

*****TRAFFIC CHECKER DATA

STANDARD COUNT

* NS St: COLUMBIA AV. EW St: 3rd ST.

* Date: June 22, 2011 Day: WEDNESDAY Sch? YES Weather: SUNNY

* Dist: CENTRAL Chkrs: KL,BD,TH Code: 8419

* DIRECTION: NORTHBOUND PERIOD: 7-10 AM PERIOD: 2-5 PM

| Period | Light Vehicles | | | | D.W. Vehicles | | | | Bus | | | |
|--------|----------------|---|----|-----|---------------|---|---|---------|-----|---|---|-------|
| Ending | L | T | R | Ped | L | T | R | Sch Pds | L | T | R | Bikes |
| 7.15 | 3 | 3 | 2 | 12 | 0 | 0 | 0 | 8 | 0 | 0 | 0 | 0 |
| 7.30 | 4 | 0 | 13 | 7 | 0 | 0 | 0 | 18 | 0 | 0 | 0 | 1 |
| 7.45 | 2 | 0 | 16 | 11 | 0 | 0 | 0 | 60 | 0 | 0 | 0 | 1 |
| 8.00 | 2 | 3 | 10 | 14 | 0 | 0 | 0 | 74 | 0 | 0 | 0 | 0 |
| 8.15 | 3 | 2 | 8 | 17 | 0 | 0 | 0 | 46 | 0 | 0 | 0 | 1 |
| 8.30 | 2 | 0 | 16 | 25 | 0 | 0 | 0 | 20 | 0 | 0 | 0 | 0 |
| 8.45 | 1 | 3 | 7 | 13 | 0 | 0 | 0 | 5 | 0 | 0 | 0 | 0 |
| 9.00 | 2 | 0 | 9 | 27 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 2 |
| 9.15 | 3 | 0 | 4 | 12 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 |
| 9.30 | 2 | 1 | 6 | 5 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 |
| 9.45 | 2 | 2 | 4 | 10 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 10.00 | 1 | 0 | 8 | 8 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

* DIRECTION: NORTHBOUND PERIOD: 2-5 PM

| Period | Light Vehicles | | | | D.W. Vehicles | | | | Bus | | | |
|--------|----------------|---|----|-----|---------------|---|---|---------|-----|---|---|-------|
| Ending | L | T | R | Ped | L | T | R | Sch Pds | L | T | R | Bikes |
| 2.15 | 5 | 1 | 10 | 28 | 0 | 0 | 0 | 42 | 0 | 0 | 0 | 0 |
| 2.30 | 1 | 0 | 5 | 16 | 0 | 0 | 0 | 26 | 0 | 0 | 0 | 0 |
| 2.45 | 2 | 1 | 6 | 24 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 1 |
| 3.00 | 1 | 0 | 4 | 21 | 0 | 0 | 0 | 4 | 0 | 0 | 0 | 0 |
| 3.15 | 2 | 1 | 8 | 38 | 0 | 0 | 0 | 61 | 0 | 0 | 0 | 0 |
| 3.30 | 3 | 1 | 8 | 30 | 0 | 0 | 0 | 136 | 0 | 0 | 0 | 0 |
| 3.45 | 1 | 2 | 14 | 18 | 0 | 0 | 0 | 50 | 0 | 0 | 0 | 0 |
| 4.00 | 2 | 0 | 12 | 15 | 0 | 0 | 2 | 27 | 0 | 0 | 0 | 1 |
| 4.15 | 3 | 1 | 13 | 10 | 0 | 0 | 0 | 11 | 0 | 0 | 0 | 1 |
| 4.30 | 1 | 1 | 9 | 6 | 0 | 0 | 0 | 16 | 0 | 0 | 0 | 0 |
| 4.45 | 0 | 0 | 15 | 4 | 0 | 0 | 0 | 9 | 0 | 0 | 0 | 0 |
| 5.00 | 5 | 0 | 8 | 12 | 0 | 0 | 1 | 19 | 0 | 0 | 0 | 2 |

* DIRECTION: EASTBOUND PERIOD: 7-10 AM

| Period | Light Vehicles | | | | D.W. Vehicles | | | | Bus | | | |
|--------|----------------|-----|---|-----|---------------|---|---|---------|-----|----|---|-------|
| Ending | L | T | R | Ped | L | T | R | Sch Pds | L | T | R | Bikes |
| 7.15 | 1 | 152 | 0 | 5 | 0 | 0 | 0 | 5 | 0 | 7 | 2 | 1 |
| 7.30 | 2 | 147 | 3 | 3 | 0 | 1 | 0 | 0 | 0 | 9 | 0 | 0 |
| 7.45 | 4 | 229 | 7 | 7 | 1 | 1 | 0 | 13 | 0 | 10 | 0 | 0 |
| 8.00 | 6 | 269 | 6 | 6 | 0 | 1 | 0 | 13 | 0 | 8 | 0 | 1 |
| 8.15 | 8 | 258 | 8 | 6 | 0 | 2 | 0 | 35 | 0 | 7 | 0 | 3 |
| 8.30 | 3 | 268 | 6 | 3 | 0 | 1 | 0 | 3 | 0 | 7 | 0 | 0 |
| 8.45 | 4 | 242 | 4 | 6 | 0 | 0 | 0 | 0 | 0 | 5 | 0 | 0 |
| 9.00 | 4 | 284 | 2 | 2 | 0 | 2 | 0 | 8 | 0 | 3 | 0 | 0 |
| 9.15 | 1 | 201 | 6 | 6 | 0 | 2 | 0 | 2 | 0 | 5 | 0 | 1 |
| 9.30 | 5 | 206 | 3 | 3 | 0 | 1 | 0 | 1 | 0 | 4 | 0 | 0 |
| 9.45 | 2 | 173 | 5 | 3 | 0 | 0 | 1 | 0 | 0 | 2 | 0 | 0 |
| 10.00 | 3 | 162 | 2 | 2 | 0 | 2 | 0 | 3 | 0 | 3 | 0 | 1 |

