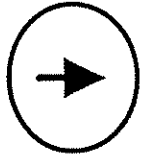
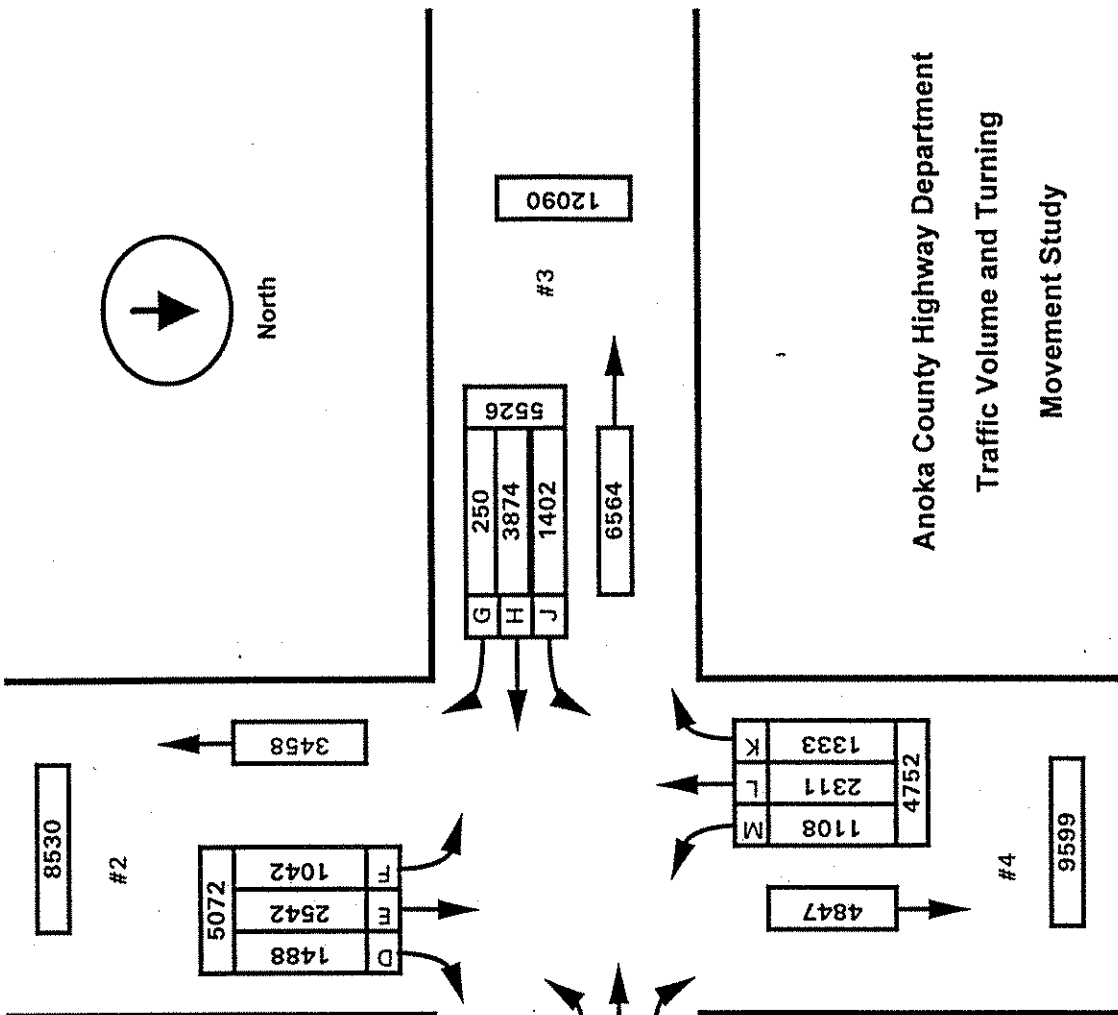


Date: 6/20/95 6/19/95  
 Count Number: TMC9512  
 Location: CSAH 23 (LAKE DRIVE)  
 @ CSAH 17 (LEXINGTON AVE.)



North



|    | LANES OF APPROACH |                |            | TOTAL |
|----|-------------------|----------------|------------|-------|
|    | RIGHT TURN LANE   | LEFT TURN LANE | THRU LANES |       |
| #1 | 1                 | 1              | 1          | 3     |
| #2 | 1                 | 1              | 1          | 3     |
| #3 | 1                 | 1              | 1          | 3     |
| #4 | 1                 | 1              | 1          | 3     |

