23.30 | 23.30 | 23.34 | 23.34 | 23.34 |
| LAKE | IL 120 | CURRAN RD | 23.35 | 23.47 | 23.47 | 23.51 | 23.51 | 23.51 |
| LAKE | IL 120 | PORTER RD | 23.90 | 23.90 | 23.90 | 23.94 | 23.94 | 23.94 |
| LAKE | IL 120 | CENTRE DR | 24.37 | 24.37 | 24.37 | 24.45 | 24.45 | 24.45 |
| LAKE | IL 120 | MAIN ST/IL 134 | 24.42 | 24.42 | 24.42 | 24.46 | 24.46 | 24.46 |
| LAKE | IL 120 | HAINESVILLE RD | 24.53 | 24.53 | 24.53 | 24.57 | 24.57 | 24.57 |
| LAKE | IL 120 | MISTY HILL LN | 24.70 | 24.70 | 24.70 | 24.73 | 24.73 | 24.73 |
| LAKE | IL 120 | DEER POINT DR | 24.95 | 24.95 | 24.95 | 24.99 | 24.99 | 24.99 |
| LAKE | IL 120 | WEST TRAIL | 25.10 | 25.11 | 25.11 | 25.15 | 25.15 | 25.15 |
| LAKE | IL 120 | ALLEGHANY RD | 25.34 | 25.34 | 25.34 | 25.38 | 25.38 | 25.38 |
| LAKE | IL 120 | GETCHELL AVE | 25.41 | 25.41 | 25.41 | 25.46 | 25.46 | 25.46 |
| LAKE | IL 120 | BLUFF AVE | 25.45 | 25.45 | 25.45 | 25.50 | 25.50 | 25.50 |
| LAKE | IL 120 | BELLE CT | 25.58 | 25.58 | 25.58 | 25.66 | 25.66 | 25.66 |
| LAKE | IL 120 | NEVILLE DR | 25.70 | 25.70 | 25.70 | 25.79 | 25.79 | 25.79 |
| LAKE | IL 120 | BRITTAIN AVE | 25.75 | 25.75 | 25.75 | 25.85 | 25.85 | 25.85 |
| LAKE | IL 120 | LAKE ST | 25.81 | 25.81 | 25.81 | 25.91 | 25.91 | 25.91 |

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# Collision Diagram

**1/1/2007 to 12/31/2007**

Crash Route: IL120 | From MileStation 21.52 to 25.81 | County : Lake | Intersection Related: All Cases | *See Notes at End of Report.

| Date | Weather | Roadway | Injuries A | B | C | Killed | Type of Crash | Light Condition | Mile | Vehicle Type | DIRP | Maneuver | Event 1 | Loc 1 | Event 2 | Loc 2 | Event 3 | Loc 3 | Unit |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 71878615 | | | | | | | | | | | | | | | | | | | |
| 3/29/2007 1:06 PM | Clear | Dry | 0 | 0 | 0 | 0 | Turning | Daylight | 21.52 | | | | | | | | | | |
| | | | | | | | | | | Pickup | Southwest | Slow/Stop - Right Turn | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 1 |
| | | | | | | | | | | SUV | Southwest | Turning Right | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 2 |
| 73685489 | | | | | | | | | | | | | | | | | | | |
| 6/30/2007 2:53 PM | Clear | Dry | 0 | 1 | 0 | 0 | Overturned | Daylight | 21.52 | | | | | | | | | | |
| | | | | | | | | | | Unknown | East | Skidding/Control Loss | Overturn | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 1 |
| 74329830 | | | | | | | | | | | | | | | | | | | |
| 8/2/2007 7:55 AM | Clear | Dry | 0 | 0 | 0 | 0 | Rear End | Daylight | 21.52 | | | | | | | | | | |
| | | | | | | | | | | Pickup | East | Straight Ahead | Motor Vehicle In Traffic | Intersection | (UNK) | (UNK) | (UNK) | (UNK) | 1 |
| | | | | | | | | | | SUV | East | Slow/Stop In Traffic | Motor Vehicle In Traffic | Intersection | (UNK) | (UNK) | (UNK) | (UNK) | 2 |
| 74348566 | | | | | | | | | | | | | | | | | | | |
| 8/14/2007 8:40 AM | Clear | Dry | 0 | 0 | 0 | 0 | Rear End | Daylight | 21.52 | | | | | | | | | | |
| | | | | | | | | | | Passenger | West | Slow/Stop In Traffic | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 1 |
| | | | | | | | | | | SUV | West | Slow/Stop In Traffic | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 2 |
| 74901984 | | | | | | | | | | | | | | | | | | | |
| 10/22/2007 9:20 PM | Rain | Wet | 0 | 0 | 0 | 0 | Rear End | Darkness | 21.54 | | | | | | | | | | |
| | | | | | | | | | | Passenger | West | Straight Ahead | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 1 |
| | | | | | | | | | | Pickup | West | Slow/Stop - Right Turn | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 2 |
| 71714844 | | | | | | | | | | | | | | | | | | | |
| 2/27/2007 9:50 AM | Clear | Wet | 0 | 0 | 0 | 0 | Rear End | Daylight | 21.56 | | | | | | | | | | |
| | | | | | | | | | | Passenger | East | Straight Ahead | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 1 |

Illinois Department of Transportation
Division of Traffic Safety



## Collision Diagram

**1/1/2007 to 12/31/2007**

Crash Route: IL120 | From MileStation 21.52 to 25.81 | County : Lake | Intersection Related: All Cases | *See Notes at End of Report.

| Date | Weather | Roadway | Injuries A | Injuries B | Injuries C | Killed | Type of Crash | Light Condition | Mile | Vehicle Type | DIRP | Maneuver | Event 1 | Loc 1 | Event 2 | Loc 2 | Event 3 | Loc 3 | Unit |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | Passenger | East | Slow/Stop In Traffic | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 2 |
| | | | | | | | | | | SUV | East | Slow/Stop In Traffic | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 3 |
| 73752909 | | | | | | | | | | | | | | | | | | | |
| 7/28/2007 8:55 PM | Clear | Dry | 0 | 0 | 0 | 0 | Sideswipe Same Direction | Darkness | 21.71 | | | | | | | | | | |
| | | | | | | | | | | Pickup | East | Straight Ahead | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 1 |
| | | | | | | | | | | Passenger | East | Passing/Overtaking | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 2 |
| 70693155 | | | | | | | | | | | | | | | | | | | |
| 1/11/2007 6:24 PM | Rain | Wet | 0 | 0 | 0 | 0 | Animal | Darkness | 21.91 | | | | | | | | | | |
| | | | | | | | | | | Passenger | West | Straight Ahead | Deer | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 1 |
| 71652945 | | | | | | | | | | | | | | | | | | | |
| 2/9/2007 9:00 PM | Clear | Dry | 0 | 0 | 0 | 0 | Animal | Darkness | 21.91 | | | | | | | | | | |
| | | | | | | | | | | SUV | East | Straight Ahead | Deer | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 1 |
| 74610619 | | | | | | | | | | | | | | | | | | | |
| 8/4/2007 5:24 PM | Clear | Dry | 0 | 0 | 0 | 0 | Rear End | Daylight | 22.05 | | | | | | | | | | |
| | | | | | | | | | | Passenger | East | Slow/Stop In Traffic | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 1 |
| | | | | | | | | | | Passenger | East | Straight Ahead | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 2 |
| 75420463 | | | | | | | | | | | | | | | | | | | |
| 11/17/2007 7:15 PM | Clear | Wet | 0 | 0 | 0 | 0 | Animal | Darkness | 22.12 | | | | | | | | | | |
| | | | | | | | | | | SUV | East | Straight Ahead | Deer | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 1 |
| 71129852 | | | | | | | | | | | | | | | | | | | |
| 1/12/2007 6:46 AM | Rain | Wet | 0 | 0 | 0 | 0 | Angle | Dusk | 22.16 | | | | | | | | | | |
| | | | | | | | | | | Passenger | Northwest | Slow/Stop - Left Turn | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 1 |

Illinois Department of Transportation
Division of Traffic Safety



## Collision Diagram

**1/1/2007 to 12/31/2007**

Crash Route: IL120 | From MileStation 21.52 to 25.81 | County : Lake | Intersection Related: All Cases | *See Notes at End of Report.

| Date | Weather | Roadway | Injuries A | Injuries B | Injuries C | Killed | Type of Crash | Light Condition | Mile | Vehicle Type | DIRP | Maneuver | Event 1 | Loc 1 | Event 2 | Loc 2 | Event 3 | Loc 3 | Unit |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | Pickup | South | Straight Ahead | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 2 |
| 71643464 | | | | | | | | | | | | | | | | | | | |
| 2/10/2007 5:31 PM | Clear | Dry | 0 | 2 | 0 | 0 | Turning | Darkness | 22.16 | | | | | | | | | | |
| | | | | | | | | | | Passenger | West | Turning Left | Motor Vehicle In Traffic | Intersection | (UNK) | (UNK) | (UNK) | (UNK) | 1 |
| | | | | | | | | | | SUV | East | Straight Ahead | Motor Vehicle In Traffic | Intersection | (UNK) | (UNK) | (UNK) | (UNK) | 2 |
| 72603699 | | | | | | | | | | | | | | | | | | | |
| 4/28/2007 10:30 AM | Clear | Dry | 0 | 0 | 0 | 0 | Rear End | Daylight | 22.16 | | | | | | | | | | |
| | | | | | | | | | | Passenger | East | Starting In Traffic | Motor Vehicle In Traffic | Intersection | (UNK) | (UNK) | (UNK) | (UNK) | 1 |
| | | | | | | | | | | Passenger | East | Starting In Traffic | Motor Vehicle In Traffic | Intersection | (UNK) | (UNK) | (UNK) | (UNK) | 2 |
| 73036162 | | | | | | | | | | | | | | | | | | | |
| 5/7/2007 5:37 PM | Clear | Dry | 0 | 0 | 0 | 0 | Rear End | Daylight | 22.16 | | | | | | | | | | |
| | | | | | | | | | | Passenger | North | Slow/Stop In Traffic | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 1 |
| | | | | | | | | | | SUV | North | Slow/Stop In Traffic | Motor Vehicle In Traffic | On Pavement (Roadway) | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | 2 |
| | | | | | | | | | | Van/Mini-Van | North | Slow/Stop In Traffic | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 3 |
| 73014177 | | | | | | | | | | | | | | | | | | | |
| 5/21/2007 5:55 AM | Clear | Dry | 0 | 1 | 0 | 0 | Rear End | Daylight | 22.16 | | | | | | | | | | |
| | | | | | | | | | | Passenger | Northwest | Slow/Stop - Right Turn | Motor Vehicle In Traffic | Intersection | (UNK) | (UNK) | (UNK) | (UNK) | 1 |
| | | | | | | | | | | SUV | Northwest | Slow/Stop - Right Turn | Motor Vehicle In Traffic | Intersection | (UNK) | (UNK) | (UNK) | (UNK) | 2 |
| 73726259 | | | | | | | | | | | | | | | | | | | |
| 6/13/2007 4:59 PM | Clear | Dry | 0 | 0 | 0 | 0 | Rear End | Daylight | 22.16 | | | | | | | | | | |
| | | | | | | | | | | Passenger | West | Straight Ahead | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 1 |

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## Collision Diagram

**1/1/2007 to 12/31/2007**

Crash Route: IL120 | From MileStation 21.52 to 25.81 | County : Lake | Intersection Related: All Cases | *See Notes at End of Report.

| Date | Weather | Roadway | Injuries A | Injuries B | Injuries C | Killed | Type of Crash | Light Condition | Mile | Vehicle Type | DIRP | Maneuver | Event 1 | Loc 1 | Event 2 | Loc 2 | Event 3 | Loc 3 | Unit |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | SUV | West | Slow/Stop In Traffic | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 2 |
| 74425695 | | | | | | | | | | | | | | | | | | | |
| 8/31/2007 7:20 AM | Clear | Dry | 0 | 0 | 0 | 0 | Rear End | Daylight | 22.16 | | | | | | | | | | |
| | | | | | | | | | | Passenger | West | Straight Ahead | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 1 |
| | | | | | | | | | | Truck Single Unit | West | Slow/Stop In Traffic | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 2 |
| 74865973 | | | | | | | | | | | | | | | | | | | |
| 10/8/2007 3:36 PM | Rain | Wet | 0 | 0 | 0 | 0 | Rear End | Daylight | 22.16 | | | | | | | | | | |
| | | | | | | | | | | Pickup | West | Straight Ahead | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 1 |
| | | | | | | | | | | Passenger | West | Slow/Stop In Traffic | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 2 |
| 74873191 | | | | | | | | | | | | | | | | | | | |
| 10/18/2007 7:55 AM | Rain | Wet | 0 | 0 | 1 | 0 | Rear End | Daylight | 22.16 | | | | | | | | | | |
| | | | | | | | | | | Passenger | South | Straight Ahead | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 1 |
| | | | | | | | | | | Passenger | South | Slow/Stop In Traffic | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 2 |
| | | | | | | | | | | Pickup | South | Slow/Stop In Traffic | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 3 |
| 75442749 | | | | | | | | | | | | | | | | | | | |
| 12/15/2007 6:53 AM | Snow | Snow or Slush | 0 | 0 | 1 | 0 | Turning | Daylight | 22.16 | | | | | | | | | | |
| | | | | | | | | | | SUV | North | Turning Left | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 1 |
| | | | | | | | | | | Van/Mini-Van | South | Straight Ahead | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 2 |
| 75439976 | | | | | | | | | | | | | | | | | | | |
| 12/23/2007 9:05 AM | Severe Cross Wind | Ice | 0 | 0 | 0 | 0 | Rear End | Daylight | 22.16 | | | | | | | | | | |
| | | | | | | | | | | Passenger | South | Skidding/Control Loss | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 1 |

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## Collision Diagram

1/1/2007 to 12/31/2007

Crash Route: IL120 | From MileStation 21.52 to 25.81 | County : Lake | Intersection Related: All Cases | *See Notes at End of Report.

| Date | Weather | Roadway | Injuries A | Injuries B | Injuries C | Killed | Type of Crash | Light Condition | Mile | Vehicle Type | DIRP | Maneuver | Event 1 | Loc 1 | Event 2 | Loc 2 | Event 3 | Loc 3 | Unit |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | SUV | South | Slow/Stop In Traffic | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 2 |
| 74333048 | | | | | | | | | | | | | | | | | | | |
| 8/28/2007 5:45 AM | Clear | Dry | 0 | 0 | 0 | 0 | Rear End | Daylight | 22.23 | | | | | | | | | | |
| | | | | | | | | | | Passenger | West | Straight Ahead | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 1 |
| | | | | | | | | | | Van/Mini-Van | West | Slow/Stop In Traffic | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 2 |
| | | | | | | | | | | Passenger | West | Slow/Stop In Traffic | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 3 |
| | | | | | | | | | | Pickup | West | Slow/Stop In Traffic | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 4 |
| 72604002 | | | | | | | | | | | | | | | | | | | |
| 4/5/2007 5:55 PM | Clear | Dry | 0 | 0 | 0 | 0 | Fixed Object | Daylight | 22.25 | | | | | | | | | | |
| | | | | | | | | | | Passenger | West | Straight Ahead | Ran Off Roadway | Off Pavement - Right | Other Fixed Object | Off Pavement - Right | (UNK) | (UNK) | 1 |
| 73554750 | | | | | | | | | | | | | | | | | | | |
| 6/15/2007 3:00 PM | Clear | Dry | 0 | 0 | 0 | 0 | Fixed Object | Daylight | 22.59 | | | | | | | | | | |
| | | | | | | | | | | Truck Single Unit | West | Skidding/Control Loss | Ran Off Roadway | Off Pavement - Right | Guardrail End | Off Pavement - Right | Guardrail Face | Off Pavement - Right | 1 |
| 75446344 | | | | | | | | | | | | | | | | | | | |
| 12/17/2007 9:13 AM | Clear | Wet | 0 | 1 | 0 | 0 | Rear End | Daylight | 22.60 | | | | | | | | | | |
| | | | | | | | | | | Pickup | East | Straight Ahead | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 1 |
| | | | | | | | | | | Passenger | East | Slow/Stop In Traffic | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 2 |
| | | | | | | | | | | Unknown | East | Slow/Stop In Traffic | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 3 |
| 70704556 | | | | | | | | | | | | | | | | | | | |
| 1/4/2007 3:40 PM | Rain | Wet | 0 | 0 | 0 | 0 | Rear End | Daylight | 22.68 | | | | | | | | | | |
| | | | | | | | | | | Passenger | West | Straight Ahead | Motor Vehicle In Traffic | On Pavement (Roadway) | Ran Off Roadway | Off Pavement - Right | (UNK) | (UNK) | 1 |

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## Collision Diagram

**1/1/2007 to 12/31/2007**

Crash Route: IL120 | From MileStation 21.52 to 25.81 | County : Lake | Intersection Related: All Cases | *See Notes at End of Report.

| Date | Weather | Roadway | Injuries A | Injuries B | Injuries C | Killed | Type of Crash | Light Condition | Mile | Vehicle Type | DIRP | Maneuver | Event 1 | Loc 1 | Event 2 | Loc 2 | Event 3 | Loc 3 | Unit |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | SUV | West | Slow/Stop In Traffic | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 2 |
| 70704614 | | | | | | | | | | | | | | | | | | | |
| 1/19/2007 9:00 AM | Clear | Dry | 0 | 0 | 0 | 0 | Rear End | Daylight | 22.68 | | | | | | | | | | |
| | | | | | | | | | | Passenger | West | Skidding/Control Loss | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 1 |
| | | | | | | | | | | Passenger | West | Slow/Stop - Left Turn | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 2 |
| 70854955 | | | | | | | | | | | | | | | | | | | |
| 2/28/2007 6:14 PM | Snow | Wet | 0 | 1 | 0 | 0 | Turning | Darkness, Lighted Road | 22.68 | | | | | | | | | | |
| | | | | | | | | | | SUV | Southwest | Turning Left | Other Non-Collision | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 1 |
| | | | | | | | | | | Passenger | West | Straight Ahead | Ran Off Roadway | Intersection | Utility Pole | Off Pavement - Right | (UNK) | (UNK) | 2 |
| 73385643 | | | | | | | | | | | | | | | | | | | |
| 4/26/2007 9:43 AM | Rain | Wet | 0 | 0 | 0 | 0 | Rear End | Daylight | 22.68 | | | | | | | | | | |
| | | | | | | | | | | Pickup | West | Straight Ahead | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 1 |
| | | | | | | | | | | Pickup | West | Slow/Stop - Left Turn | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 2 |
| 72851611 | | | | | | | | | | | | | | | | | | | |
| 5/24/2007 6:00 PM | Clear | Dry | 0 | 0 | 0 | 0 | Turning | Daylight | 22.68 | | | | | | | | | | |
| | | | | | | | | | | Passenger | Northeast | Turning Right | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 1 |
| | | | | | | | | | | Van/Mini-Van | Northwest | Turning Left | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 2 |
| 73431249 | | | | | | | | | | | | | | | | | | | |
| 6/2/2007 1:28 PM | Clear | Dry | 0 | 0 | 0 | 0 | Rear End | Daylight | 22.68 | | | | | | | | | | |
| | | | | | | | | | | SUV | West | Straight Ahead | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 1 |
| | | | | | | | | | | Passenger | West | Slow/Stop In Traffic | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 2 |

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## Collision Diagram

**1/1/2007 to 12/31/2007**

Crash Route: IL120 | From MileStation 21.52 to 25.81 | County : Lake | Intersection Related: All Cases | *See Notes at End of Report.

| Date | Weather | Roadway | ------ A | Injuries B | ------ C | Killed | Type of Crash | Light Condition | Mile | Vehicle Type | DIRP | Maneuver | Event 1 | Loc 1 | Event 2 | Loc 2 | Event 3 | Loc 3 | Unit |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | Passenger | West | Turning Left | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 3 |
| 73469314 | | | | | | | | | | | | | | | | | | | |
| 6/12/2007 6:23 AM | Clear | Dry | 0 | 1 | 0 | 0 | Rear End | Daylight | 22.68 | | | | | | | | | | |
| | | | | | | | | | | Truck Single Unit | East | Straight Ahead | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 1 |
| | | | | | | | | | | Passenger | East | Slow/Stop In Traffic | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 2 |
| 73432676 | | | | | | | | | | | | | | | | | | | |
| 6/24/2007 5:30 AM | Clear | Dry | 0 | 0 | 0 | 0 | Animal | Dawn | 22.68 | | | | | | | | | | |
| | | | | | | | | | | SUV | West | Straight Ahead | Deer | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 1 |
| 73752941 | | | | | | | | | | | | | | | | | | | |
| 7/7/2007 5:55 PM | Clear | Dry | 0 | 0 | 0 | 0 | Turning | Daylight | 22.68 | | | | | | | | | | |
| | | | | | | | | | | Pickup | Northeast | Turning Right | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 1 |
| | | | | | | | | | | Pickup | Northwest | Turning Left | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 2 |
| 73752958 | | | | | | | | | | | | | | | | | | | |
| 7/17/2007 3:59 PM | Clear | Dry | 0 | 0 | 0 | 0 | Rear End | Daylight | 22.68 | | | | | | | | | | |
| | | | | | | | | | | Passenger | North | Slow/Stop - Left Turn | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 1 |
| | | | | | | | | | | Passenger | North | Slow/Stop - Left Turn | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 2 |
| 73737967 | | | | | | | | | | | | | | | | | | | |
| 7/26/2007 11:20 AM | Rain | Wet | 0 | 0 | 3 | 0 | Rear End | Daylight | 22.68 | | | | | | | | | | |
| | | | | | | | | | | Passenger | West | Straight Ahead | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 1 |
| | | | | | | | | | | Passenger | West | Slow/Stop In Traffic | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 2 |
| | | | | | | | | | | Van/Mini-Van | West | Slow/Stop In Traffic | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 3 |