BIKES COUNT

| | | | |
|-----|-----|-----|-----|
| N/B | S/B | E/B | W/B |
| 10 | 1 | 7 | 10 |

DIRECTION: SOUTHBOUND PERIOD: 7-10 AM

| Period Ending | Light Vehicles | | | | D.W. Vehicles | | | | Bus | | | Bikes |
|---------------|----------------|---|----|-----|---------------|---|---|---------|-----|---|---|-------|
| | L | T | R | Ped | L | T | R | Sch Pds | L | T | R | |
| 7.15 | 3 | 2 | 6 | 10 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 7.30 | 1 | 1 | 9 | 3 | 0 | 0 | 0 | 11 | 0 | 0 | 0 | 0 |
| 7.45 | 1 | 1 | 11 | 6 | 0 | 0 | 0 | 40 | 0 | 0 | 0 | 0 |
| 8.00 | 0 | 3 | 18 | 7 | 0 | 0 | 0 | 66 | 0 | 0 | 0 | 0 |
| 8.15 | 0 | 0 | 15 | 14 | 0 | 0 | 0 | 24 | 0 | 0 | 0 | 0 |
| 8.30 | 2 | 0 | 11 | 11 | 0 | 0 | 0 | 5 | 0 | 0 | 0 | 0 |
| 8.45 | 0 | 0 | 6 | 13 | 0 | 0 | 0 | 3 | 0 | 0 | 0 | 0 |
| 9.00 | 1 | 0 | 0 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 9.15 | 0 | 0 | 1 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 9.30 | 1 | 0 | 5 | 6 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 1 |
| 9.45 | 0 | 0 | 4 | 10 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 |
| 10.00 | 0 | 2 | 3 | 2 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 |

DIRECTION: SOUTHBOUND PERIOD: 2-5 PM

| Period Ending | Light Vehicles | | | | D.W. Vehicles | | | | Bus | | | Bikes |
|---------------|----------------|---|----|-----|---------------|---|---|---------|-----|---|---|-------|
| | L | T | R | Ped | L | T | R | Sch Pds | L | T | R | |
| 2.15 | 0 | 2 | 5 | 7 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 |
| 2.30 | 0 | 0 | 2 | 8 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 2.45 | 2 | 0 | 2 | 20 | 0 | 0 | 0 | 5 | 0 | 0 | 0 | 0 |
| 3.00 | 1 | 0 | 2 | 34 | 0 | 0 | 0 | 38 | 0 | 1 | 0 | 0 |
| 3.15 | 1 | 4 | 6 | 52 | 0 | 0 | 0 | 58 | 0 | 0 | 0 | 0 |
| 3.30 | 1 | 0 | 14 | 84 | 0 | 0 | 0 | 42 | 0 | 0 | 0 | 0 |
| 3.45 | 2 | 0 | 5 | 48 | 0 | 0 | 0 | 14 | 0 | 0 | 0 | 0 |
| 4.00 | 3 | 0 | 1 | 19 | 0 | 0 | 0 | 5 | 0 | 0 | 0 | 0 |
| 4.15 | 0 | 0 | 2 | 11 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 |
| 4.30 | 2 | 1 | 4 | 29 | 1 | 0 | 1 | 4 | 0 | 0 | 0 | 0 |
| 4.45 | 3 | 2 | 8 | 20 | 0 | 0 | 0 | 5 | 0 | 0 | 0 | 0 |
| 5.00 | 2 | 1 | 4 | 20 | 0 | 0 | 1 | 3 | 0 | 0 | 0 | 0 |

DIRECTION: WESTBOUND PERIOD: 7-10 AM

| Period Ending | Light Vehicles | | | | D.W. Vehicles | | | | Bus | | | Bikes |
|---------------|----------------|-----|----|-----|---------------|----|---|---------|-----|---|---|-------|
| | L | T | R | Ped | L | T | R | Sch Pds | L | T | R | |
| 7.15 | 12 | 192 | 11 | 0 | 0 | 2 | 1 | 0 | 0 | 8 | 0 | 0 |
| 7.30 | 16 | 213 | 12 | 0 | 3 | 4 | 2 | 0 | 0 | 6 | 0 | 0 |
| 7.45 | 18 | 251 | 14 | 0 | 1 | 7 | 0 | 0 | 0 | 9 | 0 | 1 |
| 8.00 | 17 | 257 | 11 | 0 | 0 | 4 | 0 | 0 | 0 | 5 | 0 | 0 |
| 8.15 | 15 | 281 | 22 | 0 | 0 | 8 | 0 | 0 | 0 | 8 | 0 | 0 |
| 8.30 | 8 | 255 | 9 | 0 | 0 | 6 | 0 | 0 | 0 | 6 | 0 | 0 |
| 8.45 | 4 | 231 | 4 | 0 | 1 | 8 | 0 | 0 | 0 | 4 | 0 | 0 |
| 9.00 | 5 | 224 | 6 | 0 | 1 | 7 | 0 | 0 | 0 | 4 | 0 | 0 |
| 9.15 | 9 | 143 | 3 | 0 | 1 | 10 | 0 | 0 | 0 | 3 | 0 | 0 |
| 9.30 | 5 | 163 | 4 | 1 | 0 | 8 | 0 | 0 | 0 | 4 | 0 | 0 |
| 9.45 | 6 | 189 | 4 | 0 | 0 | 6 | 0 | 0 | 0 | 4 | 0 | 1 |
| 10.00 | 9 | 252 | 5 | 0 | 0 | 5 | 0 | 0 | 0 | 4 | 0 | 0 |