Anoka County Highway Department  
 Traffic Volume and Turning  
 Movement Study

ANOKA COUNTY HIGHWAY DEPARTMENT

TRAFFIC ENGINEERING SECTION

TRAFFIC VOLUME AND

TURNING MOVEMENT STUDY

Vehicle group 1

Counter : TDC EIGHT  
 Counted by ANN/LAURIE  
 CLEAR/90s

Site No : 95120101  
 Start Date: 06/19/95  
 File I.D. : TMC9512  
 Page : 1

| Date 06/19/95   | CSAH 17 (LEXINGTON AVE)<br>Southbound |           |            | CSAH 23 (LAKE DRIVE)<br>Westbound |           |           | CSAH 17 (LEXINGTON AVE)<br>Northbound |           |           | CSAH 23 (LAKE DRIVE)<br>Eastbound |            |            | Vehicle Total |           |            |           |               |             |
|-----------------|---------------------------------------|-----------|------------|-----------------------------------|-----------|-----------|---------------------------------------|-----------|-----------|-----------------------------------|------------|------------|---------------|-----------|------------|-----------|---------------|-------------|
|                 | Other                                 | Right     | Thru       | Left                              | Other     | Right     | Thru                                  | Left      | Other     | Right                             | Thru       | Left       | Other         | Right     | Thru       | Left      | Vehicle Total | Other Total |
| 06:00           | 3                                     | 28        | 16         | 2                                 | 0         | 6         | 92                                    | 5         | 0         | 2                                 | 9          | 7          | 2             | 1         | 9          | 1         | 178           | 5           |
| 06:15           | 2                                     | 14        | 36         | 5                                 | 3         | 8         | 94                                    | 12        | 1         | 0                                 | 8          | 4          | 2             | 0         | 19         | 3         | 203           | 8           |
| 06:30           | 6                                     | 17        | 52         | 6                                 | 2         | 11        | 104                                   | 7         | 0         | 4                                 | 14         | 7          | 2             | 4         | 14         | 4         | 244           | 10          |
| 06:45           | 7                                     | 22        | 80         | 10                                | 0         | 15        | 86                                    | 20        | 1         | 3                                 | 10         | 7          | 1             | 2         | 21         | 2         | 278           | 9           |
| <b>Hr Total</b> | <b>18</b>                             | <b>81</b> | <b>184</b> | <b>23</b>                         | <b>5</b>  | <b>40</b> | <b>376</b>                            | <b>44</b> | <b>2</b>  | <b>9</b>                          | <b>41</b>  | <b>25</b>  | <b>7</b>      | <b>7</b>  | <b>63</b>  | <b>10</b> | <b>903</b>    | <b>32</b>   |
| 07:00           | 5                                     | 22        | 52         | 7                                 | 1         | 21        | 91                                    | 17        | 1         | 10                                | 3          | 12         | 4             | 2         | 15         | 5         | 257           | 11          |
| 07:15           | 4                                     | 19        | 71         | 16                                | 1         | 20        | 73                                    | 24        | 1         | 8                                 | 19         | 13         | 7             | 5         | 20         | 11        | 299           | 13          |
| 07:30           | 4                                     | 21        | 61         | 12                                | 3         | 11        | 89                                    | 21        | 2         | 9                                 | 15         | 9          | 6             | 4         | 25         | 9         | 286           | 15          |
| 07:45           | 7                                     | 31        | 69         | 19                                | 3         | 7         | 87                                    | 20        | 1         | 11                                | 38         | 9          | 2             | 3         | 36         | 10        | 340           | 13          |
| <b>Hr Total</b> | <b>20</b>                             | <b>93</b> | <b>253</b> | <b>54</b>                         | <b>8</b>  | <b>59</b> | <b>340</b>                            | <b>82</b> | <b>5</b>  | <b>38</b>                         | <b>75</b>  | <b>43</b>  | <b>19</b>     | <b>14</b> | <b>96</b>  | <b>35</b> | <b>1182</b>   | <b>52</b>   |
| 08:00           | 6                                     | 23        | 36         | 18                                | 1         | 16        | 87                                    | 13        | 3         | 19                                | 26         | 13         | 3             | 4         | 20         | 12        | 287           | 13          |
| 08:15           | 3                                     | 27        | 36         | 10                                | 4         | 12        | 69                                    | 5         | 1         | 14                                | 20         | 15         | 4             | 9         | 17         | 11        | 245           | 12          |
| 08:30           | 2                                     | 26        | 29         | 7                                 | 5         | 6         | 51                                    | 7         | 3         | 17                                | 18         | 11         | 3             | 7         | 14         | 14        | 207           | 13          |
| 08:45           | 1                                     | 12        | 27         | 10                                | 4         | 5         | 52                                    | 10        | 3         | 10                                | 16         | 14         | 3             | 5         | 27         | 9         | 197           | 11          |
| <b>Hr Total</b> | <b>12</b>                             | <b>88</b> | <b>128</b> | <b>45</b>                         | <b>14</b> | <b>39</b> | <b>259</b>                            | <b>35</b> | <b>10</b> | <b>60</b>                         | <b>80</b>  | <b>53</b>  | <b>13</b>     | <b>25</b> | <b>78</b>  | <b>46</b> | <b>936</b>    | <b>49</b>   |
| 09:00           | 4                                     | 21        | 33         | 9                                 | 7         | 9         | 65                                    | 14        | 2         | 9                                 | 25         | 19         | 4             | 4         | 21         | 12        | 241           | 17          |
| 09:15           | 6                                     | 20        | 33         | 9                                 | 3         | 12        | 58                                    | 11        | 3         | 12                                | 31         | 13         | 5             | 4         | 36         | 11        | 250           | 17          |
| 09:30           | 2                                     | 15        | 32         | 8                                 | 3         | 9         | 53                                    | 11        | 2         | 7                                 | 20         | 13         | 3             | 5         | 36         | 9         | 218           | 10          |
| 09:45           | 0                                     | 14        | 27         | 12                                | 5         | 13        | 56                                    | 8         | 2         | 12                                | 20         | 13         | 1             | 4         | 37         | 13        | 229           | 8           |
| <b>Hr Total</b> | <b>12</b>                             | <b>70</b> | <b>125</b> | <b>38</b>                         | <b>18</b> | <b>43</b> | <b>232</b>                            | <b>44</b> | <b>9</b>  | <b>40</b>                         | <b>96</b>  | <b>58</b>  | <b>13</b>     | <b>17</b> | <b>130</b> | <b>45</b> | <b>938</b>    | <b>52</b>   |
| 10:00           | 4                                     | 15        | 20         | 20                                | 2         | 11        | 63                                    | 9         | 0         | 20                                | 21         | 11         | 5             | 6         | 38         | 15        | 249           | 11          |
| 10:15           | 2                                     | 21        | 26         | 17                                | 1         | 14        | 52                                    | 11        | 1         | 13                                | 19         | 11         | 1             | 5         | 39         | 16        | 244           | 5           |
| 10:30           | 7                                     | 12        | 32         | 11                                | 1         | 12        | 63                                    | 12        | 4         | 12                                | 22         | 13         | 6             | 7         | 49         | 13        | 258           | 18          |
| 10:45           | 7                                     | 16        | 27         | 9                                 | 0         | 12        | 69                                    | 9         | 1         | 17                                | 22         | 11         | 2             | 3         | 44         | 16        | 255           | 10          |
| <b>Hr Total</b> | <b>20</b>                             | <b>64</b> | <b>105</b> | <b>57</b>                         | <b>4</b>  | <b>49</b> | <b>247</b>                            | <b>41</b> | <b>6</b>  | <b>62</b>                         | <b>84</b>  | <b>46</b>  | <b>14</b>     | <b>21</b> | <b>170</b> | <b>60</b> | <b>1006</b>   | <b>44</b>   |
| 11:00           | 3                                     | 18        | 26         | 10                                | 5         | 2         | 68                                    | 8         | 0         | 18                                | 18         | 10         | 3             | 7         | 41         | 19        | 245           | 11          |
| 11:15           | 1                                     | 14        | 28         | 17                                | 2         | 12        | 63                                    | 12        | 7         | 14                                | 35         | 14         | 1             | 2         | 48         | 17        | 276           | 11          |
| 11:30           | 2                                     | 18        | 31         | 18                                | 6         | 17        | 80                                    | 22        | 0         | 26                                | 44         | 24         | 1             | 4         | 52         | 20        | 356           | 9           |
| 11:45           | 7                                     | 11        | 29         | 24                                | 2         | 21        | 58                                    | 6         | 3         | 25                                | 34         | 29         | 3             | 1         | 51         | 17        | 306           | 15          |
| <b>Hr Total</b> | <b>13</b>                             | <b>61</b> | <b>114</b> | <b>69</b>                         | <b>15</b> | <b>52</b> | <b>269</b>                            | <b>48</b> | <b>10</b> | <b>83</b>                         | <b>131</b> | <b>77</b>  | <b>8</b>      | <b>14</b> | <b>192</b> | <b>73</b> | <b>1183</b>   | <b>46</b>   |
| 12:00           | 0                                     | 17        | 18         | 24                                | 2         | 18        | 60                                    | 17        | 2         | 19                                | 35         | 25         | 1             | 2         | 40         | 24        | 299           | 5           |
| 12:15           | 2                                     | 15        | 31         | 15                                | 0         | 21        | 51                                    | 12        | 3         | 22                                | 57         | 31         | 3             | 3         | 64         | 19        | 341           | 8           |
| 12:30           | 2                                     | 19        | 31         | 27                                | 0         | 14        | 71                                    | 7         | 1         | 29                                | 25         | 17         | 2             | 12        | 56         | 22        | 330           | 5           |
| 12:45           | 2                                     | 28        | 30         | 33                                | 2         | 16        | 58                                    | 9         | 4         | 23                                | 53         | 28         | 2             | 8         | 37         | 16        | 339           | 10          |
| <b>Hr Total</b> | <b>6</b>                              | <b>79</b> | <b>110</b> | <b>99</b>                         | <b>4</b>  | <b>69</b> | <b>240</b>                            | <b>45</b> | <b>10</b> | <b>93</b>                         | <b>170</b> | <b>101</b> | <b>8</b>      | <b>25</b> | <b>197</b> | <b>81</b> | <b>1309</b>   | <b>28</b>   |