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## Collision Diagram

**1/1/2007 to 12/31/2007**

Crash Route: IL120 | From MileStation 21.52 to 25.81 | County : Lake | Intersection Related: All Cases | *See Notes at End of Report.

| Date | Weather | Roadway | Injuries A | Injuries B | Injuries C | Killed | Type of Crash | Light Condition | Mile | Vehicle Type | DIRP | Maneuver | Event 1 | Loc 1 | Event 2 | Loc 2 | Event 3 | Loc 3 | Unit |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 74633447 | | | | | | | | | | | | | | | | | | | |
| 8/18/2007 2:18 PM | Rain | Wet | 0 | 0 | 0 | 0 | Rear End | Daylight | 22.68 | | | | | | | | | | |
| | | | | | | | | | | SUV | West | Straight Ahead | Motor Vehicle In Traffic | Intersection | (UNK) | (UNK) | (UNK) | (UNK) | 1 |
| | | | | | | | | | | Passenger | West | Slow/Stop In Traffic | Motor Vehicle In Traffic | Intersection | (UNK) | (UNK) | (UNK) | (UNK) | 2 |
| 75430983 | | | | | | | | | | | | | | | | | | | |
| 10/18/2007 6:07 PM | Clear | Dry | 0 | 0 | 0 | 0 | Turning | Daylight | 22.68 | | | | | | | | | | |
| | | | | | | | | | | Passenger | North | Turning Right | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 1 |
| | | | | | | | | | | Passenger | East | Straight Ahead | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 2 |
| 75430850 | | | | | | | | | | | | | | | | | | | |
| 10/26/2007 10:07 PM | Rain | Wet | 0 | 0 | 0 | 0 | Rear End | Darkness, Lighted Road | 22.68 | | | | | | | | | | |
| | | | | | | | | | | Passenger | West | Straight Ahead | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 1 |
| | | | | | | | | | | Passenger | West | Straight Ahead | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 2 |
| 75446187 | | | | | | | | | | | | | | | | | | | |
| 12/17/2007 11:15 AM | Clear | Wet | 0 | 0 | 0 | 0 | Rear End | Daylight | 22.68 | | | | | | | | | | |
| | | | | | | | | | | Passenger | West | Skidding/Control Loss | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 1 |
| | | | | | | | | | | Passenger | West | Slow/Stop In Traffic | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 2 |
| 75446062 | | | | | | | | | | | | | | | | | | | |
| 12/16/2007 2:15 PM | Clear | Dry | 0 | 0 | 0 | 0 | Angle | Daylight | 22.72 | | | | | | | | | | |
| | | | | | | | | | | Snowmobile | North | Other | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 1 |
| | | | | | | | | | | Passenger | East | Straight Ahead | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 2 |

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## Collision Diagram

**1/1/2007 to 12/31/2007**

Crash Route: IL120 | From MileStation 21.52 to 25.81 | County : Lake | Intersection Related: All Cases | *See Notes at End of Report.

| Date | Weather | Roadway | ------ A | Injuries B | ------ C | Killed | Type of Crash | Light Condition | Mile | Vehicle Type | DIRP | Maneuver | Event 1 | Loc 1 | Event 2 | Loc 2 | Event 3 | Loc 3 | Unit |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 73431009 | | | | | | | | | | | | | | | | | | | |
| 6/15/2007 4:51 PM | Clear | Dry | 0 | 0 | 1 | 0 | Rear End | Daylight | 22.94 | | | | | | | | | | |
| | | | | | | | | | | Passenger | West | Straight Ahead | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 1 |
| | | | | | | | | | | Passenger | West | Straight Ahead | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 2 |
| | | | | | | | | | | Passenger | West | Slow/Stop - Left Turn | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 3 |
| 70704176 | | | | | | | | | | | | | | | | | | | |
| 1/24/2007 4:55 PM | Clear | Dry | 0 | 0 | 0 | 0 | Rear End | Darkness, Lighted Road | 22.96 | | | | | | | | | | |
| | | | | | | | | | | Passenger | East | Unknown | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 1 |
| | | | | | | | | | | Passenger | East | Slow/Stop In Traffic | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 2 |
| 73385759 | | | | | | | | | | | | | | | | | | | |
| 4/30/2007 5:45 AM | Clear | Dry | 0 | 0 | 0 | 0 | Rear End | Dawn | 22.96 | | | | | | | | | | |
| | | | | | | | | | | Pickup | Southwest | Slow/Stop - Right Turn | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 1 |
| | | | | | | | | | | SUV | Southwest | Slow/Stop - Right Turn | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 2 |
| 72800048 | | | | | | | | | | | | | | | | | | | |
| 5/8/2007 7:02 AM | Clear | Dry | 0 | 0 | 0 | 0 | Rear End | Daylight | 22.96 | | | | | | | | | | |
| | | | | | | | | | | SUV | South | Straight Ahead | Motor Vehicle In Traffic | Intersection | (UNK) | (UNK) | (UNK) | (UNK) | 1 |
| | | | | | | | | | | Passenger | South | Straight Ahead | Motor Vehicle In Traffic | Intersection | (UNK) | (UNK) | (UNK) | (UNK) | 2 |
| 72800055 | | | | | | | | | | | | | | | | | | | |
| 5/8/2007 2:32 PM | Clear | Dry | 0 | 0 | 0 | 0 | Fixed Object | Daylight | 22.96 | | | | | | | | | | |
| | | | | | | | | | | Pickup | Northeast | Avoiding Vehicle/Objects | Ran Off Roadway | Off Pavement - Right | Utility Pole | Off Pavement - Right | (UNK) | (UNK) | 1 |

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## Collision Diagram

**1/1/2007 to 12/31/2007**

Crash Route: IL120 | From MileStation 21.52 to 25.81 | County : Lake | Intersection Related: All Cases | *See Notes at End of Report.

| Date | Weather | Roadway | Injuries A | Injuries B | Injuries C | Killed | Type of Crash | Light Condition | Mile | Vehicle Type | DIRP | Maneuver | Event 1 | Loc 1 | Event 2 | Loc 2 | Event 3 | Loc 3 | Unit |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 72852163 | | | | | | | | | | | | | | | | | | | |
| 5/17/2007 11:24 AM | Clear | Dry | 0 | 0 | 0 | 0 | Rear End | Daylight | 22.96 | | | | | | | | | | |
| | | | | | | | | | | Passenger | South | Straight Ahead | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 1 |
| | | | | | | | | | | Pickup | South | Slow/Stop - Right Turn | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 2 |
| 72851819 | | | | | | | | | | | | | | | | | | | |
| 5/19/2007 2:30 PM | Clear | Dry | 0 | 0 | 0 | 0 | Rear End | Daylight | 22.96 | | | | | | | | | | |
| | | | | | | | | | | Pickup | East | Straight Ahead | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 1 |
| | | | | | | | | | | Passenger | East | Slow/Stop In Traffic | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 2 |
| 73752933 | | | | | | | | | | | | | | | | | | | |
| 7/30/2007 12:02 PM | Clear | Wet | 0 | 0 | 0 | 0 | Rear End | Daylight | 22.96 | | | | | | | | | | |
| | | | | | | | | | | Passenger | South | Unknown | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 1 |
| | | | | | | | | | | Passenger | South | Unknown | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 2 |
| 74611427 | | | | | | | | | | | | | | | | | | | |
| 8/1/2007 3:38 PM | Clear | Dry | 0 | 0 | 0 | 0 | Turning | Daylight | 22.96 | | | | | | | | | | |
| | | | | | | | | | | Passenger | South | Turning Left | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 1 |
| | | | | | | | | | | Van/Mini-Van | West | Straight Ahead | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 2 |
| 74632225 | | | | | | | | | | | | | | | | | | | |
| 8/9/2007 4:24 PM | Clear | Dry | 0 | 1 | 0 | 0 | Rear End | Daylight | 22.96 | | | | | | | | | | |
| | | | | | | | | | | Passenger | East | Straight Ahead | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 1 |
| | | | | | | | | | | Passenger | East | Slow/Stop In Traffic | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 2 |

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## Collision Diagram

**1/1/2007 to 12/31/2007**

Crash Route: IL120 | From MileStation 21.52 to 25.81 | County : Lake | Intersection Related: All Cases | *See Notes at End of Report.

| Date | Weather | Roadway | Injuries A | Injuries B | Injuries C | Killed | Type of Crash | Light Condition | Mile | Vehicle Type | DIRP | Maneuver | Event 1 | Loc 1 | Event 2 | Loc 2 | Event 3 | Loc 3 | Unit |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 74631458 | | | | | | | | | | | | | | | | | | | |
| 8/14/2007 6:30 AM | Rain | Wet | 0 | 0 | 0 | 0 | Rear End | Daylight | 22.96 | | | | | | | | | | |
| | | | | | | | | | | Passenger | South | Straight Ahead | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 1 |
| | | | | | | | | | | Passenger | South | Slow/Stop - Right Turn | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 2 |
| 75432369 | | | | | | | | | | | | | | | | | | | |
| 10/16/2007 4:10 PM | Clear | Dry | 1 | 0 | 0 | 0 | Rear End | Daylight | 22.96 | | | | | | | | | | |
| | | | | | | | | | | Passenger | East | Straight Ahead | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 1 |
| | | | | | | | | | | Passenger | East | Slow/Stop In Traffic | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 2 |
| 75423046 | | | | | | | | | | | | | | | | | | | |
| 11/14/2007 10:09 AM | Clear | Dry | 0 | 0 | 0 | 0 | Parked Motor Vehicle | Daylight | 22.96 | | | | | | | | | | |
| | | | | | | | | | | Other Vehicle With Trailer | Northeast | Straight Ahead | Hit Parked Vehicle | Off Pavement - Right | (UNK) | (UNK) | (UNK) | (UNK) | 1 |
| | | | | | | | | | | Pickup | Unknown | Parked | Motor Vehicle In Traffic | Off Pavement - Right | (UNK) | (UNK) | (UNK) | (UNK) | 2 |
| 75446104 | | | | | | | | | | | | | | | | | | | |
| 12/13/2007 10:45 PM | Snow | Wet | 0 | 0 | 0 | 0 | Rear End | Daylight | 22.96 | | | | | | | | | | |
| | | | | | | | | | | Pickup | East | Skidding/Control Loss | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 1 |
| | | | | | | | | | | Tractor With Semi -Trailer | East | Slow/Stop In Traffic | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 2 |
| 75446179 | | | | | | | | | | | | | | | | | | | |
| 12/20/2007 12:00 PM | Clear | Unknown | 0 | 0 | 0 | 0 | Rear End | Daylight | 22.96 | | | | | | | | | | |
| | | | | | | | | | | SUV | South | Slow/Stop - Right Turn | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 1 |
| | | | | | | | | | | Passenger | South | Slow/Stop - Right Turn | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 2 |

Illinois Department of Transportation
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## Collision Diagram

**1/1/2007 to 12/31/2007**

Crash Route: IL120 | From MileStation 21.52 to 25.81 | County : Lake | Intersection Related: All Cases | *See Notes at End of Report.

| Date | Weather | Roadway | Injuries A | Injuries B | Injuries C | Killed | Type of Crash | Light Condition | Mile | Vehicle Type | DIRP | Maneuver | Event 1 | Loc 1 | Event 2 | Loc 2 | Event 3 | Loc 3 | Unit |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 72818792 | | | | | | | | | | | | | | | | | | | |
| 5/27/2007 8:20 AM | Clear | Dry | 0 | 0 | 0 | 0 | Rear End | Daylight | 23.22 | | | | | | | | | | |
| | | | | | | | | | | Passenger | North | Straight Ahead | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 1 |
| | | | | | | | | | | Van/Mini-Van | North | Slow/Stop - Right Turn | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 2 |
| 73752925 | | | | | | | | | | | | | | | | | | | |
| 7/11/2007 7:31 PM | Clear | Dry | 0 | 0 | 0 | 0 | Angle | Daylight | 23.22 | | | | | | | | | | |
| | | | | | | | | | | SUV | South | Straight Ahead | Motor Vehicle In Traffic | Intersection | (UNK) | (UNK) | (UNK) | (UNK) | 1 |
| | | | | | | | | | | Passenger | West | Straight Ahead | Motor Vehicle In Traffic | Intersection | (UNK) | (UNK) | (UNK) | (UNK) | 2 |
| 74011958 | | | | | | | | | | | | | | | | | | | |
| 7/20/2007 1:47 AM | Clear | Dry | 0 | 0 | 0 | 0 | Angle | Darkness, Lighted Road | 23.22 | | | | | | | | | | |
| | | | | | | | | | | SUV | North | Straight Ahead | Motor Vehicle In Traffic | Intersection | (UNK) | (UNK) | (UNK) | (UNK) | 1 |
| | | | | | | | | | | Passenger | East | Straight Ahead | Motor Vehicle In Traffic | Intersection | (UNK) | (UNK) | (UNK) | (UNK) | 2 |
| 74586587 | | | | | | | | | | | | | | | | | | | |
| 8/24/2007 4:18 PM | Clear | Dry | 0 | 2 | 2 | 0 | Angle | Daylight | 23.22 | | | | | | | | | | |
| | | | | | | | | | | Van/Mini-Van | South | Straight Ahead | Motor Vehicle In Traffic | On Pavement (Roadway) | Curb | Off Pavement - Left | Motor Vehicle In Traffic | On Pavement (Roadway) | 1 |
| | | | | | | | | | | SUV | East | Straight Ahead | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 2 |
| | | | | | | | | | | SUV | South | Unknown | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 3 |
| 74634536 | | | | | | | | | | | | | | | | | | | |
| 8/31/2007 2:25 PM | Clear | Dry | 0 | 0 | 0 | 0 | Rear End | Daylight | 23.22 | | | | | | | | | | |
| | | | | | | | | | | Pickup | North | Slow/Stop - Right Turn | Motor Vehicle In Traffic | Intersection | (UNK) | (UNK) | (UNK) | (UNK) | 1 |
| | | | | | | | | | | Passenger | North | Slow/Stop - Right Turn | Motor Vehicle In Traffic | Intersection | (UNK) | (UNK) | (UNK) | (UNK) | 2 |

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## Collision Diagram

**1/1/2007 to 12/31/2007**

Crash Route: IL120 | From MileStation 21.52 to 25.81 | County : Lake | Intersection Related: All Cases | *See Notes at End of Report.

| Date | Weather | Roadway | ------ A | Injuries B | ------ C | Killed | Type of Crash | Light Condition | Mile | Vehicle Type | DIRP | Maneuver | Event 1 | Loc 1 | Event 2 | Loc 2 | Event 3 | Loc 3 | Unit |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 75409359 | | | | | | | | | | | | | | | | | | | |
| 11/23/2007 12:49 PM | Clear | Dry | 0 | 0 | 0 | 0 | Angle | Daylight | 23.22 | | | | | | | | | | |
| | | | | | | | | | | SUV | East | Slow/Stop - Right Turn | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 1 |
| | | | | | | | | | | Passenger | Northeast | Straight Ahead | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 2 |
| 75446021 | | | | | | | | | | | | | | | | | | | |
| 12/16/2007 9:30 AM | Clear | Snow or Slush | 0 | 0 | 0 | 0 | Fixed Object | Daylight | 23.22 | | | | | | | | | | |
| | | | | | | | | | | Passenger | South | U-Turn | Ran Off Roadway | Off Pavement - Right | Traffic Signal | Off Pavement - Right | (UNK) | (UNK) | 1 |
| 70693247 | | | | | | | | | | | | | | | | | | | |
| 1/26/2007 1:05 PM | Clear | Dry | 0 | 0 | 0 | 0 | Turning | Daylight | 23.35 | | | | | | | | | | |
| | | | | | | | | | | Van/Mini-Van | Northeast | Slow/Stop - Right Turn | Motor Vehicle In Traffic | Intersection | (UNK) | (UNK) | (UNK) | (UNK) | 1 |
| | | | | | | | | | | Passenger | Northeast | Slow/Stop - Right Turn | Motor Vehicle In Traffic | Intersection | (UNK) | (UNK) | (UNK) | (UNK) | 2 |
| 75430637 | | | | | | | | | | | | | | | | | | | |
| 10/17/2007 6:21 PM | Clear | Dry | 0 | 0 | 0 | 0 | Turning | Darkness, Lighted Road | 23.35 | | | | | | | | | | |
| | | | | | | | | | | Pickup | North | Turning Left | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 1 |
| | | | | | | | | | | Passenger | East | Straight Ahead | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 2 |
| 72385248 | | | | | | | | | | | | | | | | | | | |
| 8/4/2007 6:57 PM | Rain | Wet | 0 | 0 | 0 | 0 | Overturned | Daylight | 23.62 | | | | | | | | | | |
| | | | | | | | | | | SUV | West | Straight Ahead | Ran Off Roadway | Off Pavement - Right | Overturn | Other | (UNK) | (UNK) | 1 |
| 74845181 | | | | | | | | | | | | | | | | | | | |
| 11/19/2007 12:19 PM | Clear | Wet | 0 | 0 | 0 | 0 | Rear End | Daylight | 23.90 | | | | | | | | | | |
| | | | | | | | | | | Passenger | East | Straight Ahead | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 1 |
| | | | | | | | | | | Passenger | East | Slow/Stop In Traffic | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 2 |

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## Collision Diagram

**1/1/2007 to 12/31/2007**

Crash Route: IL120 | From MileStation 21.52 to 25.81 | County : Lake | Intersection Related: All Cases | *See Notes at End of Report.

| Date | Weather | Roadway | Injuries A | Injuries B | Injuries C | Killed | Type of Crash | Light Condition | Mile | Vehicle Type | DIRP | Maneuver | Event 1 | Loc 1 | Event 2 | Loc 2 | Event 3 | Loc 3 | Unit |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 73937435 | | | | | | | | | | | | | | | | | | | |
| 8/23/2007 7:50 AM | Rain | Wet | 0 | 0 | 0 | 0 | Rear End | Daylight | 23.91 | | | | | | | | | | |
| | | | | | | | | | | Passenger | East | Straight Ahead | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 1 |
| | | | | | | | | | | Pickup | East | Slow/Stop In Traffic | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 2 |
| | | | | | | | | | | Passenger | East | Slow/Stop In Traffic | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 3 |
| 72685761 | | | | | | | | | | | | | | | | | | | |
| 8/16/2007 6:15 AM | Clear | Dry | 0 | 0 | 0 | 0 | Rear End | Daylight | 24.08 | | | | | | | | | | |
| | | | | | | | | | | Passenger | East | Straight Ahead | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 1 |
| | | | | | | | | | | SUV | East | Slow/Stop In Traffic | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 2 |
| 71769129 | | | | | | | | | | | | | | | | | | | |
| 7/12/2007 6:35 AM | Clear | Dry | 0 | 0 | 0 | 0 | Rear End | Daylight | 24.13 | | | | | | | | | | |
| | | | | | | | | | | Passenger | East | Straight Ahead | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 1 |
| | | | | | | | | | | Pickup | East | Slow/Stop In Traffic | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 2 |
| 71303325 | | | | | | | | | | | | | | | | | | | |
| 5/16/2007 7:00 AM | Clear | Dry | 0 | 0 | 0 | 0 | Rear End | Daylight | 24.14 | | | | | | | | | | |
| | | | | | | | | | | SUV | East | Straight Ahead | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 1 |
| | | | | | | | | | | SUV | East | Slow/Stop In Traffic | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 2 |
| 70798756 | | | | | | | | | | | | | | | | | | | |
| 4/11/2007 6:20 AM | Clear | Wet | 0 | 0 | 0 | 0 | Rear End | Daylight | 24.25 | | | | | | | | | | |
| | | | | | | | | | | Passenger | East | Straight Ahead | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 1 |
| | | | | | | | | | | Unknown | Unknown | Unknown | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 2 |

Illinois Department of Transportation
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## Collision Diagram

**1/1/2007 to 12/31/2007**

Crash Route: IL120 | From MileStation 21.52 to 25.81 | County : Lake | Intersection Related: All Cases | *See Notes at End of Report.