DIRECTION: WESTBOUND PERIOD: 2-5 PM

| Period Ending | Light Vehicles | | | | D.W. Vehicles | | | | Bus | | | | Bikes |
|------------------|----------------|-----|----|-----|---------------|---|---|---------|-----|---|---|---|-------|
| | L | T | R | Ped | L | T | R | Sch Pds | L | T | R | | |
| 2.15 | 6 | 267 | 7 | 0 | 6 | 0 | 0 | 0 | 0 | 3 | 0 | 1 | |
| 2.30 | 13 | 219 | 2 | 0 | 2 | 0 | 0 | 0 | 0 | 3 | 0 | 0 | |
| 2.45 | 8 | 196 | 12 | 0 | 6 | 1 | 0 | 0 | 0 | 6 | 0 | 0 | |
| 3.00 | 9 | 321 | 11 | 0 | 3 | 2 | 1 | 0 | 0 | 3 | 0 | 0 | |
| 3.15 | 6 | 180 | 5 | 0 | 1 | 1 | 2 | 0 | 0 | 3 | 0 | 2 | |
| 3.30 | 12 | 276 | 5 | 0 | 0 | 1 | 1 | 0 | 0 | 6 | 0 | 0 | |
| 3.45 | 15 | 236 | 8 | 1 | 4 | 0 | 1 | 0 | 0 | 6 | 0 | 2 | |
| 4.00 | 13 | 273 | 7 | 0 | 2 | 0 | 0 | 0 | 0 | 4 | 0 | 2 | |
| 4.15 | 8 | 250 | 5 | 0 | 3 | 0 | 0 | 0 | 0 | 4 | 0 | 0 | |
| 4.30 | 15 | 299 | 10 | 0 | 2 | 0 | 0 | 0 | 0 | 9 | 0 | 0 | |
| 4.45 | 10 | 303 | 7 | 0 | 0 | 1 | 1 | 0 | 0 | 6 | 0 | 0 | |
| 5.00 | 5 | 296 | 7 | 0 | 4 | 1 | 1 | 0 | 0 | 6 | 0 | 1 | |



City Of Los Angeles Department Of Transportation MANUAL TRAFFIC COUNT SUMMARY

STREET:

North/South COLUMBIA AV.

East/West 3rd ST.

Day: WEDNESDAY Date: June 22, 2011 Weather: SUNNY

Hours: 7-10AM 2-5PM Chekrs: KL,BD,TH

School Day: YES District: CENTRAL I/S CODE 8419

| | <u>N/B</u> | <u>S/B</u> | <u>E/B</u> | <u>W/B</u> |
|---------------------|------------|------------|------------|------------|
| DUAL-WHEELED | 4 | 6 | 24 | 132 |
| BIKES | 10 | 1 | 7 | 10 |
| BUSES | 0 | 1 | 153 | 124 |

| | <u>N/B TIME</u> | <u>S/B TIME</u> | <u>E/B TIME</u> | <u>W/B TIME</u> |
|---------------------|-----------------|-----------------|-----------------|-----------------|
| <i>AM PK 15 MIN</i> | 18 7.30 | 21 7.45 | 295 8.45 | 334 8.00 |
| <i>PM PK 15 MIN</i> | 17 3.30 | 15 3.15 | 212 4.30 | 350 2.45 |
| <i>AM PK HOUR</i> | 64 7.30 | 62 7.30 | 1118 8.00 | 1212 7.30 |
| <i>PM PK HOUR</i> | 62 3.15 | 37 2.45 | 784 4.00 | 1253 4.00 |

NORTHBOUND Approach

| Hours | <u>Lt</u> | <u>Th</u> | <u>Rt</u> | <u>Total</u> |
|--------------|-----------|-----------|-----------|--------------|
| 7-8 | 11 | 6 | 41 | 58 |
| 8-9 | 8 | 5 | 41 | 54 |
| 9-10 | 8 | 3 | 22 | 33 |
| 2-3 | 9 | 2 | 25 | 36 |
| 3-4 | 8 | 4 | 44 | 56 |
| 4-5 | 9 | 2 | 46 | 57 |
| TOTAL | 53 | 22 | 219 | 294 |

SOUTHBOUND Approach

| Hours | <u>Lt</u> | <u>Th</u> | <u>Rt</u> | <u>Total</u> |
|--------------|-----------|-----------|-----------|--------------|
| 7-8 | 5 | 7 | 44 | 56 |
| 8-9 | 3 | 0 | 32 | 35 |
| 9-10 | 1 | 3 | 14 | 18 |
| 2-3 | 4 | 3 | 11 | 18 |
| 3-4 | 7 | 4 | 26 | 37 |
| 4-5 | 8 | 4 | 20 | 32 |
| TOTAL | 28 | 21 | 147 | 196 |