ANOKA COUNTY HIGHWAY DEPARTMENT  
 TRAFFIC ENGINEERING SECTION  
 TRAFFIC VOLUME AND  
 TURNING MOVEMENT STUDY

Site Code : 95120101  
 Start Date: 06/19/95  
 File I.D. : TMC9512  
 Page : 2

Counted by ANN/LAURIE  
 CLEAR/90s

Vehicle group 1

| Date 06/19/95 | CSAH 17 (LEXINGTON AVE) Southbound |       |      |      | CSAH 23 (LAKE DRIVE) Westbound |       |      |      | CSAH 17 (LEXINGTON AVE) Northbound |       |      |      | CSAH 23 (LAKE DRIVE) Eastbound |       |      |      | Vehicle Total | Other Total |
|---------------|------------------------------------|-------|------|------|--------------------------------|-------|------|------|------------------------------------|-------|------|------|--------------------------------|-------|------|------|---------------|-------------|
|               | Other                              | Right | Thru | Left | Other                          | Right | Thru | Left | Other                              | Right | Thru | Left | Other                          | Right | Thru | Left |               |             |
| 13:00         | 4                                  | 11    | 42   | 26   | 2                              | 20    | 54   | 13   | 3                                  | 23    | 36   | 27   | 7                              | 9     | 76   | 30   | 367           | 16          |
| 13:15         | 2                                  | 16    | 31   | 15   | 2                              | 14    | 59   | 23   | 3                                  | 20    | 35   | 13   | 3                              | 8     | 50   | 22   | 306           | 10          |
| 13:30         | 0                                  | 21    | 27   | 19   | 2                              | 19    | 47   | 12   | 0                                  | 21    | 31   | 20   | 2                              | 11    | 50   | 25   | 303           | 4           |
| 13:45         | 2                                  | 20    | 30   | 17   | 2                              | 9     | 57   | 13   | 3                                  | 14    | 45   | 20   | 1                              | 9     | 49   | 19   | 302           | 8           |
| Hr Total      | 8                                  | 68    | 130  | 77   | 8                              | 62    | 217  | 61   | 9                                  | 78    | 147  | 80   | 13                             | 37    | 225  | 96   | 1278          | 38          |
| 14:00         | 5                                  | 20    | 26   | 15   | 1                              | 9     | 59   | 13   | 1                                  | 19    | 30   | 20   | 2                              | 6     | 65   | 18   | 300           | 9           |
| 14:15         | 1                                  | 25    | 35   | 15   | 3                              | 15    | 57   | 8    | 3                                  | 24    | 27   | 21   | 2                              | 5     | 58   | 29   | 319           | 9           |
| 14:30         | 1                                  | 25    | 27   | 15   | 3                              | 10    | 50   | 16   | 3                                  | 15    | 30   | 17   | 2                              | 2     | 57   | 27   | 291           | 9           |
| 14:45         | 1                                  | 17    | 24   | 23   | 4                              | 10    | 66   | 10   | 0                                  | 19    | 32   | 16   | 2                              | 0     | 77   | 23   | 317           | 7           |
| Hr Total      | 8                                  | 87    | 112  | 68   | 11                             | 44    | 232  | 47   | 7                                  | 77    | 119  | 74   | 8                              | 13    | 257  | 97   | 1227          | 34          |
| 15:00         | 1                                  | 24    | 33   | 14   | 4                              | 18    | 54   | 8    | 1                                  | 28    | 36   | 10   | 1                              | 5     | 64   | 18   | 312           | 7           |
| 15:15         | 1                                  | 31    | 38   | 16   | 3                              | 9     | 62   | 16   | 2                                  | 26    | 53   | 14   | 2                              | 8     | 89   | 18   | 380           | 8           |
| 15:30         | 0                                  | 24    | 27   | 17   | 1                              | 21    | 52   | 11   | 4                                  | 24    | 48   | 19   | 4                              | 4     | 89   | 38   | 374           | 9           |
| 15:45         | 2                                  | 22    | 42   | 19   | 3                              | 16    | 47   | 17   | 3                                  | 47    | 76   | 20   | 5                              | 5     | 108  | 52   | 471           | 13          |
| Hr Total      | 4                                  | 101   | 140  | 66   | 11                             | 64    | 215  | 52   | 10                                 | 125   | 213  | 63   | 12                             | 22    | 350  | 126  | 1537          | 37          |
| 16:00         | 3                                  | 32    | 31   | 26   | 0                              | 22    | 65   | 22   | 0                                  | 34    | 60   | 20   | 0                              | 4     | 105  | 33   | 454           | 3           |
| 16:15         | 0                                  | 19    | 35   | 24   | 3                              | 22    | 73   | 8    | 5                                  | 36    | 69   | 14   | 0                              | 6     | 126  | 42   | 474           | 8           |
| 16:30         | 1                                  | 18    | 34   | 18   | 3                              | 17    | 78   | 15   | 3                                  | 44    | 80   | 34   | 1                              | 1     | 128  | 33   | 500           | 8           |
| 16:45         | 2                                  | 15    | 36   | 21   | 4                              | 15    | 71   | 16   | 4                                  | 63    | 103  | 26   | 1                              | 6     | 103  | 57   | 532           | 11          |
| Hr Total      | 6                                  | 84    | 136  | 89   | 10                             | 76    | 287  | 61   | 12                                 | 177   | 312  | 94   | 2                              | 17    | 462  | 165  | 1960          | 30          |
| 17:00         | 1                                  | 19    | 42   | 36   | 0                              | 17    | 67   | 29   | 4                                  | 53    | 98   | 29   | 3                              | 2     | 123  | 50   | 565           | 8           |
| 17:15         | 1                                  | 30    | 46   | 20   | 0                              | 14    | 64   | 17   | 3                                  | 62    | 89   | 34   | 2                              | 3     | 149  | 49   | 577           | 6           |
| 17:30         | 1                                  | 27    | 40   | 16   | 1                              | 24    | 73   | 19   | 3                                  | 37    | 80   | 14   | 1                              | 1     | 139  | 36   | 506           | 6           |
| 17:45         | 0                                  | 28    | 48   | 36   | 3                              | 21    | 69   | 25   | 5                                  | 43    | 93   | 24   | 6                              | 2     | 113  | 32   | 534           | 14          |
| Hr Total      | 3                                  | 104   | 176  | 108  | 4                              | 76    | 273  | 90   | 15                                 | 195   | 360  | 101  | 12                             | 8     | 524  | 167  | 2182          | 34          |
| 18:00         | 1                                  | 23    | 46   | 25   | 0                              | 10    | 72   | 16   | 3                                  | 42    | 66   | 27   | 3                              | 3     | 124  | 43   | 497           | 7           |
| 18:15         | 1                                  | 32    | 64   | 25   | 0                              | 23    | 72   | 20   | 0                                  | 42    | 64   | 25   | 2                              | 3     | 99   | 35   | 504           | 3           |
| 18:30         | 0                                  | 21    | 26   | 21   | 0                              | 19    | 83   | 20   | 0                                  | 43    | 76   | 28   | 0                              | 2     | 73   | 31   | 443           | 0           |
| 18:45         | 0                                  | 23    | 40   | 10   | 0                              | 7     | 66   | 15   | 0                                  | 32    | 66   | 17   | 1                              | 2     | 82   | 30   | 390           | 1           |
| Hr Total      | 2                                  | 99    | 176  | 81   | 0                              | 59    | 293  | 71   | 3                                  | 159   | 272  | 97   | 6                              | 10    | 378  | 139  | 1834          | 11          |
| 19:00         | 1                                  | 42    | 35   | 35   | 3                              | 23    | 72   | 23   | 0                                  | 30    | 38   | 20   | 2                              | 0     | 65   | 27   | 410           | 6           |
| 19:15         | 0                                  | 21    | 31   | 20   | 0                              | 16    | 77   | 13   | 0                                  | 20    | 46   | 9    | 0                              | 4     | 72   | 22   | 351           | 0           |
| 19:30         | 0                                  | 23    | 40   | 34   | 0                              | 21    | 74   | 11   | 0                                  | 21    | 41   | 7    | 0                              | 0     | 61   | 15   | 348           | 0           |
| 19:45         | 0                                  | 30    | 43   | 17   | 2                              | 15    | 67   | 20   | 0                                  | 23    | 45   | 11   | 0                              | 0     | 67   | 18   | 356           | 2           |
| Hr Total      | 1                                  | 116   | 149  | 106  | 5                              | 75    | 290  | 67   | 0                                  | 94    | 170  | 47   | 2                              | 4     | 265  | 82   | 1465          | 8           |