| Date | Weather | Roadway | ------ A | Injuries B | ------ C | Killed | Type of Crash | Light Condition | Mile | Vehicle Type | DIRP | Maneuver | Event 1 | Loc 1 | Event 2 | Loc 2 | Event 3 | Loc 3 | Unit |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 70197629 | | | | | | | | | | | | | | | | | | | |
| 2/14/2007 3:00 PM | Snow | Wet | 0 | 0 | 2 | 0 | Rear End | Daylight | 24.27 | | | | | | | | | | |
| | | | | | | | | | | Pickup | East | Straight Ahead | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 1 |
| | | | | | | | | | | Passenger | East | Slow/Stop In Traffic | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 2 |
| 74399940 | | | | | | | | | | | | | | | | | | | |
| 11/27/2007 5:45 AM | Clear | Dry | 0 | 0 | 0 | 0 | Rear End | Darkness | 24.30 | | | | | | | | | | |
| | | | | | | | | | | Passenger | East | Straight Ahead | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 1 |
| | | | | | | | | | | Van/Mini-Van | East | Slow/Stop In Traffic | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 2 |
| 74847096 | | | | | | | | | | | | | | | | | | | |
| 12/20/2007 5:22 PM | Clear | Dry | 0 | 0 | 0 | 0 | Turning | Darkness, Lighted Road | 24.36 | | | | | | | | | | |
| | | | | | | | | | | Passenger | West | Turning Left | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 1 |
| | | | | | | | | | | Passenger | East | Straight Ahead | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 2 |
| 70070909 | | | | | | | | | | | | | | | | | | | |
| 1/31/2007 6:18 AM | Clear | Dry | 0 | 0 | 0 | 0 | Rear End | Dawn | 24.37 | | | | | | | | | | |
| | | | | | | | | | | Passenger | Southeast | Slow/Stop In Traffic | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 1 |
| | | | | | | | | | | Passenger | Southeast | Slow/Stop In Traffic | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 2 |
| 70348339 | | | | | | | | | | | | | | | | | | | |
| 2/1/2007 4:50 PM | Clear | Dry | 0 | 0 | 0 | 0 | Rear End | Daylight | 24.37 | | | | | | | | | | |
| | | | | | | | | | | Passenger | East | Straight Ahead | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 1 |
| | | | | | | | | | | Passenger | East | Slow/Stop In Traffic | Motor Vehicle In Traffic | On Pavement (Roadway) | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | 2 |
| | | | | | | | | | | Passenger | East | Slow/Stop In Traffic | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 3 |

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## Collision Diagram

**1/1/2007 to 12/31/2007**

Crash Route: IL120 | From MileStation 21.52 to 25.81 | County : Lake | Intersection Related: All Cases | *See Notes at End of Report.

| Date | Weather | Roadway | Injuries A | Injuries B | Injuries C | Killed | Type of Crash | Light Condition | Mile | Vehicle Type | DIRP | Maneuver | Event 1 | Loc 1 | Event 2 | Loc 2 | Event 3 | Loc 3 | Unit |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 70070628 | | | | | | | | | | | | | | | | | | | |
| 2/7/2007 11:55 AM | Other | Wet | 0 | 0 | 0 | 0 | Rear End | Daylight | 24.37 | | | | | | | | | | |
| | | | | | | | | | | SUV | West | Slow/Stop In Traffic | Motor Vehicle In Traffic | Intersection | (UNK) | (UNK) | (UNK) | (UNK) | 1 |
| | | | | | | | | | | Passenger | West | Straight Ahead | Motor Vehicle In Traffic | Intersection | (UNK) | (UNK) | (UNK) | (UNK) | 2 |
| 73156416 | | | | | | | | | | | | | | | | | | | |
| 8/30/2007 7:15 AM | Clear | Dry | 0 | 0 | 0 | 0 | Rear End | Daylight | 24.37 | | | | | | | | | | |
| | | | | | | | | | | Truck Single Unit | East | Backing | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 1 |
| | | | | | | | | | | Passenger | East | Slow/Stop In Traffic | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 2 |
| 73350290 | | | | | | | | | | | | | | | | | | | |
| 9/22/2007 12:45 PM | Clear | Dry | 0 | 0 | 3 | 0 | Rear End | Daylight | 24.37 | | | | | | | | | | |
| | | | | | | | | | | Pickup | East | Straight Ahead | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 1 |
| | | | | | | | | | | Passenger | East | Slow/Stop In Traffic | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 2 |
| | | | | | | | | | | Passenger | East | Slow/Stop In Traffic | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 3 |
| 74400144 | | | | | | | | | | | | | | | | | | | |
| 11/27/2007 6:11 AM | Clear | Dry | 0 | 0 | 0 | 0 | Sideswipe Same Direction | Darkness | 24.37 | | | | | | | | | | |
| | | | | | | | | | | Pickup | East | Straight Ahead | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 1 |
| | | | | | | | | | | Passenger | East | Straight Ahead | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 2 |
| 74845884 | | | | | | | | | | | | | | | | | | | |
| 12/7/2007 7:45 PM | Clear | Wet | 0 | 0 | 0 | 0 | Rear End | Darkness, Lighted Road | 24.37 | | | | | | | | | | |
| | | | | | | | | | | Passenger | East | Straight Ahead | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 1 |
| | | | | | | | | | | Passenger | East | Slow/Stop In Traffic | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 2 |

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## Collision Diagram

**1/1/2007 to 12/31/2007**

Crash Route: IL120 | From MileStation 21.52 to 25.81 | County : Lake | Intersection Related: All Cases | *See Notes at End of Report.

| Date | Weather | Roadway | ------ A | Injuries B | ------ C | Killed | Type of Crash | Light Condition | Mile | Vehicle Type | DIRP | Maneuver | Event 1 | Loc 1 | Event 2 | Loc 2 | Event 3 | Loc 3 | Unit |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 70675632 | | | | | | | | | | | | | | | | | | | |
| 1/30/2007 3:57 PM | Clear | Dry | 0 | 0 | 0 | 0 | Rear End | Daylight | 24.42 | | | | | | | | | | |
| | | | | | | | | | | Van/Mini-Van | East | Straight Ahead | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 1 |
| | | | | | | | | | | SUV | East | Slow/Stop In Traffic | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 2 |
| | | | | | | | | | | Passenger | East | Slow/Stop In Traffic | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 3 |
| 74849142 | | | | | | | | | | | | | | | | | | | |
| 12/26/2007 4:34 PM | Clear | Dry | 0 | 0 | 0 | 0 | Turning | Dusk | 24.42 | | | | | | | | | | |
| | | | | | | | | | | Pickup | West | Turning Left | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 1 |
| | | | | | | | | | | Passenger | East | Straight Ahead | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 2 |
| 71187629 | | | | | | | | | | | | | | | | | | | |
| 6/1/2007 11:27 AM | Clear | Dry | 0 | 0 | 0 | 0 | Turning | Daylight | 24.46 | | | | | | | | | | |
| | | | | | | | | | | Passenger | North | Turning Left | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 1 |
| | | | | | | | | | | Pickup | East | Straight Ahead | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 2 |
| 71428635 | | | | | | | | | | | | | | | | | | | |
| 6/2/2007 11:55 PM | Clear | Dry | 0 | 0 | 0 | 0 | Turning | Daylight | 24.46 | | | | | | | | | | |
| | | | | | | | | | | Passenger | Northwest | Turning Left | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 1 |
| | | | | | | | | | | Passenger | East | Straight Ahead | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 2 |
| 71937536 | | | | | | | | | | | | | | | | | | | |
| 7/12/2007 5:10 PM | Clear | Dry | 0 | 0 | 0 | 0 | Rear End | Daylight | 24.46 | | | | | | | | | | |
| | | | | | | | | | | Passenger | East | Straight Ahead | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 1 |
| | | | | | | | | | | Passenger | East | Straight Ahead | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 2 |

Illinois Department of Transportation
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## Collision Diagram

**1/1/2007 to 12/31/2007**

Crash Route: IL120 | From MileStation 21.52 to 25.81 | County : Lake | Intersection Related: All Cases | *See Notes at End of Report.

| Date | Weather | Roadway | Injuries A | Injuries B | Injuries C | Killed | Type of Crash | Light Condition | Mile | Vehicle Type | DIRP | Maneuver | Event 1 | Loc 1 | Event 2 | Loc 2 | Event 3 | Loc 3 | Unit |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 70024401 | | | | | | | | | | | | | | | | | | | |
| 1/16/2007 5:50 PM | Clear | Dry | 0 | 0 | 0 | 0 | Turning | Darkness, Lighted Road | 24.50 | | | | | | | | | | |
| | | | | | | | | | | Passenger | South | Turning Left | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 1 |
| | | | | | | | | | | Passenger | East | Straight Ahead | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 2 |
| 71628515 | | | | | | | | | | | | | | | | | | | |
| 6/29/2007 6:38 PM | Clear | Dry | 0 | 0 | 0 | 0 | Turning | Daylight | 24.50 | | | | | | | | | | |
| | | | | | | | | | | Passenger | Northeast | Turning Right | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 1 |
| | | | | | | | | | | Van/Mini-Van | East | Straight Ahead | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 2 |
| 73156341 | | | | | | | | | | | | | | | | | | | |
| 8/31/2007 9:27 PM | Clear | Dry | 0 | 0 | 0 | 0 | Rear End | Darkness, Lighted Road | 24.51 | | | | | | | | | | |
| | | | | | | | | | | Passenger | Southwest | Straight Ahead | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 1 |
| | | | | | | | | | | Passenger | West | Slow/Stop - Left Turn | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 2 |
| 70491493 | | | | | | | | | | | | | | | | | | | |
| 3/21/2007 5:35 PM | Rain | Wet | 0 | 2 | 0 | 0 | Turning | Dusk | 24.52 | | | | | | | | | | |
| | | | | | | | | | | Passenger | Southwest | Turning Left | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 1 |
| | | | | | | | | | | SUV | East | Slow/Stop In Traffic | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 2 |
| 70553748 | | | | | | | | | | | | | | | | | | | |
| 1/29/2007 11:47 AM | Snow | Snow or Slush | 0 | 0 | 0 | 0 | Rear End | Daylight | 24.53 | | | | | | | | | | |
| | | | | | | | | | | Passenger | West | Slow/Stop In Traffic | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 1 |
| | | | | | | | | | | Passenger | West | Slow/Stop In Traffic | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 2 |
| | | | | | | | | | | Passenger | West | Slow/Stop In Traffic | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 3 |

Illinois Department of Transportation
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## Collision Diagram

**1/1/2007 to 12/31/2007**

Crash Route: IL120 | From MileStation 21.52 to 25.81 | County : Lake | Intersection Related: All Cases | *See Notes at End of Report.

| Date | Weather | Roadway | Injuries A | Injuries B | Injuries C | Killed | Type of Crash | Light Condition | Mile | Vehicle Type | DIRP | Maneuver | Event 1 | Loc 1 | Event 2 | Loc 2 | Event 3 | Loc 3 | Unit |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 70070636 | | | | | | | | | | | | | | | | | | | |
| 2/2/2007 6:47 AM | Clear | Dry | 1 | 0 | 0 | 0 | Rear End | Daylight | 24.53 | | | | | | | | | | |
| | | | | | | | | | | Passenger | West | Straight Ahead | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 1 |
| | | | | | | | | | | Pickup | West | Slow/Stop In Traffic | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 2 |
| 70121389 | | | | | | | | | | | | | | | | | | | |
| 2/15/2007 9:41 AM | Clear | Dry | 0 | 0 | 0 | 0 | Rear End | Daylight | 24.53 | | | | | | | | | | |
| | | | | | | | | | | Pickup | South | Straight Ahead | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 1 |
| | | | | | | | | | | Passenger | South | Slow/Stop In Traffic | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 2 |
| 71458475 | | | | | | | | | | | | | | | | | | | |
| 5/23/2007 9:23 AM | Clear | Dry | 0 | 0 | 0 | 0 | Turning | Daylight | 24.53 | | | | | | | | | | |
| | | | | | | | | | | Van/Mini-Van | South | Straight Ahead | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 1 |
| | | | | | | | | | | Pickup | South | Turning Right | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 2 |
| 72384746 | | | | | | | | | | | | | | | | | | | |
| 7/29/2007 5:00 PM | Clear | Dry | 0 | 0 | 0 | 0 | Turning | Daylight | 24.53 | | | | | | | | | | |
| | | | | | | | | | | Van/Mini-Van | North | Turning Left | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 1 |
| | | | | | | | | | | Passenger | West | Straight Ahead | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 2 |
| 70966957 | | | | | | | | | | | | | | | | | | | |
| 5/5/2007 12:53 PM | Clear | Dry | 0 | 0 | 0 | 0 | Turning | Daylight | 24.54 | | | | | | | | | | |
| | | | | | | | | | | Passenger | West | Passing/Overtaking | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 1 |
| | | | | | | | | | | Passenger | South | Turning Left | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 2 |

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## Collision Diagram

**1/1/2007 to 12/31/2007**

Crash Route: IL120 | From MileStation 21.52 to 25.81 | County : Lake | Intersection Related: All Cases | *See Notes at End of Report.

| Date | Weather | Roadway | ------ A | Injuries B | ------ C | Killed | Type of Crash | Light Condition | Mile | Vehicle Type | DIRP | Maneuver | Event 1 | Loc 1 | Event 2 | Loc 2 | Event 3 | Loc 3 | Unit |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 71186118 | | | | | | | | | | | | | | | | | | | |
| 5/7/2007 12:45 PM | Clear | Dry | 0 | 0 | 0 | 0 | Rear End | Daylight | 24.54 | | | | | | | | | | |
| | | | | | | | | | | Van/Mini-Van | West | Straight Ahead | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 1 |
| | | | | | | | | | | Pickup | West | Slow/Stop In Traffic | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 2 |
| 71004642 | | | | | | | | | | | | | | | | | | | |
| 5/8/2007 8:38 AM | Clear | Dry | 0 | 1 | 0 | 0 | Turning | Daylight | 24.54 | | | | | | | | | | |
| | | | | | | | | | | Passenger | South | Turning Left | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 1 |
| | | | | | | | | | | SUV | East | Straight Ahead | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 2 |
| 72384738 | | | | | | | | | | | | | | | | | | | |
| 7/29/2007 2:00 PM | Clear | Dry | 0 | 0 | 0 | 0 | Rear End | Daylight | 24.54 | | | | | | | | | | |
| | | | | | | | | | | Passenger | West | Straight Ahead | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 1 |
| | | | | | | | | | | Passenger | West | Straight Ahead | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 2 |
| 73937427 | | | | | | | | | | | | | | | | | | | |
| 7/31/2007 4:30 PM | Clear | Dry | 0 | 0 | 0 | 0 | Rear End | Daylight | 24.55 | | | | | | | | | | |
| | | | | | | | | | | Passenger | West | Straight Ahead | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 1 |
| | | | | | | | | | | Unknown | West | Slow/Stop In Traffic | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 2 |
| 72493125 | | | | | | | | | | | | | | | | | | | |
| 7/25/2007 7:30 AM | Clear | Dry | 0 | 0 | 0 | 0 | Rear End | Daylight | 24.56 | | | | | | | | | | |
| | | | | | | | | | | Pickup | West | Straight Ahead | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 1 |
| | | | | | | | | | | Passenger | West | Straight Ahead | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 2 |

Illinois Department of Transportation
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## Collision Diagram

**1/1/2007 to 12/31/2007**

Crash Route: IL120 | From MileStation 21.52 to 25.81 | County : Lake | Intersection Related: All Cases | *See Notes at End of Report.

| Date | Weather | Roadway | Injuries A | Injuries B | Injuries C | Killed | Type of Crash | Light Condition | Mile | Vehicle Type | DIRP | Maneuver | Event 1 | Loc 1 | Event 2 | Loc 2 | Event 3 | Loc 3 | Unit |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 70018445 | | | | | | | | | | | | | | | | | | | |
| 1/13/2007 4:20 PM | Clear | Dry | 0 | 0 | 0 | 0 | Rear End | Dusk | 24.58 | | | | | | | | | | |
| | | | | | | | | | | Pickup | West | Straight Ahead | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 1 |
| | | | | | | | | | | Pickup | West | Straight Ahead | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 2 |
| 74845868 | | | | | | | | | | | | | | | | | | | |
| 12/3/2007 6:11 PM | Clear | Dry | 0 | 0 | 0 | 0 | Rear End | Daylight | 24.58 | | | | | | | | | | |
| | | | | | | | | | | Passenger | West | Straight Ahead | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 1 |
| | | | | | | | | | | Pickup | West | Straight Ahead | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 2 |
| 71267801 | | | | | | | | | | | | | | | | | | | |
| 5/9/2007 3:34 PM | Clear | Dry | 0 | 0 | 0 | 0 | Rear End | Daylight | 24.59 | | | | | | | | | | |
| | | | | | | | | | | Passenger | West | Straight Ahead | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 1 |
| | | | | | | | | | | SUV | West | Slow/Stop In Traffic | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 2 |
| 72384324 | | | | | | | | | | | | | | | | | | | |
| 7/6/2007 12:00 PM | Clear | Dry | 0 | 0 | 0 | 0 | Rear End | Daylight | 24.59 | | | | | | | | | | |
| | | | | | | | | | | Unknown | West | Unknown | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 1 |
| | | | | | | | | | | Pickup | West | Slow/Stop In Traffic | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 2 |
| 73937500 | | | | | | | | | | | | | | | | | | | |
| 9/26/2007 5:59 AM | Clear | Dry | 0 | 1 | 0 | 0 | Rear End | Dawn | 24.65 | | | | | | | | | | |
| | | | | | | | | | | Passenger | East | Straight Ahead | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 1 |
| | | | | | | | | | | Passenger | East | Slow/Stop In Traffic | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 2 |

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## Collision Diagram

**1/1/2007 to 12/31/2007**

Crash Route: IL120 | From MileStation 21.52 to 25.81 | County : Lake | Intersection Related: All Cases | *See Notes at End of Report.

| Date | Weather | Roadway | Injuries A | Injuries B | Injuries C | Killed | Type of Crash | Light Condition | Mile | Vehicle Type | DIRP | Maneuver | Event 1 | Loc 1 | Event 2 | Loc 2 | Event 3 | Loc 3 | Unit |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 73937542 | | | | | | | | | | | | | | | | | | | |
| 10/17/2007 6:15 PM | Clear | Dry | 0 | 0 | 0 | 0 | Rear End | Daylight | 24.69 | | | | | | | | | | |
| | | | | | | | | | | Passenger | West | Straight Ahead | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 1 |
| | | | | | | | | | | Passenger | West | Slow/Stop In Traffic | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 2 |
| 70569348 | | | | | | | | | | | | | | | | | | | |
| 3/17/2007 11:45 AM | Clear | Dry | 0 | 0 | 0 | 0 | Rear End | Daylight | 24.71 | | | | | | | | | | |
| | | | | | | | | | | Passenger | West | Straight Ahead | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 1 |
| | | | | | | | | | | Passenger | West | Straight Ahead | Motor Vehicle In Traffic | On Pavement (Roadway) | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | 2 |
| | | | | | | | | | | Pickup | West | Straight Ahead | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 3 |
| 72809510 | | | | | | | | | | | | | | | | | | | |
| 8/8/2007 1:40 PM | Clear | Dry | 0 | 0 | 0 | 0 | Rear End | Daylight | 24.71 | | | | | | | | | | |
| | | | | | | | | | | Van/Mini-Van | East | Straight Ahead | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 1 |
| | | | | | | | | | | SUV | East | Slow/Stop In Traffic | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 2 |
| 70033048 | | | | | | | | | | | | | | | | | | | |
| 1/21/2007 8:50 AM | Snow | Snow or Slush | 0 | 0 | 0 | 0 | Fixed Object | Daylight | 24.74 | | | | | | | | | | |
| | | | | | | | | | | Passenger | West | Turning Left | Ran Off Roadway | Off Pavement - Right | Mailbox | Off Pavement - Right | (UNK) | (UNK) | 1 |
| 74044611 | | | | | | | | | | | | | | | | | | | |
| 11/2/2007 3:20 PM | Clear | Dry | 0 | 0 | 0 | 0 | Rear End | Daylight | 24.79 | | | | | | | | | | |
| | | | | | | | | | | Pickup | West | Straight Ahead | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 1 |
| | | | | | | | | | | SUV | West | Straight Ahead | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 2 |

Illinois Department of Transportation
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## Collision Diagram

**1/1/2007 to 12/31/2007**

Crash Route: IL120 | From MileStation 21.52 to 25.81 | County : Lake | Intersection Related: All Cases | *See Notes at End of Report.