TOTAL

| <u>N-S</u> |
|------------|
| 114 |
| 89 |
| 51 |
| 54 |
| 93 |
| 89 |
| 490 |

XING S/L

| <u>Ped</u> | <u>Sch</u> |
|------------|------------|
| 44 | 160 |
| 82 | 72 |
| 35 | 3 |
| 89 | 74 |
| 101 | 274 |
| 32 | 55 |
| 383 | 638 |

XING N/L

| <u>Ped</u> | <u>Sch</u> |
|------------|------------|
| 26 | 117 |
| 42 | 32 |
| 22 | 2 |
| 69 | 45 |
| 203 | 119 |
| 80 | 14 |
| 442 | 329 |

EASTBOUND Approach

| Hours | <u>Lt</u> | <u>Th</u> | <u>Rt</u> | <u>Total</u> |
|--------------|-----------|-----------|-----------|--------------|
| 7-8 | 14 | 834 | 18 | 866 |
| 8-9 | 19 | 1079 | 20 | 1118 |
| 9-10 | 11 | 761 | 17 | 789 |
| 2-3 | 8 | 563 | 17 | 588 |
| 3-4 | 9 | 493 | 12 | 514 |
| 4-5 | 17 | 750 | 17 | 784 |
| TOTAL | 78 | 4480 | 101 | 4659 |

WESTBOUND Approach

| Hours | <u>Lt</u> | <u>Th</u> | <u>Rt</u> | <u>Total</u> |
|--------------|-----------|-----------|-----------|--------------|
| 7-8 | 67 | 958 | 51 | 1076 |
| 8-9 | 34 | 1042 | 41 | 1117 |
| 9-10 | 30 | 791 | 16 | 837 |
| 2-3 | 53 | 1021 | 33 | 1107 |
| 3-4 | 53 | 986 | 29 | 1068 |
| 4-5 | 47 | 1175 | 31 | 1253 |
| TOTAL | 284 | 5973 | 201 | 6458 |

TOTAL

| <u>E-W</u> |
|------------|
| 1942 |
| 2235 |
| 1626 |
| 1695 |
| 1582 |
| 2037 |
| 11117 |

XING W/L

| <u>Ped</u> | <u>Sch</u> |
|------------|------------|
| 21 | 31 |
| 17 | 46 |
| 14 | 6 |
| 13 | 7 |
| 17 | 30 |
| 10 | 21 |
| 92 | 141 |

XING E/L

| <u>Ped</u> | <u>Sch</u> |
|------------|------------|
| 0 | 0 |
| 0 | 0 |
| 1 | 0 |
| 0 | 0 |
| 1 | 0 |
| 0 | 0 |
| 2 | 0 |

CHECK 1031 772 240 12

FETSIM COUNT SHEET

City of Los Angeles
Department of Transportation
(R 3-89)

North/South St: COLUMBIA AV.

East/West St: 3rd ST.

Date: June 22, 2011

NOTE: THESE COUNTS WERE CALCULATED IN ACCORDANCE WITH THE COUNT DEFINITION OUTLINED

Peak hour volumes were calculated by determining the 1/2 hour during which the total volume on all approaches was a maximum, i.e., from 7.00-7.30 or from 4.15-4.45. Then these volumes were multiplied by 2 to get the hourly volumes. These numbers are not the same as the ones in the Traffic Count Summary forms.

| A.M. | Format | P.M. | LINK | Format |
|------|--------|------|------|--------|
| 16 | 0 | 26 | 6 | 10 |
| 6 | 24 | 10 | 0 | 48 |
| 10 | 16 | 12 | 784 | 20 |
| 18 | 30 | 32 | 1226 | 38 |

TRAFFIC COUNT SUMMARY Format

SB APPROACH

| | Lt | Rt | Lt | Th | Rt | |
|----|----|----|----|----|----|------|
| AM | 6 | 24 | 0 | 0 | 16 | 9.30 |
| PM | 10 | 48 | 10 | 6 | 26 | 4.30 |

WB APPROACH

| | Lt | Rt | Lt | Th | Rt |
|----|----|----|----|------|----|
| AM | 10 | 16 | 30 | 784 | 18 |
| PM | 12 | 20 | 38 | 1226 | 32 |