ANOKA COUNTY HIGHWAY DEPARTMENT

TRAFFIC ENGINEERING SECTION

TRAFFIC VOLUME AND

TURNING MOVEMENT STUDY

Counter : TDC EIGHT  
Counted by ANN/LAURIE  
CLEAR/90s

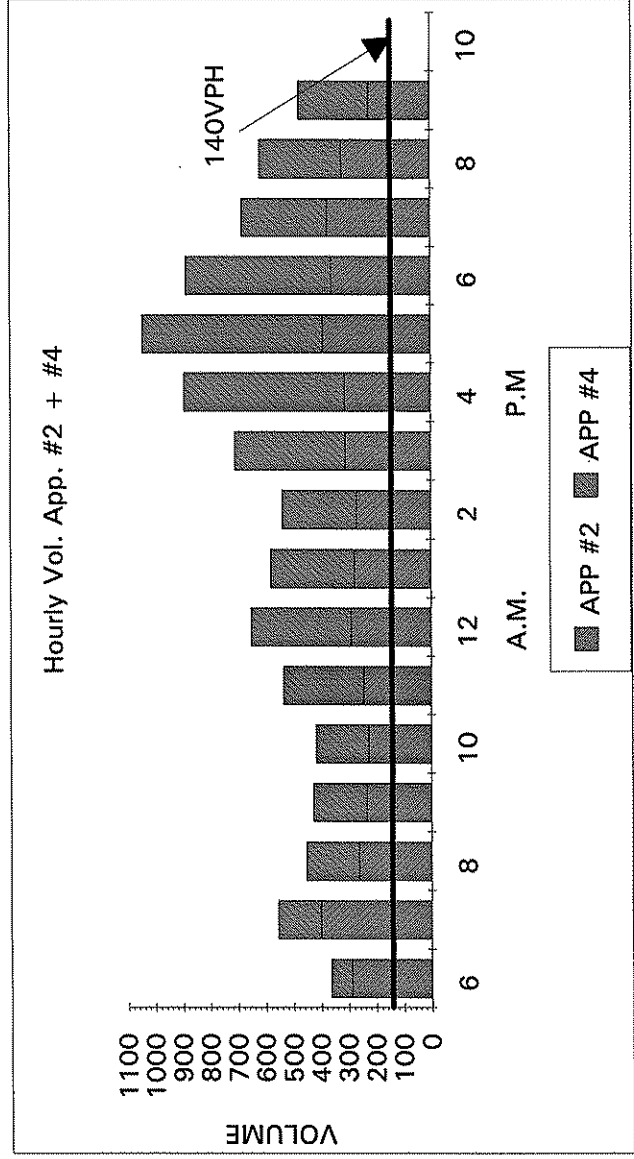
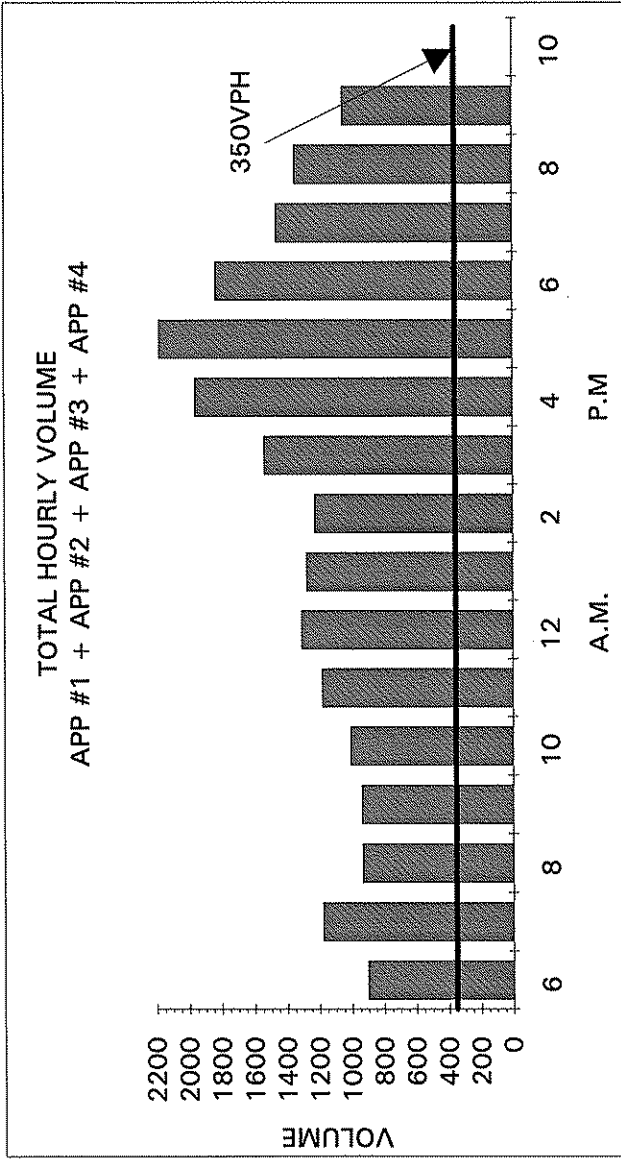
Site File : 95120101  
Start Date: 06/19/95  
File I.D. : TMC9512}  
Page : 3

