**Rate of Flow (Two-Way) for a Signalized One-Lane, Two-Way Closing**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | | **Length of One-Lane Operation**  **feet** | | | | | | |
| **Total cycle length** | | **400** | **500** | **600** | **700** | **800\*** | **900\*** | **1000\*** |
| **Minutes** | **Seconds** |
| 1.0 | 60 | 450 | 310 | 170 | 35 |  |  |  |
|  | 70 | 570 | 445 | 320 | 200 | 80 |  |  |
|  | 80 | 690 | 579 | 475 | 365 | 260 | 155 |  |
| 1.5 | 90 | 810 | 715 | 625 | 530 | 440 | 350 | 225 |
|  | 100 | 870 | 780 | 700 | 615 | 530 | 445 | 340 |
| 2.0 | 120 | 990 | 915 | 844 | 788 | 712 | 638 | 572 |
| 3.0 | 180 \* | 1154 | 1117 | 1075 | 1027 | 983 | 934 | 890 |
| 4.0 | 240 \* | 1247 | 1215 | 1184 | 1151 | 1118 | 1081 | 1048 |
| 5.0 | 300 \* | 1302 | 1276 | 1253 | 1226 | 1200 | 1170 | 1144 |

This table assumes a 12-foot lane width. If the lane width is 11 feet, reduce the rate of flow by using a factor of 0.97 and for a 10 foot lane width, reduce the rate of flow by using a factor of 0.93.

\* Cycle lengths greater than three minutes should be considered only in unusual cases. It is important to remember that a road user encountering a signal staying red for more that two minutes is very likely to become impatient and/or assume the signal is malfunctioning. This is particularly true if the motorist cannot see that opposing traffic is using the open lane. For the same reasons, closure lengths greater than about 800 feet should not be used until carefully evaluated. Where relatively short closure lengths are involved but high peak traffic volumes tend to support the need for a longer cycle length, it will probably be appropriate to employ a technique which will allow a shorter cycle length to be used during lower traffic periods. Traffic actuated operation and/or multi-plan time-of-day operation should be considered.