| Date | Weather | Roadway | Injuries A | Injuries B | Injuries C | Killed | Type of Crash | Light Condition | Mile | Vehicle Type | DIRP | Maneuver | Event 1 | Loc 1 | Event 2 | Loc 2 | Event 3 | Loc 3 | Unit |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 70798772 | | | | | | | | | | | | | | | | | | | |
| 4/14/2007 5:10 PM | Clear | Dry | 0 | 0 | 0 | 0 | Rear End | Daylight | 24.92 | | | | | | | | | | |
| | | | | | | | | | | Passenger | West | Slow/Stop In Traffic | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 1 |
| | | | | | | | | | | Passenger | West | Slow/Stop In Traffic | Motor Vehicle In Traffic | On Pavement (Roadway) | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | 2 |
| | | | | | | | | | | Passenger | West | Slow/Stop In Traffic | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 3 |
| 72685779 | | | | | | | | | | | | | | | | | | | |
| 8/18/2007 3:07 PM | Rain | Wet | 0 | 0 | 0 | 0 | Rear End | Daylight | 24.93 | | | | | | | | | | |
| | | | | | | | | | | Pickup | West | Straight Ahead | Motor Vehicle In Traffic | Unknown | (UNK) | (UNK) | (UNK) | (UNK) | 1 |
| | | | | | | | | | | Van/Mini-Van | West | Straight Ahead | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 2 |
| 70966965 | | | | | | | | | | | | | | | | | | | |
| 5/2/2007 8:24 AM | Clear | Dry | 0 | 1 | 0 | 0 | Rear End | Daylight | 24.94 | | | | | | | | | | |
| | | | | | | | | | | Passenger | East | Straight Ahead | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 1 |
| | | | | | | | | | | Passenger | East | Slow/Stop In Traffic | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 2 |
| | | | | | | | | | | Passenger | East | Slow/Stop In Traffic | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 3 |
| | | | | | | | | | | Passenger | East | Slow/Stop In Traffic | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 4 |
| 70070727 | | | | | | | | | | | | | | | | | | | |
| 2/1/2007 7:05 AM | Snow | Snow or Slush | 0 | 0 | 0 | 0 | Turning | Daylight | 24.95 | | | | | | | | | | |
| | | | | | | | | | | Passenger | West | Turning Right | Motor Vehicle In Traffic | Intersection | (UNK) | (UNK) | (UNK) | (UNK) | 1 |
| | | | | | | | | | | Pickup | West | Straight Ahead | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 2 |

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## Collision Diagram

**1/1/2007 to 12/31/2007**

Crash Route: IL120 | From MileStation 21.52 to 25.81 | County : Lake | Intersection Related: All Cases | *See Notes at End of Report.

| Date | Weather | Roadway | Injuries A | Injuries B | Injuries C | Killed | Type of Crash | Light Condition | Mile | Vehicle Type | DIRP | Maneuver | Event 1 | Loc 1 | Event 2 | Loc 2 | Event 3 | Loc 3 | Unit |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 70834890 | | | | | | | | | | | | | | | | | | | |
| 3/1/2007 7:15 AM | Snow | Snow or Slush | 0 | 0 | 0 | 0 | Angle | Dawn | 24.95 | | | | | | | | | | |
| | | | | | | | | | | Passenger | West | Straight Ahead | Motor Vehicle In Traffic | Intersection | Ran Off Roadway | Off Pavement - Left | (UNK) | (UNK) | 1 |
| | | | | | | | | | | Passenger | South | Slow/Stop - Left Turn | Motor Vehicle In Traffic | Intersection | (UNK) | (UNK) | (UNK) | (UNK) | 2 |
| 74354358 | | | | | | | | | | | | | | | | | | | |
| 10/21/2007 4:08 PM | Clear | Dry | 0 | 0 | 1 | 0 | Rear End | Daylight | 25.01 | | | | | | | | | | |
| | | | | | | | | | | Passenger | East | Straight Ahead | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 1 |
| | | | | | | | | | | Passenger | East | Slow/Stop In Traffic | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 2 |
| 70930961 | | | | | | | | | | | | | | | | | | | |
| 2/12/2007 1:30 AM | Snow | Snow or Slush | 0 | 0 | 0 | 0 | Turning | Darkness | 25.06 | | | | | | | | | | |
| | | | | | | | | | | Passenger | West | Turning Left | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 1 |
| | | | | | | | | | | Van/Mini-Van | West | Straight Ahead | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 2 |
| 73763641 | | | | | | | | | | | | | | | | | | | |
| 9/22/2007 11:44 AM | Clear | Dry | 0 | 0 | 0 | 0 | Fixed Object | Daylight | 25.08 | | | | | | | | | | |
| | | | | | | | | | | Passenger | East | Skidding/Control Loss | Ran Off Roadway | On Pavement (Roadway) | Tree or Shrub | Off Pavement - Right | (UNK) | (UNK) | 1 |
| 73126328 | | | | | | | | | | | | | | | | | | | |
| 7/9/2007 2:45 PM | Clear | Dry | 0 | 0 | 0 | 0 | Rear End | Daylight | 25.10 | | | | | | | | | | |
| | | | | | | | | | | Passenger | South | Straight Ahead | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 1 |
| | | | | | | | | | | SUV | South | Slow/Stop In Traffic | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 2 |
| 70941471 | | | | | | | | | | | | | | | | | | | |
| 2/3/2007 1:30 PM | Clear | Snow or Slush | 0 | 0 | 0 | 0 | Fixed Object | Daylight | 25.31 | | | | | | | | | | |
| | | | | | | | | | | Passenger | West | Skidding/Control Loss | Ran Off Roadway | Off Pavement - Right | Ditch/Embankment | Off Pavement - Right | (UNK) | (UNK) | 1 |

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## Collision Diagram

**1/1/2007 to 12/31/2007**

Crash Route: IL120 | From MileStation 21.52 to 25.81 | County : Lake | Intersection Related: All Cases | *See Notes at End of Report.

| Date | Weather | Roadway | ------ A | Injuries B | ------ C | Killed | Type of Crash | Light Condition | Mile | Vehicle Type | DIRP | Maneuver | Event 1 | Loc 1 | Event 2 | Loc 2 | Event 3 | Loc 3 | Unit |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 70682109 | | | | | | | | | | | | | | | | | | | |
| 1/12/2007 9:42 AM | Rain | Wet | 0 | 0 | 1 | 0 | Turning | Daylight | 25.34 | | | | | | | | | | |
| | | | | | | | | | | Passenger | East | Turning Right | Motor Vehicle In Traffic | On Pavement (Roadway) | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | 1 |
| | | | | | | | | | | Passenger | North | Slow/Stop In Traffic | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 2 |
| | | | | | | | | | | Pickup | North | Slow/Stop In Traffic | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 3 |
| 70685680 | | | | | | | | | | | | | | | | | | | |
| 1/29/2007 1:36 PM | Clear | Wet | 0 | 0 | 0 | 0 | Turning | Daylight | 25.34 | | | | | | | | | | |
| | | | | | | | | | | Passenger | South | Turning Right | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 1 |
| | | | | | | | | | | Passenger | South | Slow/Stop - Left Turn | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 2 |
| 71440689 | | | | | | | | | | | | | | | | | | | |
| 3/21/2007 4:17 PM | Rain | Wet | 0 | 0 | 0 | 0 | Rear End | Dusk | 25.34 | | | | | | | | | | |
| | | | | | | | | | | Passenger | West | Straight Ahead | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 1 |
| | | | | | | | | | | Passenger | West | Straight Ahead | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 2 |
| 72138290 | | | | | | | | | | | | | | | | | | | |
| 5/10/2007 11:08 AM | Clear | Dry | 0 | 0 | 0 | 0 | Rear End | Daylight | 25.34 | | | | | | | | | | |
| | | | | | | | | | | SUV | West | Straight Ahead | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 1 |
| | | | | | | | | | | SUV | West | Slow/Stop - Left Turn | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 2 |
| 72861370 | | | | | | | | | | | | | | | | | | | |
| 5/26/2007 1:25 PM | Rain | Wet | 0 | 0 | 0 | 0 | Rear End | Daylight | 25.34 | | | | | | | | | | |
| | | | | | | | | | | Passenger | West | Straight Ahead | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 1 |
| | | | | | | | | | | SUV | West | Slow/Stop In Traffic | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 2 |

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## Collision Diagram

**1/1/2007 to 12/31/2007**

Crash Route: IL120 | From MileStation 21.52 to 25.81 | County : Lake | Intersection Related: All Cases | *See Notes at End of Report.

| Date | Weather | Roadway | Injuries A | Injuries B | Injuries C | Killed | Type of Crash | Light Condition | Mile | Vehicle Type | DIRP | Maneuver | Event 1 | Loc 1 | Event 2 | Loc 2 | Event 3 | Loc 3 | Unit |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 73341737 | | | | | | | | | | | | | | | | | | | |
| 7/11/2007 3:28 PM | Clear | Dry | 0 | 0 | 0 | 0 | Fixed Object | Daylight | 25.34 | | | | | | | | | | |
| | | | | | | | | | | Passenger | Northwest | Slow/Stop - Left Turn | Ran Off Roadway | Off Pavement - Right | Other Pole or Post | Off Pavement - Right | (UNK) | (UNK) | 1 |
| 73345407 | | | | | | | | | | | | | | | | | | | |
| 7/12/2007 12:50 PM | Clear | Dry | 0 | 0 | 0 | 0 | Rear End | Daylight | 25.34 | | | | | | | | | | |
| | | | | | | | | | | SUV | North | Slow/Stop In Traffic | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 1 |
| | | | | | | | | | | Pickup | North | Slow/Stop In Traffic | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 2 |
| 74502295 | | | | | | | | | | | | | | | | | | | |
| 8/15/2007 11:51 AM | Rain | Wet | 0 | 0 | 0 | 0 | Rear End | Daylight | 25.34 | | | | | | | | | | |
| | | | | | | | | | | Passenger | West | Straight Ahead | Motor Vehicle In Traffic | Intersection | (UNK) | (UNK) | (UNK) | (UNK) | 1 |
| | | | | | | | | | | Passenger | West | Slow/Stop In Traffic | Motor Vehicle In Traffic | Intersection | (UNK) | (UNK) | (UNK) | (UNK) | 2 |
| 74601667 | | | | | | | | | | | | | | | | | | | |
| 9/16/2007 1:55 PM | Clear | Dry | 0 | 1 | 0 | 0 | Turning | Daylight | 25.34 | | | | | | | | | | |
| | | | | | | | | | | Motorcycle (Over 150cc) | East | Straight Ahead | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 1 |
| | | | | | | | | | | Van/Mini-Van | North | Turning Left | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 2 |
| 74338369 | | | | | | | | | | | | | | | | | | | |
| 9/29/2007 1:13 PM | Clear | Dry | 0 | 2 | 0 | 0 | Rear End | Daylight | 25.34 | | | | | | | | | | |
| | | | | | | | | | | Passenger | West | Straight Ahead | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 1 |
| | | | | | | | | | | Passenger | West | Straight Ahead | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 2 |
| 75298505 | | | | | | | | | | | | | | | | | | | |
| 12/13/2007 4:17 PM | Clear | Wet | 0 | 0 | 0 | 0 | Rear End | Dusk | 25.35 | | | | | | | | | | |
| | | | | | | | | | | Passenger | West | Straight Ahead | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 1 |

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## Collision Diagram

**1/1/2007 to 12/31/2007**

Crash Route: IL120 | From MileStation 21.52 to 25.81 | County : Lake | Intersection Related: All Cases | *See Notes at End of Report.

| Date | Weather | Roadway | Injuries A | Injuries B | Injuries C | Killed | Type of Crash | Light Condition | Mile | Vehicle Type | DIRP | Maneuver | Event 1 | Loc 1 | Event 2 | Loc 2 | Event 3 | Loc 3 | Unit |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | Bus Up to 15 Passengers | West | Straight Ahead | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 2 |
| 72443708 | | | | | | | | | | | | | | | | | | | |
| 6/27/2007 6:47 PM | Clear | Dry | 0 | 0 | 0 | 0 | Rear End | Daylight | 25.36 | | | | | | | | | | |
| | | | | | | | | | | Pickup | West | Slow/Stop In Traffic | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 1 |
| | | | | | | | | | | Passenger | West | Slow/Stop In Traffic | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 2 |
| 75221317 | | | | | | | | | | | | | | | | | | | |
| 12/19/2007 12:06 PM | Clear | Dry | 0 | 0 | 1 | 0 | Rear End | Daylight | 25.39 | | | | | | | | | | |
| | | | | | | | | | | Passenger | West | Straight Ahead | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 1 |
| | | | | | | | | | | Van/Mini-Van | West | Slow/Stop In Traffic | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 2 |
| 74377854 | | | | | | | | | | | | | | | | | | | |
| 10/1/2007 7:56 AM | Rain | Wet | 0 | 0 | 0 | 0 | Rear End | Daylight | 25.40 | | | | | | | | | | |
| | | | | | | | | | | Passenger | West | Slow/Stop In Traffic | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 1 |
| | | | | | | | | | | Pickup | West | Slow/Stop In Traffic | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 2 |
| 72549934 | | | | | | | | | | | | | | | | | | | |
| 6/12/2007 4:54 PM | Clear | Dry | 0 | 0 | 0 | 0 | Rear End | Daylight | 25.42 | | | | | | | | | | |
| | | | | | | | | | | Truck Single Unit | West | Slow/Stop In Traffic | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 1 |
| | | | | | | | | | | Passenger | West | Slow/Stop In Traffic | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 2 |
| | | | | | | | | | | Passenger | West | Slow/Stop In Traffic | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 3 |
| 73738387 | | | | | | | | | | | | | | | | | | | |
| 9/5/2007 5:40 PM | Clear | Dry | 0 | 0 | 0 | 0 | Rear End | Daylight | 25.42 | | | | | | | | | | |
| | | | | | | | | | | Pickup | East | Slow/Stop In Traffic | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 1 |

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## Collision Diagram

**1/1/2007 to 12/31/2007**

Crash Route: IL120 | From MileStation 21.52 to 25.81 | County : Lake | Intersection Related: All Cases | *See Notes at End of Report.

| Date | Weather | Roadway | Injuries A | Injuries B | Injuries C | Killed | Type of Crash | Light Condition | Mile | Vehicle Type | DIRP | Maneuver | Event 1 | Loc 1 | Event 2 | Loc 2 | Event 3 | Loc 3 | Unit |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | Passenger | East | Slow/Stop In Traffic | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 2 |
| | | | | | | | | | | SUV | East | Slow/Stop In Traffic | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 3 |
| 73742157 | | | | | | | | | | | | | | | | | | | |
| 9/18/2007 4:36 PM | Clear | Dry | 0 | 0 | 0 | 0 | Rear End | Daylight | 25.42 | | | | | | | | | | |
| | | | | | | | | | | Passenger | East | Straight Ahead | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 1 |
| | | | | | | | | | | Van/Mini-Van | East | Slow/Stop In Traffic | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 2 |
| 71441190 | | | | | | | | | | | | | | | | | | | |
| 3/21/2007 8:52 PM | Rain | Wet | 0 | 0 | 0 | 0 | Turning | Dusk | 25.45 | | | | | | | | | | |
| | | | | | | | | | | Van/Mini-Van | West | Turning Right | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 1 |
| | | | | | | | | | | Passenger | West | Straight Ahead | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 2 |
| 71440309 | | | | | | | | | | | | | | | | | | | |
| 3/23/2007 4:01 PM | Rain | Wet | 0 | 0 | 0 | 0 | Turning | Daylight | 25.45 | | | | | | | | | | |
| | | | | | | | | | | Passenger | Southeast | Turning Left | Other Non-Collision | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 1 |
| | | | | | | | | | | Passenger | East | Straight Ahead | Ran Off Roadway | Off Pavement - Right | Mailbox | Off Pavement - Right | (UNK) | (UNK) | 2 |
| 72151715 | | | | | | | | | | | | | | | | | | | |
| 5/15/2007 11:47 PM | Rain | Wet | 0 | 0 | 0 | 0 | Rear End | Daylight | 25.45 | | | | | | | | | | |
| | | | | | | | | | | SUV | West | Slow/Stop In Traffic | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 1 |
| | | | | | | | | | | SUV | West | Slow/Stop In Traffic | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 2 |
| 72487788 | | | | | | | | | | | | | | | | | | | |
| 6/17/2007 5:54 PM | Clear | Dry | 0 | 0 | 0 | 0 | Rear End | Daylight | 25.45 | | | | | | | | | | |
| | | | | | | | | | | Passenger | West | Slow/Stop In Traffic | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 1 |

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## Collision Diagram

1/1/2007 to 12/31/2007

Crash Route: IL120 | From MileStation 21.52 to 25.81 | County : Lake | Intersection Related: All Cases | *See Notes at End of Report.

| Date | Weather | Roadway | Injuries A | Injuries B | Injuries C | Killed | Type of Crash | Light Condition | Mile | Vehicle Type | DIRP | Maneuver | Event 1 | Loc 1 | Event 2 | Loc 2 | Event 3 | Loc 3 | Unit |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | Passenger | West | Slow/Stop In Traffic | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 2 |
| | | | | | | | | | | Van/Mini-Van | West | Slow/Stop In Traffic | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 3 |
| 73739005 | | | | | | | | | | | | | | | | | | | |
| 9/10/2007 5:15 PM | Rain | Wet | 0 | 0 | 0 | 0 | Rear End | Daylight | 25.45 | | | | | | | | | | |
| | | | | | | | | | | SUV | East | Skidding/Control Loss | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 1 |
| | | | | | | | | | | SUV | East | Slow/Stop In Traffic | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 2 |
| 74355454 | | | | | | | | | | | | | | | | | | | |
| 10/9/2007 6:07 AM | Clear | Dry | 0 | 0 | 0 | 0 | Rear End | Darkness | 25.45 | | | | | | | | | | |
| | | | | | | | | | | Passenger | East | Straight Ahead | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 1 |
| | | | | | | | | | | Pickup | East | Slow/Stop In Traffic | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 2 |
| 73504706 | | | | | | | | | | | | | | | | | | | |
| 8/28/2007 8:51 AM | Clear | Dry | 0 | 0 | 0 | 0 | Rear End | Daylight | 25.56 | | | | | | | | | | |
| | | | | | | | | | | Passenger | East | Slow/Stop In Traffic | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 1 |
| | | | | | | | | | | Passenger | East | Slow/Stop In Traffic | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 2 |
| | | | | | | | | | | Passenger | East | Slow/Stop In Traffic | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 3 |
| 70914056 | | | | | | | | | | | | | | | | | | | |
| 2/6/2007 9:09 AM | Snow | Wet | 0 | 0 | 0 | 0 | Rear End | Daylight | 25.70 | | | | | | | | | | |
| | | | | | | | | | | Truck Single Unit | West | Skidding/Control Loss | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 1 |
| | | | | | | | | | | Passenger | West | Slow/Stop - Left Turn | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 2 |

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## Collision Diagram

**1/1/2007 to 12/31/2007**

Crash Route: IL120 | From MileStation 21.52 to 25.81 | County : Lake | Intersection Related: All Cases | *See Notes at End of Report.

| Date | Weather | Roadway | Injuries A | Injuries B | Injuries C | Killed | Type of Crash | Light Condition | Mile | Vehicle Type | DIRP | Maneuver | Event 1 | Loc 1 | Event 2 | Loc 2 | Event 3 | Loc 3 | Unit |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 71665954 | | | | | | | | | | | | | | | | | | | |
| 4/27/2007 2:48 PM | Clear | Dry | 0 | 0 | 1 | 0 | Turning | Daylight | 25.70 | | | | | | | | | | |
| | | | | | | | | | | Pickup | Northwest | Turning Left | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 1 |
| | | | | | | | | | | Van/Mini-Van | West | Straight Ahead | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 2 |
| | | | | | | | | | | Pickup | East | Straight Ahead | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 3 |
| 72144470 | | | | | | | | | | | | | | | | | | | |
| 5/10/2007 12:06 PM | Clear | Dry | 0 | 2 | 0 | 0 | Rear End | Daylight | 25.70 | | | | | | | | | | |
| | | | | | | | | | | Passenger | West | Straight Ahead | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 1 |
| | | | | | | | | | | Passenger | West | Slow/Stop In Traffic | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 2 |
| 74698168 | | | | | | | | | | | | | | | | | | | |
| 11/8/2007 3:05 PM | Clear | Dry | 0 | 0 | 0 | 0 | Rear End | Dusk | 25.76 | | | | | | | | | | |
| | | | | | | | | | | Passenger | West | Straight Ahead | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 1 |
| | | | | | | | | | | Passenger | West | Slow/Stop In Traffic | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 2 |
| 70931688 | | | | | | | | | | | | | | | | | | | |
| 2/8/2007 6:41 AM | Clear | Dry | 0 | 0 | 0 | 0 | Rear End | Daylight | 25.79 | | | | | | | | | | |
| | | | | | | | | | | Passenger | East | Straight Ahead | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 1 |
| | | | | | | | | | | Passenger | East | Slow/Stop In Traffic | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 2 |
| 72445885 | | | | | | | | | | | | | | | | | | | |
| 6/13/2007 9:04 PM | Clear | Dry | 0 | 0 | 1 | 0 | Turning | Darkness, Lighted Road | 25.81 | | | | | | | | | | |
| | | | | | | | | | | Passenger | East | Turning Left | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 1 |
| | | | | | | | | | | Van/Mini-Van | West | Straight Ahead | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 2 |

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## Collision Diagram

**1/1/2007 to 12/31/2007**

Crash Route: IL120 | From MileStation 21.52 to 25.81 | County : Lake | Intersection Related: All Cases | *See Notes at End of Report.