Vehicle group 1

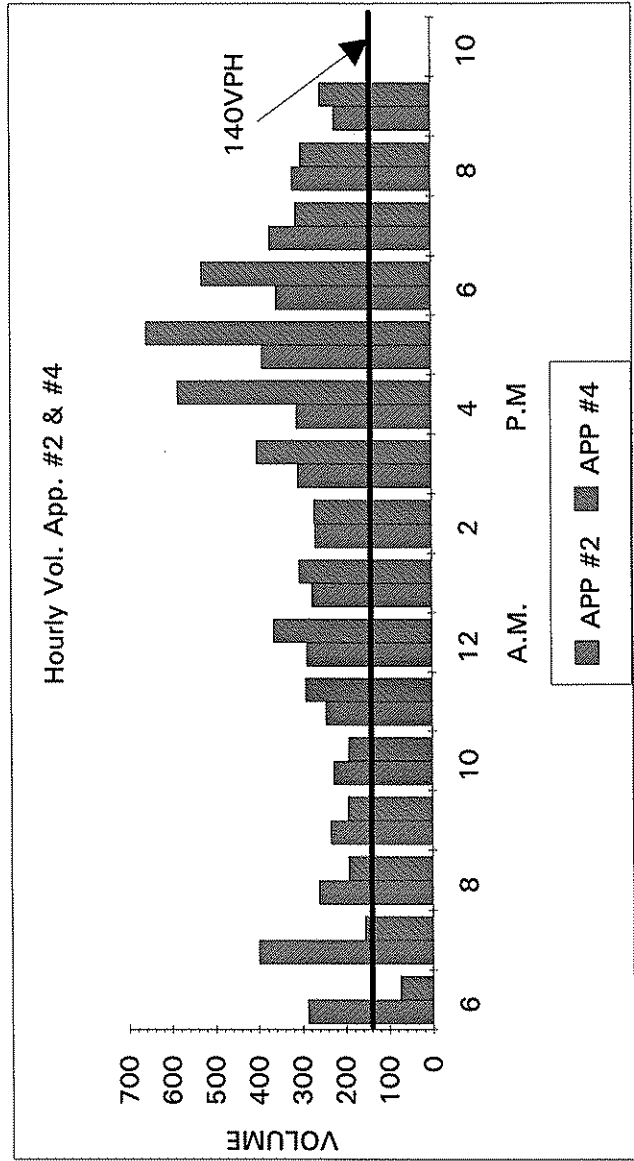
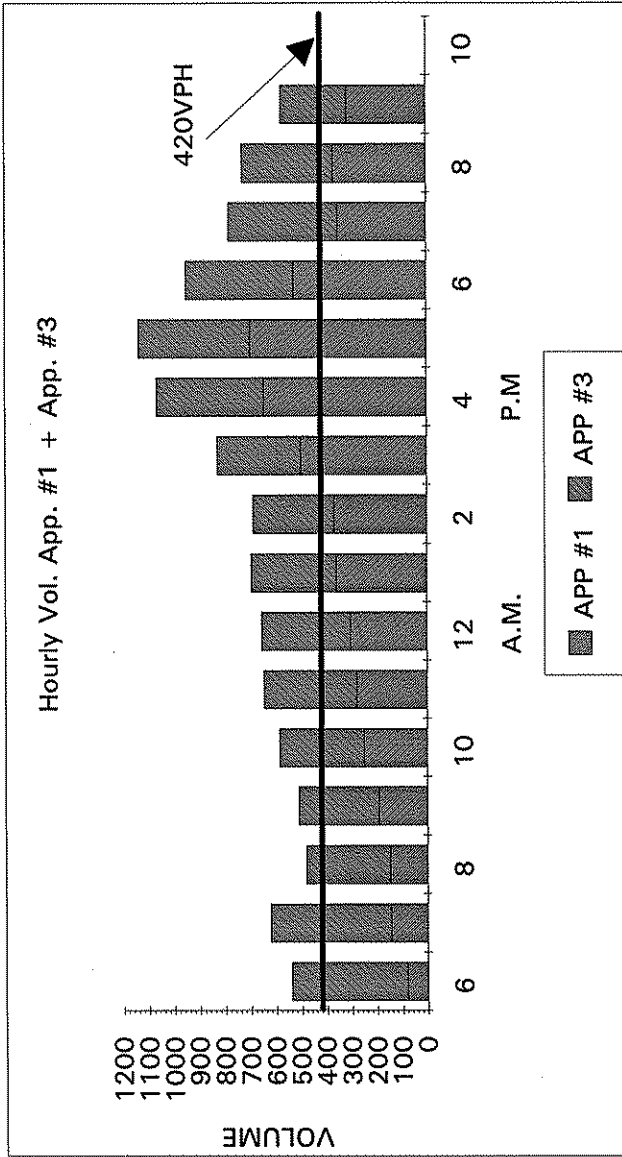
| Date     | CSAH 17 (LEXINGTON AVE) Southbound |       |      | CSAH 23 (LAKE DRIVE) Westbound |       |       | CSAH 17 (LEXINGTON AVE) Northbound |      |       | CSAH 23 (LAKE DRIVE) Eastbound |      |      | Vehicle Total | Other Total |     |     |      |    |
|----------|------------------------------------|-------|------|--------------------------------|-------|-------|------------------------------------|------|-------|--------------------------------|------|------|---------------|-------------|-----|-----|------|----|
|          | Other                              | Right | Thru | Left                           | Other | Right | Thru                               | Left | Other | Right                          | Thru | Left |               |             |     |     |      |    |
| 20:00    | 1                                  | 17    | 36   | 10                             | 0     | 14    | 72                                 | 21   | 0     | 35                             | 36   | 11   | 1             | 4           | 57  | 18  | 331  | 2  |
| 20:15    | 2                                  | 18    | 46   | 24                             | 3     | 18    | 59                                 | 8    | 0     | 32                             | 41   | 13   | 1             | 2           | 71  | 20  | 352  | 6  |
| 20:30    | 0                                  | 20    | 48   | 13                             | 1     | 10    | 55                                 | 26   | 0     | 27                             | 26   | 6    | 1             | 2           | 63  | 37  | 333  | 2  |
| 20:45    | 1                                  | 18    | 45   | 23                             | 2     | 12    | 53                                 | 13   | 0     | 24                             | 36   | 12   | 1             | 1           | 68  | 26  | 331  | 4  |
| Hr Total | 4                                  | 73    | 175  | 70                             | 6     | 54    | 239                                | 68   | 0     | 118                            | 139  | 42   | 4             | 9           | 259 | 101 | 1347 | 14 |
| 21:00    | 0                                  | 17    | 22   | 19                             | 0     | 15    | 59                                 | 14   | 0     | 28                             | 42   | 14   | 0             | 2           | 66  | 19  | 317  | 0  |
| 21:15    | 0                                  | 16    | 27   | 20                             | 0     | 9     | 51                                 | 18   | 0     | 25                             | 40   | 11   | 0             | 3           | 47  | 23  | 290  | 0  |
| 21:30    | 0                                  | 16    | 25   | 10                             | 1     | 9     | 40                                 | 8    | 1     | 12                             | 29   | 11   | 0             | 1           | 60  | 13  | 234  | 2  |
| 21:45    | 0                                  | 16    | 24   | 9                              | 0     | 9     | 30                                 | 1    | 0     | 15                             | 22   | 5    | 0             | 1           | 55  | 24  | 211  | 0  |
| Hr Total | 0                                  | 65    | 98   | 58                             | 1     | 42    | 180                                | 41   | 1     | 80                             | 133  | 41   | 0             | 7           | 228 | 79  | 1052 | 2  |

