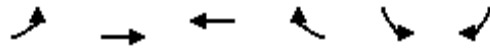


# HCM Unsignalized Intersection Capacity Analysis

## 2: Gibson & Entrance

UNM Gibson Commercial District  
2015 AM Peak Hour - Build - With Left Out at Gibson



| Movement                          | EBL                                                                               | EBT                                                                               | WBT                                                                               | WBR                                                                               | SBL                                                                               | SBR                                                                               |      |      |      |      |
|-----------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------|------|------|------|
| Lane Configurations               |  |  |  |  |  |  |      |      |      |      |
| Volume (veh/h)                    | 54                                                                                | 2491                                                                              | 1174                                                                              | 46                                                                                | 33                                                                                | 71                                                                                |      |      |      |      |
| Sign Control                      |                                                                                   | Free                                                                              | Free                                                                              |                                                                                   | Stop                                                                              |                                                                                   |      |      |      |      |
| Grade                             |                                                                                   | 0%                                                                                | 0%                                                                                |                                                                                   | 0%                                                                                |                                                                                   |      |      |      |      |
| Peak Hour Factor                  | 0.95                                                                              | 0.95                                                                              | 0.95                                                                              | 0.95                                                                              | 0.95                                                                              | 0.95                                                                              |      |      |      |      |
| Hourly flow rate (vph)            | 57                                                                                | 2622                                                                              | 1236                                                                              | 48                                                                                | 35                                                                                | 75                                                                                |      |      |      |      |
| Pedestrians                       |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |      |      |      |      |
| Lane Width (ft)                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |      |      |      |      |
| Walking Speed (ft/s)              |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |      |      |      |      |
| Percent Blockage                  |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |      |      |      |      |
| Right turn flare (veh)            |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |      |      |      |      |
| Median type                       |                                                                                   | Raised                                                                            | Raised                                                                            |                                                                                   |                                                                                   |                                                                                   |      |      |      |      |
| Median storage veh                |                                                                                   | 1                                                                                 | 1                                                                                 |                                                                                   |                                                                                   |                                                                                   |      |      |      |      |
| Upstream signal (ft)              |                                                                                   |                                                                                   | 718                                                                               |                                                                                   |                                                                                   |                                                                                   |      |      |      |      |
| pX, platoon unblocked             | 0.87                                                                              |                                                                                   |                                                                                   |                                                                                   | 0.87                                                                              | 0.87                                                                              |      |      |      |      |
| vC, conflicting volume            | 1284                                                                              |                                                                                   |                                                                                   |                                                                                   | 2224                                                                              | 412                                                                               |      |      |      |      |
| vC1, stage 1 conf vol             |                                                                                   |                                                                                   |                                                                                   |                                                                                   | 1236                                                                              |                                                                                   |      |      |      |      |
| vC2, stage 2 conf vol             |                                                                                   |                                                                                   |                                                                                   |                                                                                   | 988                                                                               |                                                                                   |      |      |      |      |
| vCu, unblocked vol                | 806                                                                               |                                                                                   |                                                                                   |                                                                                   | 1885                                                                              | 0                                                                                 |      |      |      |      |
| tC, single (s)                    | 4.1                                                                               |                                                                                   |                                                                                   |                                                                                   | 6.8                                                                               | 6.9                                                                               |      |      |      |      |
| tC, 2 stage (s)                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   | 5.8                                                                               |                                                                                   |      |      |      |      |
| tF (s)                            | 2.2                                                                               |                                                                                   |                                                                                   |                                                                                   | 3.5                                                                               | 3.3                                                                               |      |      |      |      |
| p0 queue free %                   | 92                                                                                |                                                                                   |                                                                                   |                                                                                   | 80                                                                                | 92                                                                                |      |      |      |      |
| cM capacity (veh/h)               | 709                                                                               |                                                                                   |                                                                                   |                                                                                   | 173                                                                               | 944                                                                               |      |      |      |      |
| Direction, Lane #                 | EB 1                                                                              | EB 2                                                                              | EB 3                                                                              | EB 4                                                                              | WB 1                                                                              | WB 2                                                                              | WB 3 | WB 4 | SB 1 | SB 2 |
| Volume Total                      | 57                                                                                | 874                                                                               | 874                                                                               | 874                                                                               | 412                                                                               | 412                                                                               | 412  | 48   | 35   | 75   |
| Volume Left                       | 57                                                                                | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0    | 0    | 35   | 0    |
| Volume Right                      | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0    | 48   | 0    | 75   |
| cSH                               | 709                                                                               | 1700                                                                              | 1700                                                                              | 1700                                                                              | 1700                                                                              | 1700                                                                              | 1700 | 1700 | 173  | 944  |
| Volume to Capacity                | 0.08                                                                              | 0.51                                                                              | 0.51                                                                              | 0.51                                                                              | 0.24                                                                              | 0.24                                                                              | 0.24 | 0.03 | 0.20 | 0.08 |
| Queue Length 95th (ft)            | 7                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0    | 0    | 18   | 6    |
| Control Delay (s)                 | 10.5                                                                              | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0  | 0.0  | 31.0 | 9.1  |
| Lane LOS                          | B                                                                                 |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |      |      | D    | A    |
| Approach Delay (s)                | 0.2                                                                               |                                                                                   |                                                                                   |                                                                                   | 0.0                                                                               |                                                                                   |      |      | 16.1 |      |
| Approach LOS                      |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |      |      | C    |      |
| Intersection Summary              |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |      |      |      |      |
| Average Delay                     |                                                                                   |                                                                                   | 0.6                                                                               |                                                                                   |                                                                                   |                                                                                   |      |      |      |      |
| Intersection Capacity Utilization |                                                                                   |                                                                                   | 58.1%                                                                             |                                                                                   | ICU Level of Service                                                              |                                                                                   |      |      | B    |      |
| Analysis Period (min)             |                                                                                   |                                                                                   | 15                                                                                |                                                                                   |                                                                                   |                                                                                   |      |      |      |      |
|                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |      |      |      |      |