| Date | Weather | Roadway | Injuries A | Injuries B | Injuries C | Killed | Type of Crash | Light Condition | Mile | Vehicle Type | DIRP | Maneuver | Event 1 | Loc 1 | Event 2 | Loc 2 | Event 3 | Loc 3 | Unit |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 72446537 | | | | | | | | | | | | | | | | | | | |
| 6/14/2007 6:36 PM | Clear | Dry | 0 | 0 | 0 | 0 | Turning | Daylight | 25.81 | | | | | | | | | | |
| | | | | | | | | | | Pickup | North | Turning Left | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 1 |
| | | | | | | | | | | Van/Mini-Van | North | Straight Ahead | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 2 |
| 73146177 | | | | | | | | | | | | | | | | | | | |
| 7/7/2007 12:54 AM | Clear | Dry | 0 | 1 | 0 | 0 | Fixed Object | Darkness, Lighted Road | 25.81 | | | | | | | | | | |
| | | | | | | | | | | Pickup | Northwest | Turning Left | Traffic Signal | Off Pavement - Right | (UNK) | (UNK) | (UNK) | (UNK) | 1 |
| 73534505 | | | | | | | | | | | | | | | | | | | |
| 8/19/2007 8:59 AM | Rain | Wet | 0 | 0 | 0 | 0 | Rear End | Daylight | 25.81 | | | | | | | | | | |
| | | | | | | | | | | Passenger | West | Straight Ahead | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 1 |
| | | | | | | | | | | SUV | West | Slow/Stop In Traffic | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 2 |
| 74687054 | | | | | | | | | | | | | | | | | | | |
| 11/20/2007 6:27 PM | Rain | Wet | 0 | 0 | 0 | 0 | Rear End | Darkness, Lighted Road | 25.81 | | | | | | | | | | |
| | | | | | | | | | | Passenger | West | Slow/Stop In Traffic | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 1 |
| | | | | | | | | | | Passenger | West | Slow/Stop In Traffic | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 2 |
| 74791088 | | | | | | | | | | | | | | | | | | | |
| 11/27/2007 6:30 AM | Clear | Dry | 0 | 1 | 0 | 0 | Pedestrian | Daylight | 25.81 | | | | | | | | | | |
| | | | | | | | | | | Unknown | West | Slow/Stop - Load/Unload | Pedestrian | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 1 |

Illinois Department of Transportation
Division of Traffic Safety



## Collision Diagram

**1/1/2007 to 12/31/2007**

Crash Route: IL120 | From MileStation 21.52 to 25.81 | County : Lake | Intersection Related: All Cases | *See Notes at End of Report.

| TOTAL CRASHES | FATAL CRASHES | A INJURY CRASHES | B INJURY CRASHES | C INJURY CRASHES | PROPERTY DAMAGE CRASHES | TOTAL KILLED | TOTAL INJURED | A INJURIES | B INJURIES | C INJURIES |
|---|---|---|---|---|---|---|---|---|---|---|
| 158 | 0 | 2 | 17 | 11 | 128 | 0 | 42 | 2 | 22 | 18 |

| *Type of Crash* | *Total* | *%* |
|---|---|---|
| Angle | 7 | 4.4% |
| Animal | 4 | 2.5% |
| Fixed Object | 9 | 5.7% |
| Overturned | 2 | 1.3% |
| Parked Motor Vehicle | 1 | 0.6% |
| Pedestrian | 1 | 0.6% |
| Rear End | 101 | 63.9% |
| Sideswipe Same Direction | 2 | 1.3% |
| Turning | 31 | 19.6% |
| ***TOTAL:*** | ***158*** | |

| *Dayof Wk* | *Total* | *%* |
|---|---|---|
| Monday | 17 | 10.8% |
| Tuesday | 23 | 14.6% |
| Wednesday | 29 | 18.4% |
| Thursday | 31 | 19.6% |
| Friday | 22 | 13.9% |
| Saturday | 24 | 15.2% |
| Sunday | 12 | 7.6% |
| ***TOTAL:*** | ***158*** | |

| *Hour of Day* | *Total* | *%* |
|---|---|---|
| Midnight | 1 | 0.6% |
| 01 AM | 2 | 1.3% |
| 05 AM | 6 | 3.8% |
| 06 AM | 13 | 8.2% |
| 07 AM | 11 | 7.0% |
| 08 AM | 7 | 4.4% |
| 09 AM | 10 | 6.3% |
| 10 AM | 2 | 1.3% |
| 11 AM | 10 | 6.3% |
| Noon | 11 | 7.0% |
| 1 PM | 9 | 5.7% |
| 2 PM | 9 | 5.7% |
| 3 PM | 12 | 7.6% |
| 4 PM | 16 | 10.1% |
| 5 PM | 14 | 8.9% |
| 6 PM | 12 | 7.6% |
| 7 PM | 3 | 1.9% |
| 8 PM | 2 | 1.3% |
| 9 PM | 4 | 2.5% |
| 10 PM | 2 | 1.3% |
| 11 PM | 2 | 1.3% |

| *Vehicle Type* | *Total* | *%* |
|---|---|---|
| Bus Up to 15 Passengers | 1 | 0.3% |
| Motorcycle (Over 150cc) | 1 | 0.3% |
| Other Vehicle With Trailer | 1 | 0.3% |
| Passenger | 184 | 56.6% |
| Pickup | 51 | 15.7% |
| Snowmobile | 1 | 0.3% |
| SUV | 47 | 14.5% |
| Tractor With Semi-Trailer | 1 | 0.3% |
| Truck Single Unit | 6 | 1.8% |
| Unknown | 6 | 1.8% |
| Van/Mini-Van | 26 | 8.0% |
| ***TOTAL:*** | ***325*** | |

Illinois Department of Transportation
Division of Traffic Safety



## Collision Diagram

**1/1/2007 to 12/31/2007**

Crash Route: IL120 | From MileStation 21.52 to 25.81 | County : Lake | Intersection Related: All Cases | *See Notes at End of Report.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | *TOTAL:* | *158* | | | | |
| *Weather Cond* | *Total* | *%* | *Light Cond* | *Total* | *%* | *Road Surface* | *Total* | *%* | *DIRP* | *Total* | *%* |
| Clear | 120 | 75.9% | Darkness | 10 | 6.3% | Dry | 107 | 67.7% | East | 107 | 32.9% |
| Other | 1 | 0.6% | Darkness, Lighted Road | 12 | 7.6% | Ice | 1 | 0.6% | North | 23 | 7.1% |
| Rain | 26 | 16.5% | Dawn | 5 | 3.2% | Snow or Slush | 8 | 5.1% | Northeast | 8 | 2.5% |
| Severe Cross Wind | 1 | 0.6% | Daylight | 123 | 77.8% | Unknown | 1 | 0.6% | Northwest | 9 | 2.8% |
| Snow | 10 | 6.3% | Dusk | 8 | 5.1% | Wet | 41 | 25.9% | South | 34 | 10.5% |
| *TOTAL:* | *158* | | *TOTAL:* | *158* | | *TOTAL:* | *158* | | Southeast | 3 | 0.9% |
| | | | | | | | | | Southwest | 7 | 2.2% |
| | | | | | | | | | Unknown | 2 | 0.6% |
| | | | | | | | | | West | 132 | 40.6% |
| | | | | | | | | | *TOTAL:* | *325* | |

Illinois Department of Transportation
Division of Traffic Safety



## Collision Diagram

**1/1/2007 to 12/31/2007**

Crash Route: IL120 | From MileStation 21.52 to 25.81 | County : Lake | Intersection Related: All Cases | *See Notes at End of Report.

### Notes

Current year and previous year data are not yet complete and are subject to change as more information becomes available. Calendar date selections include data based on the date of the crash. Year selections include data based on the statistical year in which the crash was processed.

The intersection-related field could be incorrect and affect the data on the report.

If a crash occurs between two municipalities, it may be coded to another city/county from what is on the crash report.

Crashes with incomplete location information are not included.

Areas where routes have more than one junction have been known to cause problems in determining accurate locations. Please notify us to verify the data for intersections with more than one junction.

For roadway segments which include the intersection of two routes, the intersection report may need to be run on the other route in order to get all the crashes.

Illinois Department of Transportation
Division of Traffic Safety



# Collision Diagram

**1/1/2008 to 12/31/2008**

Crash Route: IL120 | From MileStation 21.52 to 25.81 | County : Lake | Intersection Related: All Cases | *See Notes at End of Report.

| Date | Weather | Roadway | Injuries A | Injuries B | Injuries C | Killed | Type of Crash | Light Condition | Mile | Vehicle Type | DIRP | Maneuver | Event 1 | Loc 1 | Event 2 | Loc 2 | Event 3 | Loc 3 | Unit |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 81601262 | | | | | | | | | | | | | | | | | | | |
| 1/4/2008 4:38 PM | Clear | Dry | 0 | 0 | 0 | 0 | Turning | Dusk | 21.52 | | | | | | | | | | |
| | | | | | | | | | | Passenger | South | Turning Left | Motor Vehicle In Traffic | Intersection | (UNK) | (UNK) | (UNK) | (UNK) | 1 |
| | | | | | | | | | | Passenger | East | Straight Ahead | Motor Vehicle In Traffic | Intersection | (UNK) | (UNK) | (UNK) | (UNK) | 2 |
| 81707226 | | | | | | | | | | | | | | | | | | | |
| 4/22/2008 7:29 AM | Clear | Dry | 0 | 0 | 0 | 0 | Rear End | Daylight | 21.52 | | | | | | | | | | |
| | | | | | | | | | | Truck Single Unit | West | Straight Ahead | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 1 |
| | | | | | | | | | | Truck Single Unit | West | Slow/Stop In Traffic | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 2 |
| 82359068 | | | | | | | | | | | | | | | | | | | |
| 6/16/2008 7:17 PM | Clear | Dry | 0 | 0 | 0 | 0 | Turning | Daylight | 21.52 | | | | | | | | | | |
| | | | | | | | | | | SUV | East | Turning Right | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 1 |
| | | | | | | | | | | Passenger | South | Straight Ahead | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 2 |
| 82399825 | | | | | | | | | | | | | | | | | | | |
| 6/20/2008 8:46 AM | Clear | Dry | 0 | 0 | 0 | 0 | Rear End | Daylight | 21.52 | | | | | | | | | | |
| | | | | | | | | | | SUV | North | Straight Ahead | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 1 |
| | | | | | | | | | | Motor Driven Cycle | North | Straight Ahead | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 2 |
| 85023745 | | | | | | | | | | | | | | | | | | | |
| 12/1/2008 2:10 PM | Snow | Snow or Slush | 0 | 0 | 3 | 0 | Angle | Daylight | 21.52 | | | | | | | | | | |
| | | | | | | | | | | Truck Single Unit | West | Straight Ahead | Motor Vehicle In Traffic | Intersection | (UNK) | (UNK) | (UNK) | (UNK) | 1 |
| | | | | | | | | | | Passenger | North | Straight Ahead | Motor Vehicle In Traffic | Intersection | (UNK) | (UNK) | (UNK) | (UNK) | 2 |
| | | | | | | | | | | Passenger | South | Straight Ahead | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 3 |

Illinois Department of Transportation
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## Collision Diagram

**1/1/2008 to 12/31/2008**

Crash Route: IL120 | From MileStation 21.52 to 25.81 | County : Lake | Intersection Related: All Cases | *See Notes at End of Report.

| Date | Weather | Roadway | Injuries A | Injuries B | Injuries C | Killed | Type of Crash | Light Condition | Mile | Vehicle Type | DIRP | Maneuver | Event 1 | Loc 1 | Event 2 | Loc 2 | Event 3 | Loc 3 | Unit |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 84854504 | | | | | | | | | | | | | | | | | | | |
| 12/5/2008 5:39 PM | Clear | Dry | 0 | 0 | 0 | 0 | Rear End | Dusk | 21.52 | | | | | | | | | | |
| | | | | | | | | | | Passenger | East | Straight Ahead | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 1 |
| | | | | | | | | | | SUV | East | Straight Ahead | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 2 |
| 84859453 | | | | | | | | | | | | | | | | | | | |
| 12/10/2008 4:57 PM | Clear | Wet | 0 | 0 | 0 | 0 | Rear End | Darkness | 21.52 | | | | | | | | | | |
| | | | | | | | | | | Passenger | South | Slow/Stop - Right Turn | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 1 |
| | | | | | | | | | | Pickup | South | Slow/Stop - Right Turn | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 2 |
| 85172385 | | | | | | | | | | | | | | | | | | | |
| 12/28/2008 11:34 AM | Clear | Dry | 0 | 0 | 0 | 0 | Angle | Daylight | 21.52 | | | | | | | | | | |
| | | | | | | | | | | Passenger | South | Straight Ahead | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 1 |
| | | | | | | | | | | Van/Mini-Van | East | Straight Ahead | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 2 |
| 81997025 | | | | | | | | | | | | | | | | | | | |
| 5/28/2008 3:10 PM | Clear | Dry | 0 | 0 | 0 | 0 | Rear End | Daylight | 22.14 | | | | | | | | | | |
| | | | | | | | | | | Passenger | East | Starting In Traffic | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 1 |
| | | | | | | | | | | Van/Mini-Van | East | Slow/Stop In Traffic | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 2 |
| 81618464 | | | | | | | | | | | | | | | | | | | |
| 1/28/2008 3:05 PM | Clear | Dry | 0 | 0 | 1 | 0 | Rear End | Daylight | 22.16 | | | | | | | | | | |
| | | | | | | | | | | Van/Mini-Van | West | Straight Ahead | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 1 |
| | | | | | | | | | | Passenger | West | Slow/Stop In Traffic | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 2 |

Illinois Department of Transportation
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## Collision Diagram

**1/1/2008 to 12/31/2008**

Crash Route: IL120 | From MileStation 21.52 to 25.81 | County : Lake | Intersection Related: All Cases | *See Notes at End of Report.

| Date | Weather | Roadway | Injuries A | Injuries B | Injuries C | Killed | Type of Crash | Light Condition | Mile | Vehicle Type | DIRP | Maneuver | Event 1 | Loc 1 | Event 2 | Loc 2 | Event 3 | Loc 3 | Unit |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 81115255 | | | | | | | | | | | | | | | | | | | |
| 3/12/2008 6:58 PM | Clear | Dry | 0 | 0 | 0 | 0 | Turning | Dusk | 22.16 | | | | | | | | | | |
| | | | | | | | | | | Passenger | East | Turning Left | Motor Vehicle In Traffic | Intersection | (UNK) | (UNK) | (UNK) | (UNK) | 1 |
| | | | | | | | | | | SUV | North | Straight Ahead | Motor Vehicle In Traffic | Intersection | (UNK) | (UNK) | (UNK) | (UNK) | 2 |
| 81536021 | | | | | | | | | | | | | | | | | | | |
| 4/4/2008 8:06 PM | Clear | Dry | 0 | 0 | 0 | 0 | Turning | Darkness | 22.16 | | | | | | | | | | |
| | | | | | | | | | | Van/Mini-Van | North | Turning Right | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 1 |
| | | | | | | | | | | Passenger | North | Slow/Stop - Right Turn | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 2 |
| 81431306 | | | | | | | | | | | | | | | | | | | |
| 4/8/2008 1:55 PM | Rain | Wet | 0 | 0 | 0 | 0 | Sideswipe Same Direction | Daylight | 22.16 | | | | | | | | | | |
| | | | | | | | | | | Pickup | North | Passing/Overtaking | Motor Vehicle In Traffic | Intersection | (UNK) | (UNK) | (UNK) | (UNK) | 1 |
| | | | | | | | | | | Passenger | North | Slow/Stop In Traffic | Motor Vehicle In Traffic | Intersection | (UNK) | (UNK) | (UNK) | (UNK) | 2 |
| 81830663 | | | | | | | | | | | | | | | | | | | |
| 5/9/2008 2:21 AM | Clear | Dry | 0 | 0 | 0 | 0 | Rear End | Daylight | 22.16 | | | | | | | | | | |
| | | | | | | | | | | Passenger | West | Skidding/Control Loss | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 1 |
| | | | | | | | | | | Passenger | West | Slow/Stop In Traffic | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 2 |
| 81820748 | | | | | | | | | | | | | | | | | | | |
| 5/11/2008 1:55 PM | Clear | Dry | 0 | 1 | 0 | 0 | Rear End | Daylight | 22.16 | | | | | | | | | | |
| | | | | | | | | | | Passenger | East | Straight Ahead | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 1 |
| | | | | | | | | | | Passenger | East | Slow/Stop In Traffic | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 2 |
| | | | | | | | | | | Passenger | West | Slow/Stop In Traffic | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 3 |

Illinois Department of Transportation
Division of Traffic Safety



## Collision Diagram

**1/1/2008 to 12/31/2008**

Crash Route: IL120 | From MileStation 21.52 to 25.81 | County : Lake | Intersection Related: All Cases | *See Notes at End of Report.

| Date | Weather | Roadway | Injuries A | Injuries B | Injuries C | Killed | Type of Crash | Light Condition | Mile | Vehicle Type | DIRP | Maneuver | Event 1 | Loc 1 | Event 2 | Loc 2 | Event 3 | Loc 3 | Unit |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 81815201 | | | | | | | | | | | | | | | | | | | |
| 5/14/2008 6:50 AM | Rain | Wet | 0 | 0 | 1 | 0 | Rear End | Daylight | 22.16 | | | | | | | | | | |
| | | | | | | | | | | Passenger | South | Straight Ahead | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 1 |
| | | | | | | | | | | Passenger | South | Slow/Stop In Traffic | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 2 |
| 82387812 | | | | | | | | | | | | | | | | | | | |
| 6/25/2008 2:35 PM | Clear | Dry | 0 | 0 | 0 | 0 | Rear End | Daylight | 22.16 | | | | | | | | | | |
| | | | | | | | | | | Passenger | East | Straight Ahead | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 1 |
| | | | | | | | | | | Truck Single Unit | East | Slow/Stop In Traffic | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 2 |
| 82655390 | | | | | | | | | | | | | | | | | | | |
| 7/8/2008 4:40 PM | Clear | Dry | 0 | 0 | 1 | 0 | Rear End | Daylight | 22.16 | | | | | | | | | | |
| | | | | | | | | | | Passenger | East | Slow/Stop In Traffic | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 1 |
| | | | | | | | | | | Passenger | East | Slow/Stop In Traffic | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 2 |
| 82889882 | | | | | | | | | | | | | | | | | | | |
| 7/25/2008 4:17 PM | Clear | Dry | 0 | 1 | 0 | 0 | Turning | Daylight | 22.16 | | | | | | | | | | |
| | | | | | | | | | | Passenger | East | Turning Left | Motor Vehicle In Traffic | Intersectio n | (UNK) | (UNK) | (UNK) | (UNK) | 1 |
| | | | | | | | | | | Pickup | West | Straight Ahead | Motor Vehicle In Traffic | Intersectio n | (UNK) | (UNK) | (UNK) | (UNK) | 2 |
| 83079004 | | | | | | | | | | | | | | | | | | | |
| 8/4/2008 9:35 AM | Rain | Wet | 0 | 0 | 0 | 0 | Angle | Daylight | 22.16 | | | | | | | | | | |
| | | | | | | | | | | Passenger | West | Straight Ahead | Motor Vehicle In Traffic | Intersectio n | (UNK) | (UNK) | (UNK) | (UNK) | 1 |
| | | | | | | | | | | SUV | South | Straight Ahead | Motor Vehicle In Traffic | Intersectio n | (UNK) | (UNK) | (UNK) | (UNK) | 2 |

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## Collision Diagram

**1/1/2008 to 12/31/2008**

Crash Route: IL120 | From MileStation 21.52 to 25.81 | County : Lake | Intersection Related: All Cases | *See Notes at End of Report.

| Date | Weather | Roadway | Injuries A | Injuries B | Injuries C | Killed | Type of Crash | Light Condition | Mile | Vehicle Type | DIRP | Maneuver | Event 1 | Loc 1 | Event 2 | Loc 2 | Event 3 | Loc 3 | Unit |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 83080408 | | | | | | | | | | | | | | | | | | | |
| 8/5/2008 5:10 AM | Fog/Smoke/Haze | Wet | 0 | 0 | 2 | 0 | Angle | Dawn | 22.16 | | | | | | | | | | |
| | | | | | | | | | | Pickup | West | Straight Ahead | Motor Vehicle In Traffic | Intersection | (UNK) | (UNK) | (UNK) | (UNK) | 1 |
| | | | | | | | | | | Passenger | North | Straight Ahead | Motor Vehicle In Traffic | Intersection | (UNK) | (UNK) | (UNK) | (UNK) | 2 |
| 83569376 | | | | | | | | | | | | | | | | | | | |
| 9/19/2008 2:15 PM | Clear | Dry | 0 | 0 | 0 | 0 | Turning | Daylight | 22.16 | | | | | | | | | | |
| | | | | | | | | | | Passenger | South | Turning Right | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 1 |
| | | | | | | | | | | Passenger | South | Slow/Stop - Right Turn | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 2 |
| 83493148 | | | | | | | | | | | | | | | | | | | |
| 8/6/2008 3:00 PM | Clear | Dry | 0 | 0 | 0 | 0 | Rear End | Daylight | 22.17 | | | | | | | | | | |
| | | | | | | | | | | Passenger | East | Straight Ahead | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 1 |
| | | | | | | | | | | SUV | East | Straight Ahead | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 2 |
| 84357086 | | | | | | | | | | | | | | | | | | | |
| 11/6/2008 4:41 AM | Clear | Dry | 0 | 0 | 0 | 0 | Animal | Darkness | 22.18 | | | | | | | | | | |
| | | | | | | | | | | Passenger | West | Straight Ahead | Deer | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 1 |
| 83233924 | | | | | | | | | | | | | | | | | | | |
| 7/7/2008 12:01 PM | Clear | Dry | 0 | 0 | 0 | 0 | Rear End | Daylight | 22.62 | | | | | | | | | | |
| | | | | | | | | | | Van/Mini-Van | West | Avoiding Vehicle/Objects | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 1 |
| | | | | | | | | | | Van/Mini-Van | West | Slow/Stop - Right Turn | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 2 |
| 81578833 | | | | | | | | | | | | | | | | | | | |
| 1/11/2008 7:30 AM | Clear | Wet | 0 | 0 | 0 | 0 | Animal | Dawn | 22.67 | | | | | | | | | | |
| | | | | | | | | | | SUV | East | Straight Ahead | Deer | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 1 |