|         |     |      |      |      |     |     |      |     |     |      |      |      |     |     |      |      |       |     |
|---------|-----|------|------|------|-----|-----|------|-----|-----|------|------|------|-----|-----|------|------|-------|-----|
| *TOTAL* | 137 | 1333 | 2311 | 1108 | 124 | 903 | 4189 | 897 | 109 | 1488 | 2542 | 1042 | 141 | 250 | 3874 | 1402 | 21339 | 511 |
|---------|-----|------|------|------|-----|-----|------|-----|-----|------|------|------|-----|-----|------|------|-------|-----|

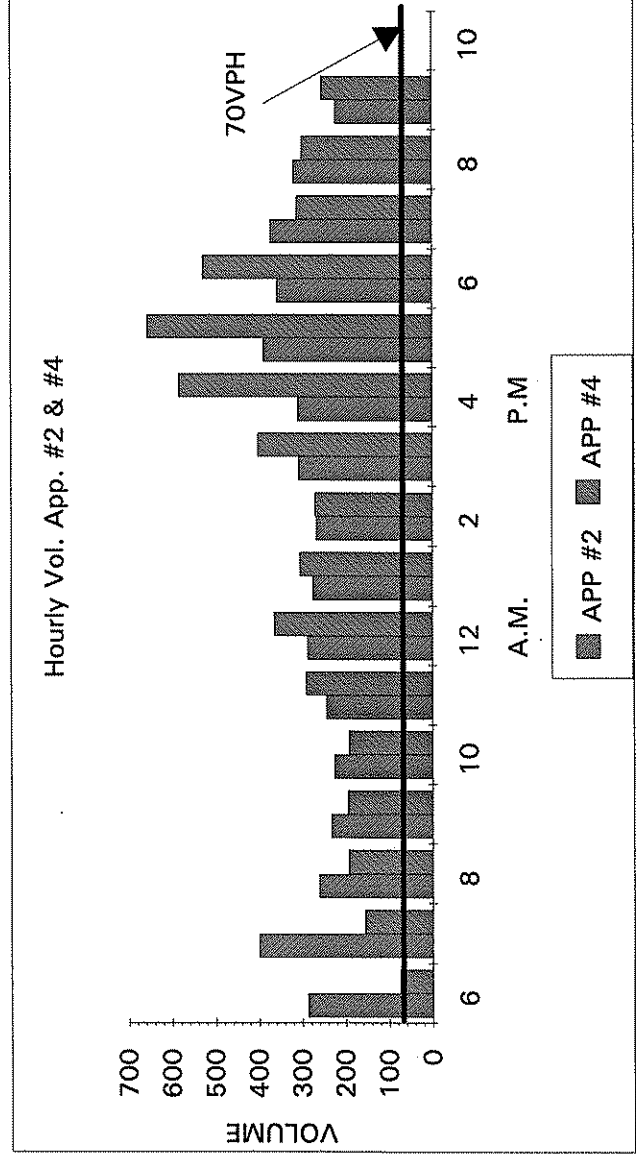
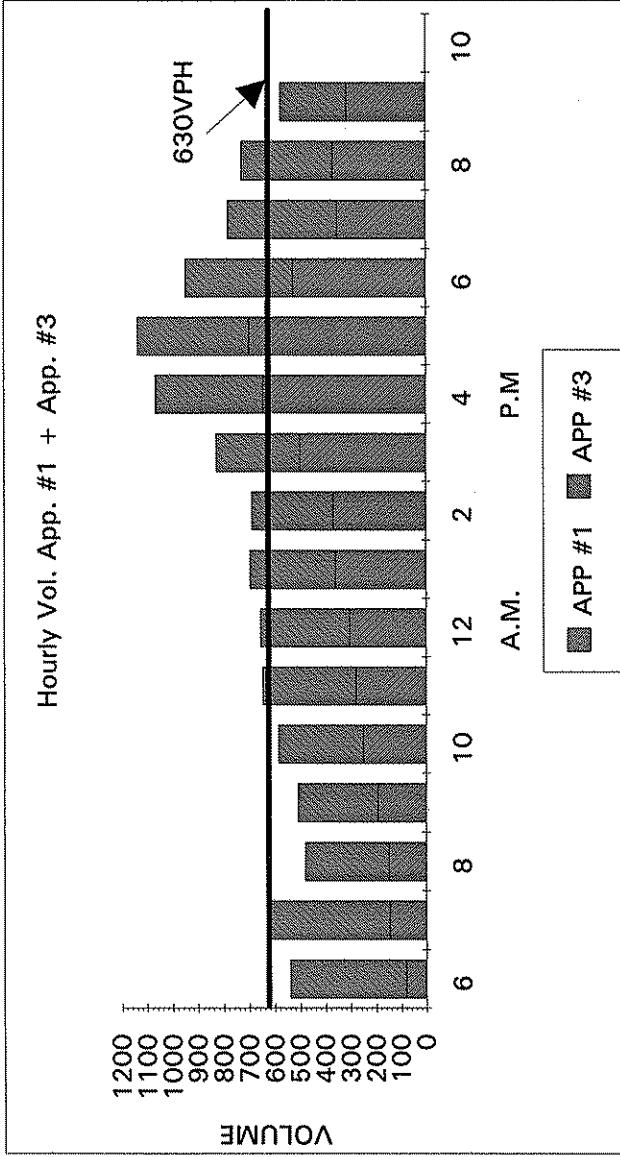
TMC9512 STOP WARRANT STUDY