| | | | | | | | | | | | |
|-----------------------|----------------|------|------|-------|------|------|------|-----------|------|-------|--------|
| CALCULATION WORKSPACE | | | | | | | | | | | |
| | | | | | | | | | | | |
| NORTHBOUND AM | | | | | | | | | | | |
| Period | Total Vehicles | | | Cross | | Hour | D.W | Pedestrns | | | Period |
| Endng | L | T | R | Tot. | Tot. | Veh. | Bus | Ped | Sch | Begng | |
| ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | |
| 7.15 | 3 | 3 | 2 | 8 | 58 | 0 | 0 | 12 | 8 | 7.00 | |
| 7.30 | 4 | 0 | 13 | 17 | 63 | 0 | 0 | 7 | 18 | 7.15 | |
| 7.45 | 2 | 0 | 16 | 18 | 64 | 0 | 0 | 11 | 60 | 7.30 | |
| 8.00 | 2 | 3 | 10 | 15 | 57 | 0 | 0 | 14 | 74 | 7.45 | |
| 8.15 | 3 | 2 | 8 | 13 | 54 | 0 | 0 | 17 | 46 | 8.00 | |
| 8.30 | 2 | 0 | 16 | 18 | 48 | 0 | 0 | 25 | 20 | 8.15 | |
| 8.45 | 1 | 3 | 7 | 11 | 39 | 0 | 0 | 13 | 5 | 8.30 | |
| 9.00 | 2 | 0 | 10 | 12 | 36 | 1 | 0 | 27 | 1 | 8.45 | |
| 9.15 | 3 | 0 | 4 | 7 | 33 | 0 | 0 | 12 | 2 | 9.00 | |
| 9.30 | 2 | 1 | 6 | 9 | | 0 | 0 | 5 | 1 | 9.15 | |
| 9.45 | 2 | 2 | 4 | 8 | | 0 | 0 | 10 | 0 | 9.30 | |
| 10.00 | 1 | 0 | 8 | 9 | | 0 | 0 | 8 | 0 | 9.45 | |
| | | | | | | | | | | | |
| NORTHBOUND PM | | | | | | | | | | | |
| Period | Total Vehicles | | | Cross | | Hour | D.W | Pedestrns | | | Period |
| Endng | L | T | R | Tot. | Tot. | Veh. | Bus | Ped | Sch | Begng | |
| ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | |
| 2.15 | 5 | 1 | 10 | 16 | 36 | 0 | 0 | 28 | 42 | 2.00 | |
| 2.30 | 1 | 0 | 5 | 6 | 31 | 0 | 0 | 16 | 26 | 2.15 | |
| 2.45 | 2 | 1 | 6 | 9 | 37 | 0 | 0 | 24 | 2 | 2.30 | |
| 3.00 | 1 | 0 | 4 | 5 | 45 | 0 | 0 | 21 | 4 | 2.45 | |
| 3.15 | 2 | 1 | 8 | 11 | 56 | 0 | 0 | 38 | 61 | 3.00 | |
| 3.30 | 3 | 1 | 8 | 12 | 62 | 0 | 0 | 30 | 136 | 3.15 | |
| 3.45 | 1 | 2 | 14 | 17 | 61 | 0 | 0 | 18 | 50 | 3.30 | |
| 4.00 | 2 | 0 | 14 | 16 | 59 | 2 | 0 | 15 | 27 | 3.45 | |
| 4.15 | 3 | 1 | 13 | 17 | 57 | 0 | 0 | 10 | 11 | 4.00 | |
| 4.30 | 1 | 1 | 9 | 11 | | 0 | 0 | 6 | 16 | 4.15 | |
| 4.45 | 0 | 0 | 15 | 15 | | 0 | 0 | 4 | 9 | 4.30 | |
| 5.00 | 5 | 0 | 9 | 14 | | 1 | 0 | 12 | 19 | 4.45 | |
| | | | | | | | | | | | |
| EASTBOUND AM | | | | | | | | | | | |
| Period | Total Vehicles | | | Cross | | Hour | D.W | Pedestrns | | | Period |
| Endng | L | T | R | Tot. | Tot. | Veh. | Bus | Ped | Sch | Begng | |
| ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | |
| 7.15 | 1 | 159 | 2 | 162 | 866 | 0 | 9 | 5 | 5 | 7.00 | |
| 7.30 | 2 | 157 | 3 | 162 | 987 | 1 | 9 | 3 | 0 | 7.15 | |
| 7.45 | 5 | 240 | 7 | 252 | 1110 | 2 | 10 | 7 | 13 | 7.30 | |
| 8.00 | 6 | 278 | 6 | 290 | 1113 | 1 | 8 | 6 | 13 | 7.45 | |
| 8.15 | 8 | 267 | 8 | 283 | 1118 | 2 | 7 | 6 | 35 | 8.00 | |
| 8.30 | 3 | 276 | 6 | 285 | 1050 | 1 | 7 | 3 | 3 | 8.15 | |
| 8.45 | 4 | 247 | 4 | 255 | 984 | 0 | 5 | 6 | 0 | 8.30 | |
| 9.00 | 4 | 289 | 2 | 295 | 912 | 2 | 3 | 2 | 8 | 8.45 | |
| 9.15 | 1 | 208 | 6 | 215 | 789 | 2 | 5 | 6 | 2 | 9.00 | |
| 9.30 | 5 | 211 | 3 | 219 | | 1 | 4 | 3 | 1 | 9.15 | |
| 9.45 | 2 | 175 | 6 | 183 | | 1 | 2 | 3 | 0 | 9.30 | |
| 10.00 | 3 | 167 | 2 | 172 | | 2 | 3 | 2 | 3 | 9.45 | |
| | | | | | | | | | | | |