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## Collision Diagram

**1/1/2008 to 12/31/2008**

Crash Route: IL120 | From MileStation 21.52 to 25.81 | County : Lake | Intersection Related: All Cases | *See Notes at End of Report.

| Date | Weather | Roadway | Injuries A | Injuries B | Injuries C | Killed | Type of Crash | Light Condition | Mile | Vehicle Type | DIRP | Maneuver | Event 1 | Loc 1 | Event 2 | Loc 2 | Event 3 | Loc 3 | Unit |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 81579039 | | | | | | | | | | | | | | | | | | | |
| 1/15/2008 7:29 AM | Clear | Dry | 0 | 0 | 0 | 0 | Rear End | Daylight | 22.68 | | | | | | | | | | |
| | | | | | | | | | | Van/Mini-Van | West | Straight Ahead | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 1 |
| | | | | | | | | | | Passenger | West | Slow/Stop In Traffic | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 2 |
| 81441461 | | | | | | | | | | | | | | | | | | | |
| 3/27/2008 7:18 AM | Rain | Wet | 0 | 0 | 0 | 0 | Rear End | Daylight | 22.68 | | | | | | | | | | |
| | | | | | | | | | | Passenger | West | Straight Ahead | Motor Vehicle In Traffic | Intersection | (UNK) | (UNK) | (UNK) | (UNK) | 1 |
| | | | | | | | | | | SUV | West | Slow/Stop - Left Turn | Motor Vehicle In Traffic | Intersection | (UNK) | (UNK) | (UNK) | (UNK) | 2 |
| 82152331 | | | | | | | | | | | | | | | | | | | |
| 5/30/2008 6:58 AM | Rain | Wet | 0 | 1 | 1 | 0 | Turning | Daylight | 22.68 | | | | | | | | | | |
| | | | | | | | | | | Passenger | West | Skidding/Control Loss | Motor Vehicle In Traffic | Intersection | (UNK) | (UNK) | (UNK) | (UNK) | 1 |
| | | | | | | | | | | Passenger | West | Turning Left | Motor Vehicle In Traffic | Intersection | (UNK) | (UNK) | (UNK) | (UNK) | 2 |
| 82949231 | | | | | | | | | | | | | | | | | | | |
| 6/8/2008 12:41 PM | Rain | Wet | 0 | 1 | 0 | 0 | Fixed Object | Daylight | 22.68 | | | | | | | | | | |
| | | | | | | | | | | Motorcycle (Over 150cc) | West | Skidding/Control Loss | Ran Off Roadway | On Pavement (Roadway) | Other Fixed Object | On Pavement (Roadway) | (UNK) | (UNK) | 1 |
| 83230938 | | | | | | | | | | | | | | | | | | | |
| 7/18/2008 3:48 PM | Clear | Dry | 0 | 0 | 0 | 0 | Rear End | Daylight | 22.68 | | | | | | | | | | |
| | | | | | | | | | | Pickup | West | Straight Ahead | Motor Vehicle In Traffic | Intersection | (UNK) | (UNK) | (UNK) | (UNK) | 1 |
| | | | | | | | | | | Pickup | West | Slow/Stop In Traffic | Motor Vehicle In Traffic | Intersection | (UNK) | (UNK) | (UNK) | (UNK) | 2 |
| 83493239 | | | | | | | | | | | | | | | | | | | |
| 8/25/2008 2:49 PM | Clear | Dry | 0 | 0 | 0 | 0 | Rear End | Daylight | 22.68 | | | | | | | | | | |
| | | | | | | | | | | Passenger | North | Slow/Stop - Left Turn | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 1 |

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## Collision Diagram

**1/1/2008 to 12/31/2008**

Crash Route: IL120 | From MileStation 21.52 to 25.81 | County : Lake | Intersection Related: All Cases | *See Notes at End of Report.

| Date | Weather | Roadway | Injuries A | Injuries B | Injuries C | Killed | Type of Crash | Light Condition | Mile | Vehicle Type | DIRP | Maneuver | Event 1 | Loc 1 | Event 2 | Loc 2 | Event 3 | Loc 3 | Unit |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | SUV | North | Slow/Stop - Left Turn | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 2 |
| 83842088 | | | | | | | | | | | | | | | | | | | |
| 9/8/2008 3:39 PM | Rain | Wet | 0 | 0 | 0 | 0 | Rear End | Daylight | 22.68 | | | | | | | | | | |
| | | | | | | | | | | Passenger | West | Slow/Stop In Traffic | Motor Vehicle In Traffic | Intersection | Ditch/Embankment | Off Pavement - Right | (UNK) | (UNK) | 1 |
| | | | | | | | | | | Pickup | West | Skidding/Control Loss | Motor Vehicle In Traffic | Intersection | (UNK) | (UNK) | (UNK) | (UNK) | 2 |
| 83230284 | | | | | | | | | | | | | | | | | | | |
| 7/22/2008 10:45 AM | Clear | Dry | 0 | 0 | 0 | 0 | Rear End | Daylight | 22.69 | | | | | | | | | | |
| | | | | | | | | | | Passenger | West | Straight Ahead | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 1 |
| | | | | | | | | | | Passenger | West | Slow/Stop In Traffic | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 2 |
| 81079485 | | | | | | | | | | | | | | | | | | | |
| 2/15/2008 6:46 PM | Clear | Dry | 0 | 0 | 0 | 0 | Animal | Darkness | 22.74 | | | | | | | | | | |
| | | | | | | | | | | Passenger | East | Straight Ahead | Other Animal | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 1 |
| 81441149 | | | | | | | | | | | | | | | | | | | |
| 3/30/2008 1:51 PM | Clear | Dry | 0 | 1 | 0 | 0 | Rear End | Daylight | 22.76 | | | | | | | | | | |
| | | | | | | | | | | Motorcycle (Over 150cc) | West | Skidding/Control Loss | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 1 |
| | | | | | | | | | | Passenger | West | Straight Ahead | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 2 |
| 81586778 | | | | | | | | | | | | | | | | | | | |
| 1/15/2008 7:12 AM | Clear | Dry | 0 | 0 | 0 | 0 | Rear End | Daylight | 22.83 | | | | | | | | | | |
| | | | | | | | | | | Passenger | West | Straight Ahead | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 1 |
| | | | | | | | | | | Van/Mini-Van | West | Slow/Stop In Traffic | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 2 |

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## Collision Diagram

**1/1/2008 to 12/31/2008**

Crash Route: IL120 | From MileStation 21.52 to 25.81 | County : Lake | Intersection Related: All Cases | *See Notes at End of Report.

| Date | Weather | Roadway | Injuries A | Injuries B | Injuries C | Killed | Type of Crash | Light Condition | Mile | Vehicle Type | DIRP | Maneuver | Event 1 | Loc 1 | Event 2 | Loc 2 | Event 3 | Loc 3 | Unit |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 81078016 | | | | | | | | | | | | | | | | | | | |
| 2/29/2008 4:01 PM | Clear | Wet | 0 | 0 | 1 | 0 | Rear End | Daylight | 22.86 | | | | | | | | | | |
| | | | | | | | | | | Passenger | East | Straight Ahead | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 1 |
| | | | | | | | | | | Passenger | East | Slow/Stop In Traffic | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 2 |
| 81085953 | | | | | | | | | | | | | | | | | | | |
| 2/6/2008 12:58 PM | Other | Snow or Slush | 0 | 0 | 0 | 0 | Rear End | Daylight | 22.96 | | | | | | | | | | |
| | | | | | | | | | | Van/Mini-Van | East | Slow/Stop In Traffic | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 1 |
| | | | | | | | | | | SUV | East | Slow/Stop In Traffic | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 2 |
| 81423477 | | | | | | | | | | | | | | | | | | | |
| 3/6/2008 10:05 AM | Clear | Dry | 0 | 0 | 0 | 0 | Rear End | Daylight | 22.96 | | | | | | | | | | |
| | | | | | | | | | | Passenger | South | Slow/Stop In Traffic | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 1 |
| | | | | | | | | | | Passenger | South | Slow/Stop In Traffic | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 2 |
| 81802738 | | | | | | | | | | | | | | | | | | | |
| 4/19/2008 1:50 PM | Clear | Dry | 0 | 0 | 0 | 0 | Rear End | Daylight | 22.96 | | | | | | | | | | |
| | | | | | | | | | | Passenger | East | Slow/Stop In Traffic | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 1 |
| | | | | | | | | | | Passenger | East | Straight Ahead | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 2 |
| 81800807 | | | | | | | | | | | | | | | | | | | |
| 4/28/2008 12:50 PM | Rain | Wet | 0 | 0 | 0 | 0 | Rear End | Daylight | 22.96 | | | | | | | | | | |
| | | | | | | | | | | Pickup | East | Slow/Stop In Traffic | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 1 |
| | | | | | | | | | | Passenger | East | Slow/Stop In Traffic | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 2 |

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## Collision Diagram

**1/1/2008 to 12/31/2008**

Crash Route: IL120 | From MileStation 21.52 to 25.81 | County : Lake | Intersection Related: All Cases | *See Notes at End of Report.

| Date | Weather | Roadway | Injuries A | Injuries B | Injuries C | Killed | Type of Crash | Light Condition | Mile | Vehicle Type | DIRP | Maneuver | Event 1 | Loc 1 | Event 2 | Loc 2 | Event 3 | Loc 3 | Unit |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 81800088 | | | | | | | | | | | | | | | | | | | |
| 4/28/2008 5:00 PM | Rain | Wet | 0 | 0 | 0 | 0 | Rear End | Daylight | 22.96 | | | | | | | | | | |
| | | | | | | | | | | Pickup | East | Slow/Stop In Traffic | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 1 |
| | | | | | | | | | | Passenger | East | Straight Ahead | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 2 |
| 82338955 | | | | | | | | | | | | | | | | | | | |
| 5/12/2008 4:00 PM | Clear | Dry | 0 | 0 | 0 | 0 | Rear End | Daylight | 22.96 | | | | | | | | | | |
| | | | | | | | | | | Pickup | East | Straight Ahead | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 1 |
| | | | | | | | | | | Pickup | East | Slow/Stop In Traffic | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 2 |
| 82338484 | | | | | | | | | | | | | | | | | | | |
| 5/18/2008 2:13 PM | Clear | Dry | 0 | 0 | 0 | 0 | Rear End | Daylight | 22.96 | | | | | | | | | | |
| | | | | | | | | | | Motorcycle (Over 150cc) | East | Slow/Stop In Traffic | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 1 |
| | | | | | | | | | | Passenger | East | Slow/Stop - Left Turn | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 2 |
| 82338096 | | | | | | | | | | | | | | | | | | | |
| 5/21/2008 6:03 AM | Clear | Dry | 0 | 0 | 0 | 0 | Rear End | Daylight | 22.96 | | | | | | | | | | |
| | | | | | | | | | | SUV | South | Slow/Stop - Right Turn | Motor Vehicle In Traffic | Intersectio n | (UNK) | (UNK) | (UNK) | (UNK) | 1 |
| | | | | | | | | | | SUV | South | Slow/Stop - Right Turn | Motor Vehicle In Traffic | Intersectio n | (UNK) | (UNK) | (UNK) | (UNK) | 2 |
| 82949272 | | | | | | | | | | | | | | | | | | | |
| 6/5/2008 7:24 AM | Clear | Wet | 0 | 0 | 0 | 0 | Rear End | Daylight | 22.96 | | | | | | | | | | |
| | | | | | | | | | | Passenger | South | Slow/Stop - Right Turn | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 1 |
| | | | | | | | | | | Van/Mini-Van | South | Slow/Stop - Right Turn | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 2 |

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## Collision Diagram

**1/1/2008 to 12/31/2008**

Crash Route: IL120 | From MileStation 21.52 to 25.81 | County : Lake | Intersection Related: All Cases | *See Notes at End of Report.

| Date | Weather | Roadway | Injuries A | Injuries B | Injuries C | Killed | Type of Crash | Light Condition | Mile | Vehicle Type | DIRP | Maneuver | Event 1 | Loc 1 | Event 2 | Loc 2 | Event 3 | Loc 3 | Unit |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 82948563 | | | | | | | | | | | | | | | | | | | |
| 6/25/2008 10:22 PM | Clear | Dry | 0 | 0 | 0 | 0 | Rear End | Darkness, Lighted Road | 22.96 | | | | | | | | | | |
| | | | | | | | | | | Passenger | South | Straight Ahead | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 1 |
| | | | | | | | | | | Passenger | South | Slow/Stop - Right Turn | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 2 |
| 83493163 | | | | | | | | | | | | | | | | | | | |
| 8/11/2008 1:10 PM | Clear | Dry | 0 | 0 | 0 | 0 | Rear End | Daylight | 22.96 | | | | | | | | | | |
| | | | | | | | | | | Passenger | West | Straight Ahead | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 1 |
| | | | | | | | | | | SUV | West | Slow/Stop In Traffic | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 2 |
| 83493197 | | | | | | | | | | | | | | | | | | | |
| 8/22/2008 5:13 PM | Clear | Dry | 0 | 0 | 1 | 0 | Turning | Daylight | 22.96 | | | | | | | | | | |
| | | | | | | | | | | Passenger | East | Turning Left | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 1 |
| | | | | | | | | | | Passenger | East | Straight Ahead | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 2 |
| 83854133 | | | | | | | | | | | | | | | | | | | |
| 9/9/2008 7:15 AM | Clear | Dry | 0 | 0 | 0 | 0 | Rear End | Daylight | 22.96 | | | | | | | | | | |
| | | | | | | | | | | SUV | North | Slow/Stop In Traffic | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 1 |
| | | | | | | | | | | SUV | North | Slow/Stop - Right Turn | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 2 |
| 83842104 | | | | | | | | | | | | | | | | | | | |
| 9/26/2008 7:14 AM | Clear | Dry | 0 | 0 | 1 | 0 | Rear End | Daylight | 22.96 | | | | | | | | | | |
| | | | | | | | | | | Passenger | South | Slow/Stop - Right Turn | Motor Vehicle In Traffic | Intersection | (UNK) | (UNK) | (UNK) | (UNK) | 1 |
| | | | | | | | | | | Passenger | South | Slow/Stop - Right Turn | Motor Vehicle In Traffic | Intersection | (UNK) | (UNK) | (UNK) | (UNK) | 2 |

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## Collision Diagram

**1/1/2008 to 12/31/2008**

Crash Route: IL120 | From MileStation 21.52 to 25.81 | County : Lake | Intersection Related: All Cases | *See Notes at End of Report.

| Date | Weather | Roadway | Injuries A | B | C | Killed | Type of Crash | Light Condition | Mile | Vehicle Type | DIRP | Maneuver | Event 1 | Loc 1 | Event 2 | Loc 2 | Event 3 | Loc 3 | Unit |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 84573617 | | | | | | | | | | | | | | | | | | | |
| 10/6/2008 10:54 AM | Clear | Dry | 0 | 0 | 0 | 0 | Rear End | Daylight | 22.96 | | | | | | | | | | |
| | | | | | | | | | | Passenger | South | Slow/Stop - Right Turn | Motor Vehicle In Traffic | Intersection | (UNK) | (UNK) | (UNK) | (UNK) | 1 |
| | | | | | | | | | | SUV | South | Slow/Stop - Right Turn | Motor Vehicle In Traffic | Intersection | (UNK) | (UNK) | (UNK) | (UNK) | 2 |
| 85218881 | | | | | | | | | | | | | | | | | | | |
| 11/8/2008 9:55 AM | Rain | Wet | 0 | 0 | 0 | 0 | Rear End | Daylight | 22.96 | | | | | | | | | | |
| | | | | | | | | | | Passenger | South | Skidding/Control Loss | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 1 |
| | | | | | | | | | | Passenger | South | Slow/Stop - Right Turn | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 2 |
| 85167690 | | | | | | | | | | | | | | | | | | | |
| 12/23/2008 7:24 PM | Snow | Snow or Slush | 0 | 0 | 2 | 0 | Sideswipe Opposite Direction | Darkness | 22.97 | | | | | | | | | | |
| | | | | | | | | | | Van/Mini-Van | West | Skidding/Control Loss | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 1 |
| | | | | | | | | | | Pickup | East | Straight Ahead | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 2 |
| 81586653 | | | | | | | | | | | | | | | | | | | |
| 1/14/2008 4:53 PM | Snow | Snow or Slush | 0 | 0 | 0 | 0 | Rear End | Darkness, Lighted Road | 23.30 | | | | | | | | | | |
| | | | | | | | | | | Passenger | North | Skidding/Control Loss | Motor Vehicle In Traffic | Intersection | (UNK) | (UNK) | (UNK) | (UNK) | 1 |
| | | | | | | | | | | Passenger | North | Slow/Stop In Traffic | Motor Vehicle In Traffic | Intersection | (UNK) | (UNK) | (UNK) | (UNK) | 2 |
| 81094427 | | | | | | | | | | | | | | | | | | | |
| 2/4/2008 7:00 AM | Unknown | Unknown | 0 | 0 | 0 | 0 | Turning | Daylight | 23.30 | | | | | | | | | | |
| | | | | | | | | | | Passenger | East | Straight Ahead | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 1 |
| | | | | | | | | | | Passenger | East | Turning Right | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 2 |

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## Collision Diagram

**1/1/2008 to 12/31/2008**

Crash Route: IL120 | From MileStation 21.52 to 25.81 | County : Lake | Intersection Related: All Cases | *See Notes at End of Report.

| Date | Weather | Roadway | ------ A | Injuries B | ------ C | Killed | Type of Crash | Light Condition | Mile | Vehicle Type | DIRP | Maneuver | Event 1 | Loc 1 | Event 2 | Loc 2 | Event 3 | Loc 3 | Unit |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 81078784 | | | | | | | | | | | | | | | | | | | |
| 2/23/2008 12:51 AM | Clear | Dry | 0 | 1 | 0 | 0 | Rear End | Darkness, Lighted Road | 23.30 | | | | | | | | | | |
| | | | | | | | | | | Passenger | West | Straight Ahead | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 1 |
| | | | | | | | | | | Passenger | West | Slow/Stop - Left Turn | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 2 |
| 81441321 | | | | | | | | | | | | | | | | | | | |
| 3/29/2008 12:30 PM | Clear | Dry | 0 | 2 | 0 | 0 | Angle | Daylight | 23.30 | | | | | | | | | | |
| | | | | | | | | | | Pickup | South | Straight Ahead | Motor Vehicle In Traffic | Intersection | (UNK) | (UNK) | (UNK) | (UNK) | 1 |
| | | | | | | | | | | Van/Mini-Van | East | Avoiding Vehicle/Objects | Motor Vehicle In Traffic | Intersection | (UNK) | (UNK) | (UNK) | (UNK) | 2 |
| 83884015 | | | | | | | | | | | | | | | | | | | |
| 9/17/2008 5:40 PM | Clear | Dry | 0 | 0 | 0 | 0 | Rear End | Dusk | 23.30 | | | | | | | | | | |
| | | | | | | | | | | Van/Mini-Van | North | Slow/Stop - Right Turn | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 1 |
| | | | | | | | | | | Van/Mini-Van | North | Slow/Stop - Right Turn | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 2 |
| 85178994 | | | | | | | | | | | | | | | | | | | |
| 12/15/2008 12:15 PM | Snow | Ice | 0 | 0 | 0 | 0 | Fixed Object | Daylight | 23.30 | | | | | | | | | | |
| | | | | | | | | | | Passenger | East | Turning Right | Ran Off Roadway | Unknown | Light Support | Intersection | (UNK) | (UNK) | 1 |
| 85168144 | | | | | | | | | | | | | | | | | | | |
| 12/22/2008 8:03 AM | Clear | Snow or Slush | 0 | 0 | 0 | 0 | Rear End | Daylight | 23.30 | | | | | | | | | | |
| | | | | | | | | | | SUV | North | Straight Ahead | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 1 |
| | | | | | | | | | | Passenger | North | Straight Ahead | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 2 |
| 81079642 | | | | | | | | | | | | | | | | | | | |
| 2/19/2008 7:07 AM | Clear | Snow or Slush | 0 | 0 | 0 | 0 | Fixed Object | Daylight | 23.31 | | | | | | | | | | |
| | | | | | | | | | | Passenger | West | Skidding/Control Loss | Ran Off Roadway | Off Pavement - Right | Snowbank | Off Pavement - Right | (UNK) | (UNK) | 1 |

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## Collision Diagram

**1/1/2008 to 12/31/2008**

Crash Route: IL120 | From MileStation 21.52 to 25.81 | County : Lake | Intersection Related: All Cases | *See Notes at End of Report.