TMC9512 SIGNAL WARRANT 1 STUDY

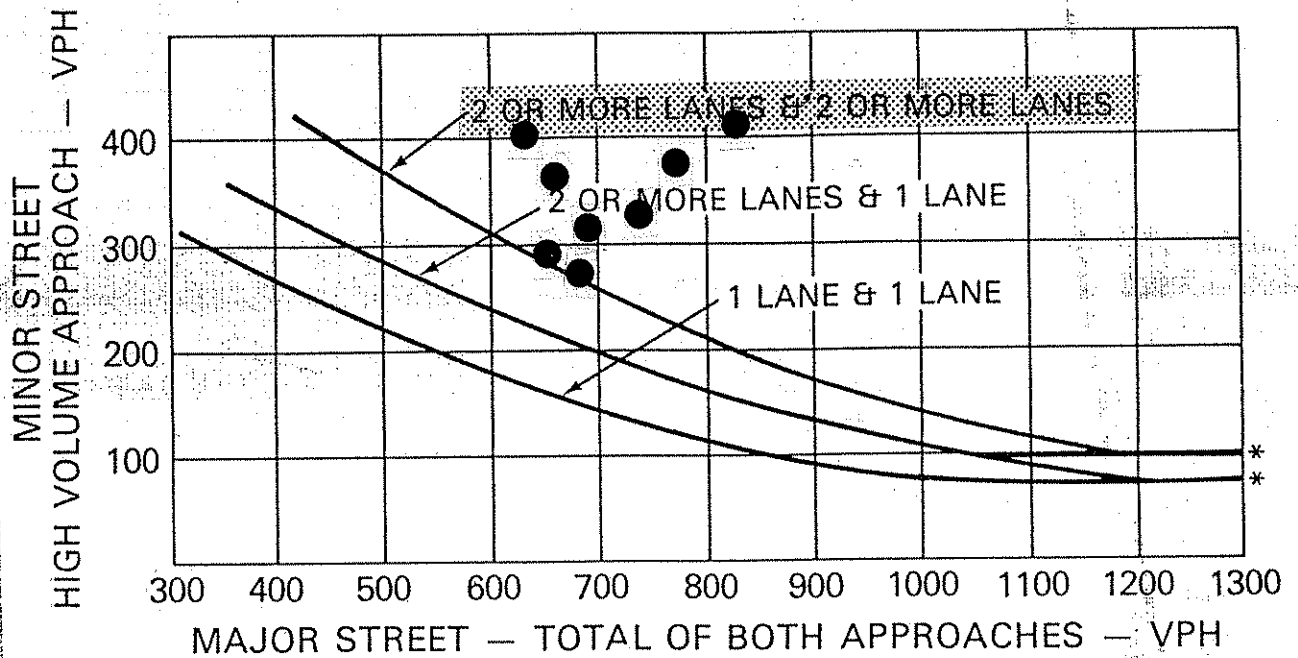


TMC9512 SIGNAL WARRANT 2 STUDY



# FIGURE 4-6. PEAK HOUR VOLUME WARRANT

(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 40 MPH ON MAJOR STREET)



\*NOTE: 100 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACH WITH TWO OR MORE LANES AND 75 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACHING WITH ONE LANE.

● = VOLUMES WHICH EXCEEDED THE THRESHOLD AND ARE REPRESENTED ON THE GRAPH.

★ = VOLUMES WHICH EXCEEDED THE THRESHOLD BUT CANNOT BE REPRESENTED ON THE GRAPH.