| | | | | | | | | | | | | | |
|---|--------------|----------------|----------|----------|----------|----------|----------|----------|----------|-----------|----------|----------|---|
| % | EASTBOUND PM | | | | | | | | | | | ! | |
| % | | | | | | | | | | | | ! | |
| % | Period | Total Vehicles | | | | Cross | Hour | D.W | | Pedestrns | | Period | ! |
| % | Endng | L | T | R | Tot. | Tot. | Veh. | Bus | Ped | Sch | Begng | ! | |
| % | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ! | |
| % | 2.15 | 1 | 131 | 5 | 137 | 588 | 1 | 5 | 5 | 0 | 2.00 | ! | |
| % | 2.30 | 1 | 139 | 4 | 144 | 621 | 3 | 6 | 3 | 2 | 2.15 | ! | |
| % | 2.45 | 4 | 140 | 5 | 149 | 579 | 1 | 4 | 3 | 1 | 2.30 | ! | |
| % | 3.00 | 2 | 153 | 3 | 158 | 525 | 0 | 10 | 2 | 4 | 2.45 | ! | |
| % | 3.15 | 1 | 163 | 6 | 170 | 514 | 1 | 5 | 3 | 10 | 3.00 | ! | |
| % | 3.30 | 1 | 100 | 1 | 102 | 543 | 0 | 7 | 3 | 6 | 3.15 | ! | |
| % | 3.45 | 4 | 86 | 5 | 95 | 618 | 0 | 5 | 5 | 7 | 3.30 | ! | |
| % | 4.00 | 3 | 144 | 0 | 147 | 735 | 0 | 9 | 6 | 7 | 3.45 | ! | |
| % | 4.15 | 7 | 188 | 4 | 199 | 784 | 0 | 12 | 1 | 7 | 4.00 | ! | |
| % | 4.30 | 4 | 170 | 3 | 177 | | 1 | 8 | 5 | 8 | 4.15 | ! | |
| % | 4.45 | 5 | 201 | 6 | 212 | | 0 | 3 | 0 | 6 | 4.30 | ! | |
| % | 5.00 | 1 | 191 | 4 | 196 | | 2 | 7 | 4 | 0 | 4.45 | ! | |
| % | | | | | | | | | | | | ! | |
| % | %%%%%%%% | %%%%%%%% | %%%%%%%% | %%%%%%%% | %%%%%%%% | %%%%%%%% | %%%%%%%% | %%%%%%%% | %%%%%%%% | %%%%%%%% | %%%%%%%% | %%%%%%%% | ! |

FETSIM WORKSPACE SEE COMMENTS BELOW

| | | | | | | | | | | | |
|---|---|------|--------|------|---|---|----|-----|---|---|----|
| * | * | | | NB | | | | SB | | | |
| * | * | A.M. | VOLUME | BEG | | | | | | | |
| * | * | | TOTAL | TIME | L | T | R | TOT | L | T | R |
| * | * | | 853 | 7.00 | 7 | 3 | 15 | 25 | 4 | 3 | 15 |
| * | * | | 1029 | 7.15 | 6 | 0 | 29 | 35 | 2 | 2 | 20 |
| * | * | | 1203 | 7.30 | 4 | 3 | 26 | 33 | 1 | 4 | 29 |
| * | * | | 1265 | 7.45 | 5 | 5 | 18 | 28 | 0 | 3 | 33 |
| * | * | | 1245 | 8.00 | 5 | 2 | 24 | 31 | 2 | 0 | 26 |
| * | * | | 1124 | 8.15 | 3 | 3 | 23 | 29 | 2 | 0 | 17 |
| * | * | | 1079 | 8.30 | 3 | 3 | 17 | 23 | 1 | 0 | 6 |
| * | * | | 947 | 8.45 | 5 | 0 | 14 | 19 | 1 | 0 | 1 |
| * | * | | 811 | 9.00 | 5 | 1 | 10 | 16 | 1 | 1 | 6 |
| * | * | | 823 | 9.15 | 4 | 3 | 10 | 17 | 1 | 1 | 9 |
| * | * | | 866 | 9.30 | 3 | 2 | 12 | 17 | 0 | 2 | 8 |

MAX 1/2 HOUR VOLUME PE. 1265
TIME MAX PEAK STARTS 9.30

| | | | | | | | | | | | |
|---|---|------|--------|------|---|---|----|-----|---|---|----|
| * | * | | | NB | | | | SB | | | |
| * | * | P.M. | VOLUME | BEG | | | | | | | |
| * | * | | TOTAL | TIME | L | T | R | TOT | L | T | R |
| * | * | | 841 | 2.00 | 6 | 1 | 15 | 22 | 1 | 2 | 7 |
| * | * | | 783 | 2.15 | 3 | 1 | 11 | 15 | 3 | 0 | 4 |
| * | * | | 908 | 2.30 | 3 | 1 | 10 | 14 | 3 | 1 | 4 |
| * | * | | 907 | 2.45 | 3 | 1 | 12 | 16 | 2 | 5 | 8 |
| * | * | | 820 | 3.00 | 5 | 2 | 16 | 23 | 2 | 4 | 20 |
| * | * | | 819 | 3.15 | 4 | 3 | 22 | 29 | 3 | 0 | 19 |
| * | * | | 855 | 3.30 | 3 | 2 | 28 | 33 | 5 | 0 | 6 |
| * | * | | 954 | 3.45 | 5 | 1 | 27 | 33 | 3 | 0 | 3 |
| * | * | | 1020 | 4.00 | 4 | 2 | 22 | 28 | 3 | 1 | 7 |
| * | * | | 1100 | 4.15 | 1 | 1 | 24 | 26 | 6 | 3 | 13 |
| * | * | | 1106 | 4.30 | 5 | 0 | 24 | 29 | 5 | 3 | 13 |

MAX 1/2 HOUR VOLUME PE. 1106
TIME MAX PEAK STARTS 4.30

COMMEN

A. DESIGN RULES FOR CALCULATING HOUR COUNT:
1. FIND MAX 1/2 HOUR COUNT BY ADDING 2 SUCCESSIVE 15 MINUTE VOLUME COUNTS WITH @SUM FNC
THEN FIND MAX USING @MAX FUNCTION. @VLOOKUP LOOKS FOR THE HIGHEST VOLUME.