| Date | Weather | Roadway | Injuries A | Injuries B | Injuries C | Killed | Type of Crash | Light Condition | Mile | Vehicle Type | DIRP | Maneuver | Event 1 | Loc 1 | Event 2 | Loc 2 | Event 3 | Loc 3 | Unit |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 84711746 | | | | | | | | | | | | | | | | | | | |
| 11/17/2008 7:00 PM | Clear | Dry | 0 | 0 | 0 | 0 | Animal | Darkness | 23.41 | | | | | | | | | | |
| | | | | | | | | | | Passenger | East | Straight Ahead | Deer | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 1 |
| 82949207 | | | | | | | | | | | | | | | | | | | |
| 6/9/2008 6:41 AM | Rain | Wet | 0 | 0 | 0 | 0 | Rear End | Daylight | 23.47 | | | | | | | | | | |
| | | | | | | | | | | Passenger | North | Slow/Stop - Right Turn | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 1 |
| | | | | | | | | | | Passenger | North | Slow/Stop - Right Turn | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 2 |
| 83859256 | | | | | | | | | | | | | | | | | | | |
| 9/30/2008 7:33 AM | Clear | Dry | 0 | 0 | 0 | 0 | Rear End | Daylight | 23.47 | | | | | | | | | | |
| | | | | | | | | | | Passenger | North | Straight Ahead | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 1 |
| | | | | | | | | | | Passenger | North | Straight Ahead | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 2 |
| 81802217 | | | | | | | | | | | | | | | | | | | |
| 4/23/2008 7:00 PM | Clear | Dry | 0 | 0 | 0 | 0 | Rear End | Daylight | 23.48 | | | | | | | | | | |
| | | | | | | | | | | Unknown | West | Unknown | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 1 |
| | | | | | | | | | | Passenger | West | Slow/Stop In Traffic | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 2 |
| 82540089 | | | | | | | | | | | | | | | | | | | |
| 7/12/2008 10:00 AM | Clear | Dry | 0 | 0 | 0 | 0 | Turning | Daylight | 23.51 | | | | | | | | | | |
| | | | | | | | | | | Farm Equipment | West | Turning Right | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 1 |
| | | | | | | | | | | Pickup | West | Straight Ahead | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 2 |
| 85166866 | | | | | | | | | | | | | | | | | | | |
| 12/24/2008 10:06 AM | Snow | Snow or Slush | 0 | 0 | 0 | 0 | Sideswipe Opposite Direction | Daylight | 23.51 | | | | | | | | | | |
| | | | | | | | | | | Passenger | East | Avoiding Vehicle/Objects | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 1 |

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## Collision Diagram

**1/1/2008 to 12/31/2008**

Crash Route: IL120 | From MileStation 21.52 to 25.81 | County : Lake | Intersection Related: All Cases | *See Notes at End of Report.

| Date | Weather | Roadway | Injuries A | Injuries B | Injuries C | Killed | Type of Crash | Light Condition | Mile | Vehicle Type | DIRP | Maneuver | Event 1 | Loc 1 | Event 2 | Loc 2 | Event 3 | Loc 3 | Unit |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | SUV | West | Straight Ahead | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 2 |
| 83493270 | | | | | | | | | | | | | | | | | | | |
| 8/31/2008 9:24 PM | Clear | Dry | 0 | 0 | 0 | 0 | Fixed Object | Darkness | 23.53 | | | | | | | | | | |
| | | | | | | | | | | Passenger | West | Skidding/Control Loss | Ran Off Roadway | Off Pavement - Left | Tree or Shrub | Off Pavement - Left | Utility Pole | Off Pavement - Left | 1 |
| 80507999 | | | | | | | | | | | | | | | | | | | |
| 2/29/2008 7:00 AM | Snow | Snow or Slush | 0 | 0 | 0 | 0 | Rear End | Daylight | 23.69 | | | | | | | | | | |
| | | | | | | | | | | Passenger | West | Straight Ahead | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 1 |
| | | | | | | | | | | Van/Mini-Van | West | Slow/Stop In Traffic | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 2 |
| 80558950 | | | | | | | | | | | | | | | | | | | |
| 2/13/2008 7:50 AM | Snow | Snow or Slush | 0 | 0 | 0 | 0 | Rear End | Daylight | 23.71 | | | | | | | | | | |
| | | | | | | | | | | Passenger | East | Straight Ahead | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 1 |
| | | | | | | | | | | Passenger | East | Slow/Stop In Traffic | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 2 |
| 84192004 | | | | | | | | | | | | | | | | | | | |
| 11/10/2008 6:15 PM | Clear | Dry | 0 | 0 | 0 | 0 | Animal | Darkness | 23.84 | | | | | | | | | | |
| | | | | | | | | | | Passenger | West | Straight Ahead | Deer | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 1 |
| 81566788 | | | | | | | | | | | | | | | | | | | |
| 1/30/2008 4:35 PM | Clear | Dry | 0 | 0 | 0 | 0 | Rear End | Daylight | 23.90 | | | | | | | | | | |
| | | | | | | | | | | SUV | East | Straight Ahead | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 1 |
| | | | | | | | | | | Passenger | East | Slow/Stop In Traffic | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 2 |
| | | | | | | | | | | Passenger | East | Slow/Stop In Traffic | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 3 |

Illinois Department of Transportation
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## Collision Diagram

**1/1/2008 to 12/31/2008**

Crash Route: IL120 | From MileStation 21.52 to 25.81 | County : Lake | Intersection Related: All Cases | *See Notes at End of Report.

| Date | Weather | Roadway | Injuries A | Injuries B | Injuries C | Killed | Type of Crash | Light Condition | Mile | Vehicle Type | DIRP | Maneuver | Event 1 | Loc 1 | Event 2 | Loc 2 | Event 3 | Loc 3 | Unit |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 81124935 | | | | | | | | | | | | | | | | | | | |
| 3/9/2008 8:30 AM | Clear | Dry | 0 | 0 | 0 | 0 | Fixed Object | Daylight | 23.90 | | | | | | | | | | |
| | | | | | | | | | | Passenger | West | Skidding/Control Loss | Ran Off Roadway | Off Pavement - Right | Tree or Shrub | Off Pavement - Right | (UNK) | (UNK) | 1 |
| 83656090 | | | | | | | | | | | | | | | | | | | |
| 9/9/2008 6:45 PM | Clear | Dry | 0 | 0 | 0 | 0 | Rear End | Daylight | 23.90 | | | | | | | | | | |
| | | | | | | | | | | Passenger | East | Straight Ahead | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 1 |
| | | | | | | | | | | Passenger | East | Slow/Stop In Traffic | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 2 |
| 83710798 | | | | | | | | | | | | | | | | | | | |
| 10/8/2008 9:43 AM | Clear | Wet | 0 | 1 | 0 | 0 | Rear End | Daylight | 23.90 | | | | | | | | | | |
| | | | | | | | | | | Passenger | East | Straight Ahead | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 1 |
| | | | | | | | | | | Passenger | East | Straight Ahead | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 2 |
| 81224289 | | | | | | | | | | | | | | | | | | | |
| 4/3/2008 8:40 PM | Rain | Wet | 0 | 0 | 0 | 0 | Other Object | Darkness | 23.91 | | | | | | | | | | |
| | | | | | | | | | | Passenger | South | Straight Ahead | Other Object | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 1 |
| 83655852 | | | | | | | | | | | | | | | | | | | |
| 9/9/2008 6:11 PM | Clear | Dry | 0 | 0 | 0 | 0 | Rear End | Daylight | 24.13 | | | | | | | | | | |
| | | | | | | | | | | SUV | East | Straight Ahead | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 1 |
| | | | | | | | | | | SUV | East | Slow/Stop In Traffic | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 2 |
| 84384999 | | | | | | | | | | | | | | | | | | | |
| 10/24/2008 5:26 PM | Clear | Dry | 0 | 0 | 1 | 0 | Rear End | Daylight | 24.15 | | | | | | | | | | |
| | | | | | | | | | | Van/Mini-Van | East | Straight Ahead | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 1 |
| | | | | | | | | | | SUV | East | Slow/Stop In Traffic | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 2 |

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## Collision Diagram

**1/1/2008 to 12/31/2008**

Crash Route: IL120 | From MileStation 21.52 to 25.81 | County : Lake | Intersection Related: All Cases | *See Notes at End of Report.

| Date | Weather | Roadway | Injuries A | Injuries B | Injuries C | Killed | Type of Crash | Light Condition | Mile | Vehicle Type | DIRP | Maneuver | Event 1 | Loc 1 | Event 2 | Loc 2 | Event 3 | Loc 3 | Unit |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 81126039 | | | | | | | | | | | | | | | | | | | |
| 3/10/2008 9:15 AM | Snow | Wet | 0 | 0 | 0 | 0 | Rear End | Daylight | 24.23 | | | | | | | | | | |
| | | | | | | | | | | Passenger | East | Straight Ahead | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 1 |
| | | | | | | | | | | Pickup | East | Slow/Stop - Left Turn | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 2 |
| 80505514 | | | | | | | | | | | | | | | | | | | |
| 1/31/2008 7:39 PM | Snow | Snow or Slush | 0 | 0 | 0 | 0 | Fixed Object | Darkness | 24.30 | | | | | | | | | | |
| | | | | | | | | | | Passenger | East | Straight Ahead | Ran Off Roadway | Off Pavement - Right | Ditch/Embankment | Off Pavement - Right | (UNK) | (UNK) | 1 |
| 82953191 | | | | | | | | | | | | | | | | | | | |
| 7/29/2008 6:54 PM | Clear | Dry | 0 | 0 | 0 | 0 | Sideswipe Same Direction | Daylight | 24.31 | | | | | | | | | | |
| | | | | | | | | | | SUV | West | Straight Ahead | Motor Vehicle In Traffic | On Pavement (Roadway) | Guardrail Face | On Pavement (Roadway) | (UNK) | (UNK) | 1 |
| | | | | | | | | | | Passenger | West | Slow/Stop In Traffic | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 2 |
| 83297010 | | | | | | | | | | | | | | | | | | | |
| 8/15/2008 6:30 AM | Clear | Dry | 0 | 0 | 0 | 0 | Rear End | Daylight | 24.31 | | | | | | | | | | |
| | | | | | | | | | | Passenger | East | Skidding/Control Loss | Motor Vehicle In Traffic | Other | (UNK) | (UNK) | (UNK) | (UNK) | 1 |
| | | | | | | | | | | Pickup | East | Slow/Stop In Traffic | Motor Vehicle In Traffic | Other | (UNK) | (UNK) | (UNK) | (UNK) | 2 |
| 84370162 | | | | | | | | | | | | | | | | | | | |
| 10/2/2008 1:20 PM | Clear | Dry | 0 | 0 | 0 | 0 | Rear End | Daylight | 24.31 | | | | | | | | | | |
| | | | | | | | | | | Passenger | West | Straight Ahead | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 1 |
| | | | | | | | | | | Unknown | Unknown | Unknown | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 2 |
| | | | | | | | | | | Passenger | West | Straight Ahead | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 3 |

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## Collision Diagram

**1/1/2008 to 12/31/2008**

Crash Route: IL120 | From MileStation 21.52 to 25.81 | County : Lake | Intersection Related: All Cases | *See Notes at End of Report.

| Date | Weather | Roadway | Injuries A | Injuries B | Injuries C | Killed | Type of Crash | Light Condition | Mile | Vehicle Type | DIRP | Maneuver | Event 1 | Loc 1 | Event 2 | Loc 2 | Event 3 | Loc 3 | Unit |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 84384890 | | | | | | | | | | | | | | | | | | | |
| 10/4/2008 3:20 PM | Clear | Dry | 0 | 0 | 0 | 0 | Rear End | Daylight | 24.31 | | | | | | | | | | |
| | | | | | | | | | | Pickup | West | Straight Ahead | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 1 |
| | | | | | | | | | | Van/Mini-Van | West | Slow/Stop In Traffic | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 2 |
| 81357030 | | | | | | | | | | | | | | | | | | | |
| 4/2/2008 8:40 AM | Clear | Dry | 0 | 0 | 0 | 0 | Rear End | Daylight | 24.32 | | | | | | | | | | |
| | | | | | | | | | | Passenger | East | Straight Ahead | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 1 |
| | | | | | | | | | | Pickup | East | Slow/Stop In Traffic | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 2 |
| | | | | | | | | | | Passenger | East | Straight Ahead | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 3 |
| 84742733 | | | | | | | | | | | | | | | | | | | |
| 11/14/2008 7:07 AM | Rain | Wet | 0 | 0 | 0 | 0 | Rear End | Daylight | 24.33 | | | | | | | | | | |
| | | | | | | | | | | Passenger | East | Straight Ahead | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 1 |
| | | | | | | | | | | Passenger | East | Slow/Stop In Traffic | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 2 |
| | | | | | | | | | | Passenger | East | Slow/Stop In Traffic | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 3 |
| 82560053 | | | | | | | | | | | | | | | | | | | |
| 6/11/2008 2:20 PM | Clear | Unknown | 0 | 0 | 0 | 0 | Rear End | Daylight | 24.35 | | | | | | | | | | |
| | | | | | | | | | | Passenger | East | Slow/Stop In Traffic | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 1 |
| | | | | | | | | | | Van/Mini-Van | East | Slow/Stop In Traffic | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 2 |
| 84973320 | | | | | | | | | | | | | | | | | | | |
| 12/18/2008 9:30 PM | Snow | Wet | 0 | 0 | 0 | 0 | Turning | Daylight | 24.35 | | | | | | | | | | |
| | | | | | | | | | | Passenger | Northwest | Turning Left | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 1 |

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## Collision Diagram

**1/1/2008 to 12/31/2008**

Crash Route: IL120 | From MileStation 21.52 to 25.81 | County : Lake | Intersection Related: All Cases | *See Notes at End of Report.

| Date | Weather | Roadway | Injuries A | Injuries B | Injuries C | Killed | Type of Crash | Light Condition | Mile | Vehicle Type | DIRP | Maneuver | Event 1 | Loc 1 | Event 2 | Loc 2 | Event 3 | Loc 3 | Unit |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | SUV | West | Straight Ahead | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 2 |
| 81996126 | | | | | | | | | | | | | | | | | | | |
| 5/31/2008 4:01 PM | Clear | Dry | 0 | 0 | 0 | 0 | Rear End | Daylight | 24.37 | | | | | | | | | | |
| | | | | | | | | | | Passenger | East | Straight Ahead | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 1 |
| | | | | | | | | | | SUV | East | Slow/Stop In Traffic | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 2 |
| | | | | | | | | | | SUV | East | Slow/Stop In Traffic | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 3 |
| 82559584 | | | | | | | | | | | | | | | | | | | |
| 6/24/2008 6:16 PM | Clear | Dry | 0 | 0 | 0 | 0 | Rear End | Daylight | 24.37 | | | | | | | | | | |
| | | | | | | | | | | Passenger | West | Straight Ahead | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 1 |
| | | | | | | | | | | Passenger | West | Slow/Stop In Traffic | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 2 |
| 82559345 | | | | | | | | | | | | | | | | | | | |
| 6/25/2008 11:30 AM | Rain | Wet | 0 | 0 | 0 | 0 | Rear End | Daylight | 24.37 | | | | | | | | | | |
| | | | | | | | | | | SUV | North | Straight Ahead | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 1 |
| | | | | | | | | | | Passenger | North | Slow/Stop In Traffic | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 2 |
| 83297317 | | | | | | | | | | | | | | | | | | | |
| 8/2/2008 3:35 PM | Unknown | Dry | 0 | 0 | 0 | 0 | Rear End | Daylight | 24.37 | | | | | | | | | | |
| | | | | | | | | | | Passenger | East | Straight Ahead | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 1 |
| | | | | | | | | | | Van/Mini-Van | East | Slow/Stop In Traffic | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 2 |
| 84710524 | | | | | | | | | | | | | | | | | | | |
| 11/27/2008 5:30 PM | Clear | Dry | 0 | 0 | 0 | 0 | Sideswipe Same Direction | Darkness, Lighted Road | 24.37 | | | | | | | | | | |
| | | | | | | | | | | Passenger | East | Passing/Overtaking | Motor Vehicle In Traffic | Intersection | (UNK) | (UNK) | (UNK) | (UNK) | 1 |

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## Collision Diagram

**1/1/2008 to 12/31/2008**

Crash Route: IL120 | From MileStation 21.52 to 25.81 | County : Lake | Intersection Related: All Cases | *See Notes at End of Report.

| Date | Weather | Roadway | Injuries A | Injuries B | Injuries C | Killed | Type of Crash | Light Condition | Mile | Vehicle Type | DIRP | Maneuver | Event 1 | Loc 1 | Event 2 | Loc 2 | Event 3 | Loc 3 | Unit |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | SUV | East | Changing Lanes | Motor Vehicle In Traffic | Intersection | (UNK) | (UNK) | (UNK) | (UNK) | 2 |
| 81139248 | | | | | | | | | | | | | | | | | | | |
| 2/23/2008 7:38 AM | Clear | Dry | 0 | 0 | 0 | 0 | Sideswipe Opposite Direction | Daylight | 24.39 | | | | | | | | | | |
| | | | | | | | | | | Van/Mini-Van | West | Other | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 1 |
| | | | | | | | | | | SUV | East | Straight Ahead | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 2 |
| 83644302 | | | | | | | | | | | | | | | | | | | |
| 9/10/2008 4:40 PM | Clear | Dry | 0 | 0 | 0 | 0 | Turning | Daylight | 24.39 | | | | | | | | | | |
| | | | | | | | | | | Passenger | West | Passing/Overtaking | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 1 |
| | | | | | | | | | | Passenger | North | Turning Left | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 2 |
| 83644260 | | | | | | | | | | | | | | | | | | | |
| 9/30/2008 4:45 PM | Clear | Dry | 0 | 0 | 0 | 0 | Rear End | Daylight | 24.40 | | | | | | | | | | |
| | | | | | | | | | | Passenger | West | Straight Ahead | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 1 |
| | | | | | | | | | | SUV | West | Slow/Stop In Traffic | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 2 |
| 84973957 | | | | | | | | | | | | | | | | | | | |
| 12/13/2008 6:00 PM | Rain | Wet | 0 | 0 | 0 | 0 | Sideswipe Opposite Direction | Darkness | 24.41 | | | | | | | | | | |
| | | | | | | | | | | Van/Mini-Van | East | Straight Ahead | Falling Load | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 1 |
| | | | | | | | | | | Passenger | West | Straight Ahead | Falling Load | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 2 |
| 80506124 | | | | | | | | | | | | | | | | | | | |
| 2/9/2008 11:05 AM | Snow | Snow or Slush | 0 | 0 | 0 | 0 | Parked Motor Vehicle | Daylight | 24.42 | | | | | | | | | | |
| | | | | | | | | | | Bus Up to 15 Passengers | Southeast | Turning Left | Hit Parked Vehicle | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 1 |
| | | | | | | | | | | Pickup | Southeast | Parked | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 2 |

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## Collision Diagram

**1/1/2008 to 12/31/2008**

Crash Route: IL120 | From MileStation 21.52 to 25.81 | County : Lake | Intersection Related: All Cases | *See Notes at End of Report.

| Date | Weather | Roadway | Injuries A | Injuries B | Injuries C | Killed | Type of Crash | Light Condition | Mile | Vehicle Type | DIRP | Maneuver | Event 1 | Loc 1 | Event 2 | Loc 2 | Event 3 | Loc 3 | Unit |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 81536468 | | | | | | | | | | | | | | | | | | | |
| 4/4/2008 2:56 PM | Clear | Dry | 0 | 0 | 0 | 0 | Turning | Daylight | 24.49 | | | | | | | | | | |
| | | | | | | | | | | SUV | East | Turning Left | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 1 |
| | | | | | | | | | | Passenger | West | Passing/Overtaking | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 2 |
| 82953605 | | | | | | | | | | | | | | | | | | | |
| 7/17/2008 4:39 PM | Clear | Dry | 0 | 0 | 0 | 0 | Turning | Daylight | 24.49 | | | | | | | | | | |
| | | | | | | | | | | Van/Mini-Van | South | Turning Left | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 1 |
| | | | | | | | | | | Passenger | East | Straight Ahead | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 2 |
| 81982662 | | | | | | | | | | | | | | | | | | | |
| 5/16/2008 9:47 AM | Clear | Dry | 0 | 0 | 0 | 0 | Turning | Daylight | 24.50 | | | | | | | | | | |
| | | | | | | | | | | Passenger | Northwest | Turning Left | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 1 |
| | | | | | | | | | | Pickup | East | Straight Ahead | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 2 |
| 83296947 | | | | | | | | | | | | | | | | | | | |
| 8/15/2008 4:25 PM | Clear | Dry | 0 | 0 | 2 | 0 | Turning | Daylight | 24.52 | | | | | | | | | | |
| | | | | | | | | | | Passenger | East | Turning Left | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 1 |
| | | | | | | | | | | Passenger | South | Straight Ahead | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 2 |
| 81195091 | | | | | | | | | | | | | | | | | | | |
| 3/11/2008 8:30 AM | Clear | Dry | 0 | 0 | 0 | 0 | Rear End | Daylight | 24.53 | | | | | | | | | | |
| | | | | | | | | | | SUV | South | Straight Ahead | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 1 |
| | | | | | | | | | | Passenger | South | Slow/Stop In Traffic | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 2 |

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## Collision Diagram

**1/1/2008 to 12/31/2008**

Crash Route: IL120 | From MileStation 21.52 to 25.81 | County : Lake | Intersection Related: All Cases | *See Notes at End of Report.

| Date | Weather | Roadway | Injuries A | Injuries B | Injuries C | Killed | Type of Crash | Light Condition | Mile | Vehicle Type | DIRP | Maneuver | Event 1 | Loc 1 | Event 2 | Loc 2 | Event 3 | Loc 3 | Unit |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 81291734 | | | | | | | | | | | | | | | | | | | |
| 3/20/2008 10:45 AM | Clear | Dry | 0 | 0 | 0 | 0 | Rear End | Daylight | 24.53 | | | | | | | | | | |
| | | | | | | | | | | Pickup | South | Straight Ahead | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 1 |
| | | | | | | | | | | Passenger | South | Slow/Stop In Traffic | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 2 |
| 81983066 | | | | | | | | | | | | | | | | | | | |
| 5/3/2008 11:54 AM | Rain | Wet | 0 | 0 | 0 | 0 | Rear End | Daylight | 24.53 | | | | | | | | | | |
| | | | | | | | | | | Passenger | West | Slow/Stop In Traffic | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 1 |
| | | | | | | | | | | Passenger | West | Slow/Stop In Traffic | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 2 |
| 81982118 | | | | | | | | | | | | | | | | | | | |
| 5/28/2008 11:21 AM | Clear | Dry | 0 | 0 | 0 | 0 | Rear End | Daylight | 24.53 | | | | | | | | | | |
| | | | | | | | | | | Passenger | West | Skidding/Control Loss | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 1 |
| | | | | | | | | | | Pickup | West | Slow/Stop In Traffic | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 2 |
| 82560368 | | | | | | | | | | | | | | | | | | | |
| 6/5/2008 11:50 AM | Clear | Dry | 0 | 0 | 0 | 0 | Rear End | Daylight | 24.53 | | | | | | | | | | |
| | | | | | | | | | | Van/Mini-Van | West | Straight Ahead | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 1 |
| | | | | | | | | | | Van/Mini-Van | West | Slow/Stop In Traffic | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 2 |
| 82560160 | | | | | | | | | | | | | | | | | | | |
| 6/9/2008 2:40 PM | Rain | Wet | 0 | 0 | 0 | 0 | Turning | Daylight | 24.53 | | | | | | | | | | |
| | | | | | | | | | | Unknown | Southwest | Turning Right | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 1 |
| | | | | | | | | | | Passenger | West | Turning Right | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 2 |

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## Collision Diagram

**1/1/2008 to 12/31/2008**

Crash Route: IL120 | From MileStation 21.52 to 25.81 | County : Lake | Intersection Related: All Cases | *See Notes at End of Report.

| Date | Weather | Roadway | ------ A | Injuries B | ------ C | Killed | Type of Crash | Light Condition | Mile | Vehicle Type | DIRP | Maneuver | Event 1 | Loc 1 | Event 2 | Loc 2 | Event 3 | Loc 3 | Unit |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 83297218 | | | | | | | | | | | | | | | | | | | |
| 8/4/2008 9:20 AM | Clear | Wet | 0 | 0 | 0 | 0 | Turning | Daylight | 24.53 | | | | | | | | | | |
| | | | | | | | | | | Other Vehicle With Trailer | Southwest | Turning Right | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 1 |
| | | | | | | | | | | Passenger | Southwest | Turning Right | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 2 |
| 83302372 | | | | | | | | | | | | | | | | | | | |
| 8/20/2008 8:28 PM | Clear | Dry | 0 | 0 | 1 | 0 | Rear End | Darkness | 24.53 | | | | | | | | | | |
| | | | | | | | | | | Passenger | West | Straight Ahead | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 1 |
| | | | | | | | | | | Passenger | West | Slow/Stop In Traffic | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 2 |
| | | | | | | | | | | Passenger | West | Slow/Stop In Traffic | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 3 |
| 83296269 | | | | | | | | | | | | | | | | | | | |
| 8/22/2008 7:15 PM | Clear | Dry | 0 | 0 | 0 | 0 | Rear End | Dusk | 24.53 | | | | | | | | | | |
| | | | | | | | | | | Passenger | West | Slow/Stop In Traffic | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 1 |
| | | | | | | | | | | Passenger | West | Slow/Stop In Traffic | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 2 |
| 83295568 | | | | | | | | | | | | | | | | | | | |
| 8/29/2008 7:25 AM | Clear | Dry | 0 | 0 | 0 | 0 | Rear End | Daylight | 24.53 | | | | | | | | | | |
| | | | | | | | | | | SUV | South | Straight Ahead | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 1 |
| | | | | | | | | | | Passenger | South | Slow/Stop - Right Turn | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 2 |
| 83644310 | | | | | | | | | | | | | | | | | | | |
| 9/9/2008 7:25 AM | Clear | Dry | 0 | 0 | 0 | 0 | Rear End | Daylight | 24.53 | | | | | | | | | | |
| | | | | | | | | | | SUV | West | Straight Ahead | Motor Vehicle In Traffic | Other | (UNK) | (UNK) | (UNK) | (UNK) | 1 |
| | | | | | | | | | | Pickup | West | Straight Ahead | Motor Vehicle In Traffic | Other | (UNK) | (UNK) | (UNK) | (UNK) | 2 |

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## Collision Diagram

**1/1/2008 to 12/31/2008**

Crash Route: IL120 | From MileStation 21.52 to 25.81 | County : Lake | Intersection Related: All Cases | *See Notes at End of Report.

| Date | Weather | Roadway | Injuries A | Injuries B | Injuries C | Killed | Type of Crash | Light Condition | Mile | Vehicle Type | DIRP | Maneuver | Event 1 | Loc 1 | Event 2 | Loc 2 | Event 3 | Loc 3 | Unit |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 84384932 | | | | | | | | | | | | | | | | | | | |
| 10/17/2008 1:40 PM | Clear | Dry | 0 | 0 | 0 | 0 | Rear End | Daylight | 24.53 | | | | | | | | | | |
| | | | | | | | | | | Van/Mini-Van | West | Straight Ahead | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 1 |
| | | | | | | | | | | SUV | West | Straight Ahead | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 2 |
| 83300699 | | | | | | | | | | | | | | | | | | | |
| 8/13/2008 10:00 AM | Clear | Dry | 0 | 0 | 1 | 0 | Rear End | Daylight | 24.54 | | | | | | | | | | |
| | | | | | | | | | | Bus Up to 15 Passengers | West | Straight Ahead | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 1 |
| | | | | | | | | | | Pickup | West | Straight Ahead | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 2 |
| 82075615 | | | | | | | | | | | | | | | | | | | |
| 5/22/2008 10:09 AM | Clear | Dry | 0 | 0 | 0 | 0 | Rear End | Daylight | 24.55 | | | | | | | | | | |
| | | | | | | | | | | Truck Single Unit | East | Slow/Stop In Traffic | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 1 |
| | | | | | | | | | | Passenger | East | Slow/Stop In Traffic | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 2 |
| 80063928 | | | | | | | | | | | | | | | | | | | |
| 1/25/2008 11:40 AM | Clear | Dry | 0 | 3 | 0 | 0 | Rear End | Daylight | 24.68 | | | | | | | | | | |
| | | | | | | | | | | Van/Mini-Van | West | Straight Ahead | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 1 |
| | | | | | | | | | | Passenger | West | Slow/Stop In Traffic | Motor Vehicle In Traffic | On Pavement (Roadway) | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | 2 |
| | | | | | | | | | | Van/Mini-Van | West | Slow/Stop In Traffic | Motor Vehicle In Traffic | On Pavement (Roadway) | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | 3 |
| | | | | | | | | | | Passenger | West | Slow/Stop In Traffic | Motor Vehicle In Traffic | On Pavement (Roadway) | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | 4 |
| | | | | | | | | | | Van/Mini-Van | West | Slow/Stop In Traffic | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 5 |

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## Collision Diagram

**1/1/2008 to 12/31/2008**

Crash Route: IL120 | From MileStation 21.52 to 25.81 | County : Lake | Intersection Related: All Cases | *See Notes at End of Report.

| Date | Weather | Roadway | ------ A | Injuries B | ------ C | Killed | Type of Crash | Light Condition | Mile | Vehicle Type | DIRP | Maneuver | Event 1 | Loc 1 | Event 2 | Loc 2 | Event 3 | Loc 3 | Unit |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 82928789 | | | | | | | | | | | | | | | | | | | |
| 7/22/2008 2:20 PM | Clear | Dry | 0 | 0 | 2 | 0 | Rear End | Daylight | 24.68 | | | | | | | | | | |
| | | | | | | | | | | Passenger | West | Straight Ahead | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 1 |
| | | | | | | | | | | Passenger | West | Slow/Stop In Traffic | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 2 |
| | | | | | | | | | | Passenger | West | Slow/Stop In Traffic | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 3 |
| 83644328 | | | | | | | | | | | | | | | | | | | |
| 9/6/2008 1:35 PM | Clear | Dry | 0 | 0 | 0 | 0 | Rear End | Daylight | 24.69 | | | | | | | | | | |
| | | | | | | | | | | Passenger | West | Straight Ahead | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 1 |
| | | | | | | | | | | Passenger | West | Straight Ahead | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 2 |
| 83644294 | | | | | | | | | | | | | | | | | | | |
| 9/11/2008 2:25 PM | Clear | Dry | 0 | 0 | 0 | 0 | Rear End | Daylight | 24.69 | | | | | | | | | | |
| | | | | | | | | | | Van/Mini-Van | West | Straight Ahead | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 1 |
| | | | | | | | | | | Pickup | West | Straight Ahead | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 2 |
| 81170458 | | | | | | | | | | | | | | | | | | | |
| 2/12/2008 6:20 PM | Snow | Snow or Slush | 0 | 0 | 0 | 0 | Rear End | Darkness, Lighted Road | 24.70 | | | | | | | | | | |
| | | | | | | | | | | Pickup | West | Straight Ahead | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 1 |
| | | | | | | | | | | Passenger | West | Straight Ahead | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 2 |
| 81540502 | | | | | | | | | | | | | | | | | | | |
| 4/19/2008 12:45 PM | Clear | Dry | 0 | 0 | 0 | 0 | Rear End | Daylight | 24.70 | | | | | | | | | | |
| | | | | | | | | | | Van/Mini-Van | West | Straight Ahead | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 1 |
| | | | | | | | | | | Passenger | West | Straight Ahead | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 2 |

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## Collision Diagram

**1/1/2008 to 12/31/2008**

Crash Route: IL120 | From MileStation 21.52 to 25.81 | County : Lake | Intersection Related: All Cases | *See Notes at End of Report.

| Date | Weather | Roadway | Injuries A | Injuries B | Injuries C | Killed | Type of Crash | Light Condition | Mile | Vehicle Type | DIRP | Maneuver | Event 1 | Loc 1 | Event 2 | Loc 2 | Event 3 | Loc 3 | Unit |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 81540650 | | | | | | | | | | | | | | | | | | | |
| 4/19/2008 2:22 PM | Clear | Dry | 0 | 0 | 0 | 0 | Rear End | Daylight | 24.70 | | | | | | | | | | |
| | | | | | | | | | | Passenger | West | Slow/Stop In Traffic | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 1 |
| | | | | | | | | | | SUV | West | Slow/Stop In Traffic | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 2 |
| 82954199 | | | | | | | | | | | | | | | | | | | |
| 7/13/2008 12:45 PM | Clear | Dry | 0 | 0 | 0 | 0 | Angle | Daylight | 24.70 | | | | | | | | | | |
| | | | | | | | | | | Passenger | South | Straight Ahead | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 1 |
| | | | | | | | | | | Passenger | East | Straight Ahead | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 2 |
| 84974245 | | | | | | | | | | | | | | | | | | | |
| 12/3/2008 5:09 PM | Snow | Snow or Slush | 0 | 0 | 0 | 0 | Turning | Darkness | 24.70 | | | | | | | | | | |
| | | | | | | | | | | Passenger | Northwest | Turning Right | Motor Vehicle In Traffic | Other | (UNK) | (UNK) | (UNK) | (UNK) | 1 |
| | | | | | | | | | | SUV | South | Straight Ahead | Motor Vehicle In Traffic | Other | (UNK) | (UNK) | (UNK) | (UNK) | 2 |
| 82559790 | | | | | | | | | | | | | | | | | | | |
| 6/18/2008 3:10 PM | Clear | Dry | 0 | 0 | 0 | 0 | Fixed Object | Daylight | 24.71 | | | | | | | | | | |
| | | | | | | | | | | Van/Mini-Van | West | Other | Ran Off Roadway | On Pavement (Roadway) | Tree or Shrub | Off Pavement - Right | (UNK) | (UNK) | 1 |
| 84714559 | | | | | | | | | | | | | | | | | | | |
| 11/12/2008 7:12 PM | Rain | Wet | 0 | 0 | 0 | 0 | Rear End | Darkness, Lighted Road | 24.71 | | | | | | | | | | |
| | | | | | | | | | | SUV | West | Skidding/Control Loss | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 1 |
| | | | | | | | | | | Passenger | West | Slow/Stop In Traffic | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 2 |
| 82953779 | | | | | | | | | | | | | | | | | | | |
| 7/15/2008 4:56 PM | Clear | Dry | 0 | 0 | 0 | 0 | Rear End | Daylight | 24.73 | | | | | | | | | | |
| | | | | | | | | | | Pickup | West | Slow/Stop In Traffic | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 1 |

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## Collision Diagram

**1/1/2008 to 12/31/2008**

Crash Route: IL120 | From MileStation 21.52 to 25.81 | County : Lake | Intersection Related: All Cases | *See Notes at End of Report.

| Date | Weather | Roadway | Injuries A | Injuries B | Injuries C | Killed | Type of Crash | Light Condition | Mile | Vehicle Type | DIRP | Maneuver | Event 1 | Loc 1 | Event 2 | Loc 2 | Event 3 | Loc 3 | Unit |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | Passenger | West | Slow/Stop In Traffic | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 2 |
| 81996555 | | | | | | | | | | | | | | | | | | | |
| 5/28/2008 12:56 PM | Clear | Dry | 0 | 0 | 0 | 0 | Rear End | Daylight | 24.74 | | | | | | | | | | |
| | | | | | | | | | | Passenger | East | Skidding/Control Loss | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 1 |
| | | | | | | | | | | Passenger | East | Slow/Stop In Traffic | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 2 |
| | | | | | | | | | | SUV | East | Slow/Stop In Traffic | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 3 |
| 81170599 | | | | | | | | | | | | | | | | | | | |
| 2/12/2008 5:24 PM | Snow | Snow or Slush | 0 | 0 | 0 | 0 | Rear End | Darkness, Lighted Road | 24.78 | | | | | | | | | | |
| | | | | | | | | | | Pickup | West | Slow/Stop In Traffic | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 1 |
| | | | | | | | | | | Pickup | West | Straight Ahead | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 2 |
| 82928953 | | | | | | | | | | | | | | | | | | | |
| 7/11/2008 3:27 PM | Clear | Dry | 0 | 0 | 1 | 0 | Rear End | Daylight | 24.91 | | | | | | | | | | |
| | | | | | | | | | | Passenger | West | Straight Ahead | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 1 |
| | | | | | | | | | | SUV | West | Straight Ahead | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 2 |
| | | | | | | | | | | Passenger | West | Straight Ahead | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 3 |
| 80505761 | | | | | | | | | | | | | | | | | | | |
| 2/5/2008 7:13 AM | Clear | Dry | 0 | 1 | 0 | 0 | Rear End | Daylight | 24.94 | | | | | | | | | | |
| | | | | | | | | | | Passenger | East | Straight Ahead | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 1 |
| | | | | | | | | | | SUV | East | Straight Ahead | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 2 |

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## Collision Diagram

**1/1/2008 to 12/31/2008**

Crash Route: IL120 | From MileStation 21.52 to 25.81 | County : Lake | Intersection Related: All Cases | *See Notes at End of Report.

| Date | Weather | Roadway | Injuries A | Injuries B | Injuries C | Killed | Type of Crash | Light Condition | Mile | Vehicle Type | DIRP | Maneuver | Event 1 | Loc 1 | Event 2 | Loc 2 | Event 3 | Loc 3 | Unit |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 84384817 | | | | | | | | | | | | | | | | | | | |
| 10/13/2008 6:34 PM | Clear | Dry | 0 | 0 | 0 | 0 | Turning | Dusk | 24.95 | | | | | | | | | | |
| | | | | | | | | | | Van/Mini-Van | South | Turning Left | Motor Vehicle In Traffic | Intersection | (UNK) | (UNK) | (UNK) | (UNK) | 1 |
| | | | | | | | | | | Van/Mini-Van | West | Straight Ahead | Motor Vehicle In Traffic | Intersection | (UNK) | (UNK) | (UNK) | (UNK) | 2 |
| 83629782 | | | | | | | | | | | | | | | | | | | |
| 9/4/2008 3:59 PM | Rain | Wet | 1 | 0 | 0 | 0 | Rear End | Daylight | 24.96 | | | | | | | | | | |
| | | | | | | | | | | Pickup | West | Straight Ahead | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 1 |
| | | | | | | | | | | Passenger | West | Slow/Stop In Traffic | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 2 |
| | | | | | | | | | | Pickup | West | Slow/Stop In Traffic | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 3 |
| | | | | | | | | | | Van/Mini-Van | West | Slow/Stop In Traffic | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 4 |
| 81166464 | | | | | | | | | | | | | | | | | | | |
| 2/21/2008 5:55 PM | Clear | Dry | 0 | 0 | 0 | 0 | Rear End | Darkness | 24.97 | | | | | | | | | | |
| | | | | | | | | | | Passenger | West | Slow/Stop In Traffic | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 1 |
| | | | | | | | | | | SUV | West | Slow/Stop In Traffic | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 2 |
| 81794307 | | | | | | | | | | | | | | | | | | | |
| 4/28/2008 4:10 PM | Rain | Wet | 0 | 0 | 0 | 0 | Rear End | Daylight | 24.98 | | | | | | | | | | |
| | | | | | | | | | | Passenger | West | Slow/Stop In Traffic | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 1 |
| | | | | | | | | | | Passenger | West | Slow/Stop In Traffic | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 2 |
| 81730954 | | | | | | | | | | | | | | | | | | | |
| 3/31/2008 3:14 PM | Rain | Wet | 0 | 0 | 0 | 0 | Rear End | Daylight | 24.99 | | | | | | | | | | |
| | | | | | | | | | | Passenger | West | Straight Ahead | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 1 |

Illinois Department of Transportation
Division of Traffic Safety



## Collision Diagram

**1/1/2008 to 12/31/2008**

Crash Route: IL120 | From MileStation 21.52 to 25.81 | County : Lake | Intersection Related: All Cases | *See Notes at End of Report.

| Date | Weather | Roadway | Injuries A | Injuries B | Injuries C | Killed | Type of Crash | Light Condition | Mile | Vehicle Type | DIRP | Maneuver | Event 1 | Loc 1 | Event 2 | Loc 2 | Event 3 | Loc 3 | Unit |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | Passenger | West | Slow/Stop In Traffic | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 2 |
| 81738825 | | | | | | | | | | | | | | | | | | | |
| 2/11/2008 6:01 PM | Clear | Dry | 0 | 0 | 1 | 0 | Rear End | Darkness | 25.09 | | | | | | | | | | |
| | | | | | | | | | | Passenger | West | Straight Ahead | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 1 |
| | | | | | | | | | | Passenger | West | Slow/Stop In Traffic | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 2 |
| 83075101 | | | | | | | | | | | | | | | | | | | |
| 5/28/2008 8:54 AM | Clear | Dry | 0 | 0 | 0 | 0 | Turning | Daylight | 25.09 | | | | | | | | | | |
| | | | | | | | | | | SUV | West | Turning Left | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 1 |
| | | | | | | | | | | SUV | Southwest | Turning Left | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 2 |
| 83047050 | | | | | | | | | | | | | | | | | | | |
| 5/20/2008 4:58 PM | Clear | Dry | 0 | 0 | 0 | 0 | Rear End | Daylight | 25.11 | | | | | | | | | | |
| | | | | | | | | | | SUV | West | Straight Ahead | Motor Vehicle In Traffic | Off Pavement - Left | (UNK) | (UNK) | (UNK) | (UNK) | 1 |
| | | | | | | | | | | Unknown | West | Unknown | Motor Vehicle In Traffic | Off Pavement - Left | (UNK) | (UNK) | (UNK) | (UNK) | 2 |
| 84597897 | | | | | | | | | | | | | | | | | | | |
| 11/12/2008 3:15 PM | Clear | Wet | 0 | 0 | 1 | 0 | Rear End | Daylight | 25.11 | | | | | | | | | | |
| | | | | | | | | | | Pickup | West | Skidding/Control Loss | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 1 |
| | | | | | | | | | | Passenger | West | Slow/Stop In Traffic | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 2 |
| | | | | | | | | | | Passenger | West | Skidding/Control Loss | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 3 |
| | | | | | | | | | | Tractor With Semi -Trailer | West | Unknown | Motor Vehicle In Traffic | On Pavement (Roadway) | (UNK) | (UNK) | (UNK) | (UNK) | 4 |