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TION

TRAFFIC SIGNAL WARRANTS

CALC DATE: June 22, 2011

CHK DATE:

DISTRICT: CENTRAL

Major St: 3rd ST.
Minor St: COLUMBIA AV.

Critical Approach Speed: mph
Critical Approach Speed: mph

Critical speed of major street traffic >=40 mph

OR

In built up area of isolated community of =< 10,000 population

..... RURAL(R)

OTHERWISE

..... URBAN (U)

WARRANT 1- Minimum Vehicular Volume

100% SATISFIED

YES

NO

80% SATISFIED

YES

NO

MINIMUM REQUIREMENTS (80% SHOWN IN BRACKETS)

| APPROACH | U | R | U | R | Hour | | | | | |
|------------------|-------|-------|-------|-------|------|------|------|------|------|------|
| LANES | 1 | | 2 or | more | 7-8 | 8-9 | 9-10 | 2-3 | 3-4 | 4-5 |
| Both Approaches | 500 | 350 | 600 | 420 | | | | | | |
| Major Street | (400) | (280) | (480) | (336) | 1942 | 2235 | 1626 | 1695 | 1582 | 2037 |
| Highest Approach | 150 | 105 | 200 | 140 | | | | | | |
| Minor street | (120) | (84) | (160) | (112) | 58 | 54 | 33 | 36 | 56 | 57 |

NOTE: Heavier left turn movement from Major Street included when LT-phasing is proposed

WARRANT2- Interruption of ContinuousTraffic

100% SATISFIED

YES

NO

80% SATISFIED

YES

NO

MINIMUM REOUIREMENTS (80% SHOWN IN BRACKETS)

| APPROACH | U | R | U | R | Hour | | | | | |
|-----------------|-------|-------|-------|-------|------|------|------|------|------|------|
| LANES | 1 | | 2 or | more | 7-8 | 8-9 | 9-10 | 2-3 | 3-4 | 4-5 |
| Both Approaches | 750 | 525 | 900 | 630 | | | | | | |
| Major Street | (600) | (420) | (720) | (504) | 1942 | 2235 | 1626 | 1695 | 1582 | 2037 |
| HighestApproch | 75 | 53 | 100 | 70 | | | | | | |
| Minor Street | (60) | (42) | (80) | (56) | 58 | 54 | 33 | 36 | 56 | 57 |

*NOTE: Heavier left turn movement from Major Street included when LT-phasing is proposed

WARRANT 3- Minimum Pedetrian Volume

100% SATISFIED

YES

NO

80% SATISFIED

YES

NO

MINIMUM REQUIREMENTS (80% SHOWN IN BRACKETS)

| | | U | R | 7-8 | 8-9 | Hour | 9-10 | 2-3 | 3-4 | 4-5 |
|------------------------|----------|-------|-------|------|------|------|------|------|------|-----|
| Both Approaches no | | 600 | 420 | | | | | | | |
| Major Street | median | (480) | (336) | 1942 | 2235 | 1626 | 1695 | 1582 | 2037 | |
| | Raised | 1000 | 700 | | | | | | | |
| Volume | 4'median | (800) | (560) | | | | | | | |
| Peds on highest volume | | 150 | 105 | | | | | | | |
| x-walk xing major st | | (120) | (84) | 52 | 63 | 20 | 20 | 47 | 31 | |

IF MIDBLOCK SIGNAL PROPOSED

MIN. REOUIREMENT DISTANCE TO NEAREST ESTABLISHED CROSSWALK

FULFILLED

150 FEET

N/E:

FT

S/W:

FT

YES

NO

The satisfaction of a warrant is not necessarily justification for a signal. Delay, congestion, confusion or other evidence of the need for right of way assignment must be shown.

WARRANT 4 - Schools Crossings

Not Applicable
See School Crossings Warrant Sheet

WARRANT 5 - Progressive Movement

SATISFIED

YES

NO

MINIMUM REQUIREMENTS

DISTANCE TO NEAREST SIGNAL

FULFILLED

> 1000 ft

N

S

E

W

YES

NO

ON ONE WAY ISOLATED ST. OR ST. WITH ONE WAY TRAFFIC SIGNIFICANCE AND ADJACENT SIGNALS ARE SO FAR APART THAT NECESSARY PLATOONING IL SPEED CONTROL WOULD BE LOST.
ON 2-WAY ST. WHERE ADJACENT SIGNALS DO NOT PROVIDE NECESSARY PLATOONING & SPEED CONTROL. PROPOSED SIGNALS COULD CONSTITUTE A PROGRESSIVE SIGNAL SYSTEM

YES

NO

WARRANT 6 - Accident Experience

SATISFIED

YES

NO

REQUIREMENT

WARRANT

(X)

FULFILLED

ONE WARRANT

WARRANT 1 - MINIMUM VEHICULAR VOLUME

SATISFIED

OR

80%

WARRANT 2 - INTERRUPTION OF CONTINUOUS TRAFFIC

OR

WARRANT 3 - MINIMUM PEDESTRIAN VOLUME

YES

NO

SIGNAL WILL NOT SERIOUSLY DISRUPT PROGRESSIVE TRAFFIC FLOW

ADEQUATE TRIAL OF LESS RESTRICTIVE REMEDIES HAS FAILED TO REDUCE ACC. FREQ.

ACC WITHIN A 12 MON. PERIOD SUSCEPTIBLE OF CORR. IL INVOLVING INJURY OR > \$200 DAMAGE

MINIMUM REQUIREMENT

NUMBER OF ACCIDENTS

3 OR MORE

YES

NO

* NOTE: Left turn accidents can be included when LT-phasing is proposed

WARRANT 7 - Systems Warrant

SATISFIED

YES

NO

Minimum Volume Requirement

ENTERING VOLUMES - ALL APPROACHES
DURING TYPICAL WEEKDAY PEAK HOUR

(X)

FULFILLED

800 VEH/HR

2456

veh/hr

DURING EACH OF ANY 5 HRS OF A SAT AND/OR SUNDAY

veh/hr

YES

NO

CHARACTERISTICS OF MAJOR ROUTES

MAJOR S/INOR ST

HWY SYSTEM SERVING AS PRINCIPLE NETWORK FOR THROUGH TRAFFIC

CONNECTS AREAS OF PRINCIPLE TRAFFIC GENERATION

RURAL OR SUBURBAN HWY OUTSIDE OF, ENTERING, OR TRAVERSING A CITY

HAS SURFACE STREET FWY OR EXPWAY RAMP TERMINALS

APPEARS AS MAJOR ROUTE ON AN OFFICIAL PLAN

ANY MAJOR ROUTE CHARACTERISTICS MET, BOTH STREETS

YES

NO

The satisfaction of a warrant is not necessarily justification for a signal. Delay, congestion, confusion or other evidence of the need for right of way assignment must be shown.

| | | | |
|-------------------------------------|-----------|-----|----|
| WARRANT 8 - Combination of Warrants | SATISFIED | YES | NO |
|-------------------------------------|-----------|-----|----|

| | | | |
|--------------|--|-----|-----------|
| REQUIREMENT | WARRANT | (X) | FULFILLED |
| TWO WARRANTS | 1 - MINIMUM VEHICULAR VOLUME | | |
| SATISFIED | 2 - INTERRUPTION OF CONTINUOUS TRAFFIC | | |
| 80% | 3 - MINIMUM PEDESTRIAN VOLUME | YES | NO |

| | | | |
|------------------------------|-----------|-----|----|
| WARRANT 9 - Four Hour Volume | SATISFIED | YES | NO |
|------------------------------|-----------|-----|----|

| | | | | | | | |
|----------------------------------|-----|-----------|------|------|------|------|------|
| Approach Lanes | One | 2 or more | Hour | 8-9 | 4-5 | 7-8 | 2-3 |
| Both Approaches, Major Street | | | | 2235 | 2037 | 1942 | 1695 |
| Highest Approaches, Minor Street | | | | 54 | 57 | 58 | 36 |

*Refer to Fig. 9-2A (URBAN AREAS) or Figure 9-2B (RURAL AREAS) to determine if this warrant is satisfied.

| | | | |
|------------------------------|-----------|-----|----|
| WARRANT 10 - Peak Hour Delay | SATISFIED | YES | NO |
|------------------------------|-----------|-----|----|

| | | |
|--|-----|----|
| 1. The total delay experienced for traffic on one minor street approach controlled by a STOP sign equals or exceeds four vehicle-hours for a one-lane approach and five vehicle-hours for a two-lane approach; and | YES | NO |
| 2. The volume on the same minor street approach equals or exceeds 100 vph for one moving lane of traffic or 150 vph for two moving lanes; and | YES | NO |
| 3. The total entering volume serviced during the hour equals or exceeds 800 vph for intersections with four or more approaches or 650 vph for intersections with three approaches | YES | NO |

| | | | |
|-------------------------------|------------|-----|----|
| WARRANT 11 - Peak Hour Volume | SATISFIED* | YES | NO |
|-------------------------------|------------|-----|----|

| | | | | |
|----------------------------------|-----|-----------|------|------|
| Approach Lanes | One | 2 or more | Hour | 8-9 |
| Both Approaches , Major Street | | | | 2235 |
| Highest Approaches, Minor Street | | | | 54 |

*Refer to Fig. 9-2C (URBAN AREAS) or Figure 9-2D (RURAL AREAS) to determine if this warrant is satisfied.

— The satisfaction of a warrant is not necessarily justification for a signal. Delay, congestion, confusion or other evidence of the need for right of way assignment must be shown.

CALCULATIONS

| | | | | | | | | |
|----------------------|------|-----------------|------|------|------|------|------|------|
| MAX OF WARRANT PAIRS | 2289 | | CH | CI | CJ | CK | CL | CM |
| NEXT MAX | 2094 | TOTAL EACH CELL | 2000 | 2289 | 1659 | 1731 | 1638 | 2094 |
| NEXT MAX | 2000 | | | | | | | |
| NEXT MAX | 1731 | | MAX | | NEXT | | NEXT | |
| | | | 2289 | | 2000 | | 0 | |
| | | | 2094 | | 0 | | 0 | |
| | | | 2289 | | 1659 | | 1659 | |
| | | | 2289 | | 1731 | | 1731 | |
| | | | 2289 | | 1638 | | 1638 | |
| | | | 2289 | | 0 | | 0 | |