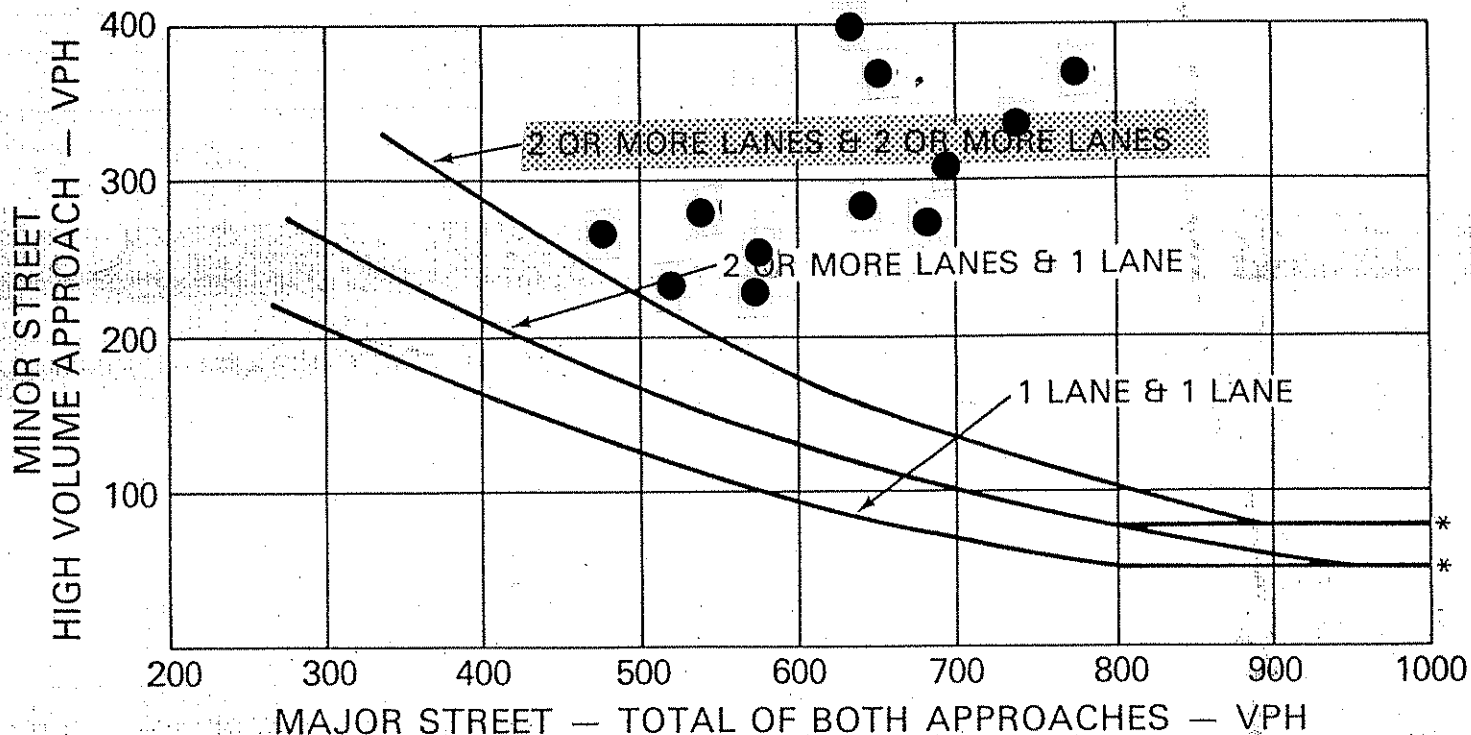
| TIME       | MAJOR STREETS (VPH) | MINOR STREET (VPH) |
|------------|---------------------|--------------------|
| 6-7 am     | 540                 | 288                |
| ● 7-8 am   | 626                 | 400                |
| 8-9 am     | 482                 | 261                |
| 9-10 am    | 511                 | 233                |
| 10-11 am   | 588                 | 226                |
| ● 11-12 pm | 648                 | 291                |
| ● 12-1 pm  | 657                 | 364                |
| ● 1-2 pm   | 698                 | 305                |
| ● 2-3 pm   | 690                 | 270                |
| ● 3-4 pm   | 829                 | 401                |
| ★ 4-5 pm   | 1068                | 583                |
| ★ 5-6 pm   | 1138                | 656                |
| ★ 6-7 pm   | 950                 | 528                |
| ● 7-8 pm   | 783                 | 371                |
| ● 8-9 pm   | 730                 | 318                |
| 9-10 pm    | 577                 | 254                |

TMC 9512 CSAH 23 (LAKE DRIVE) @ CSAH 17 (LEXINGTON AVE)



# FIGURE 4-8. FOUR HOUR VOLUME WARRANT

(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 40 MPH ON MAJOR STREET)



\*NOTE: 80 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACH WITH TWO OR MORE LANES AND 60 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACHING WITH ONE LANE.

● = VOLUMES WHICH EXCEED THE THRESHOLD AND ARE REPRESENTED ON THE GRAPH.

★ = VOLUMES WHICH EXCEED THE THRESHOLD BUT CANNOT BE REPRESENTED ON THE GRAPH.

| TIME       | MAJOR STREETS (VPH) | MINOR STREET (VPH) |
|------------|---------------------|--------------------|
| ● 6-7 am   | 540                 | 288                |
| ● 7-8 am   | 626                 | 400                |
| ● 8-9 am   | 482                 | 261                |
| ● 9-10 am  | 511                 | 233                |
| ● 10-11 am | 588                 | 226                |
| ● 11-12 pm | 648                 | 291                |
| ● 12-1 pm  | 657                 | 364                |
| ● 1-2 pm   | 698                 | 305                |
| ● 2-3 pm   | 690                 | 270                |
| ★ 3-4 pm   | 829                 | 401                |
| ★ 4-5 pm   | 1068                | 583                |
| ★ 5-6 pm   | 1138                | 656                |
| ★ 6-7 pm   | 950                 | 528                |
| ● 7-8 pm   | 783                 | 371                |
| ● 8-9 pm   | 730                 | 318                |
| ● 9-10 pm  | 577                 | 254                |



**NORTH**

**COUNT LOCATION:**

CSAH 23 (LAKE DRIVE) @ CSAH 17  
(LEXINGTON AVE)

**DATE:**

6/20/95

APP. #1= WB CSAH 23  
(LAKE DRIVE)

APP. #2= NB CSAH 17  
(LEXINGTON AVE)

APP. #3= EB CSAH 23  
(LAKE DRIVE)

APP. #4= SB CSAH 17  
(LEXINGTON AVE)

APP.  
#2

APP.  
#1

APP.  
#3

APP.  
#4

HEAVY VEHICLE- ANY VEHICLE HAVING MORE THAN  
FOUR TIRES TOUCHING THE PAVEMENT

A. TRUCKS- A HEAVY VEHICLE INVOLVED PRIMARILY  
IN THE TRANSPORT OF GOODS OR IN THE DELIVERY  
OF A SERVICE.

B. RV- A HEAVY VEHICLE OPERATED BY A PRIVATE  
MOTORIST AND INVOLVED IN THE TRANSPORT OF  
RECREATIONAL EQUIPMENT OR FACILITIES.

C. BUSES- A HEAVY VEHICLE INVOLVED IN THE  
TRANSPORTATION OF GROUPS OF PEOPLE.

| TIME                | PEDESTRIANS |         |         |         |            | HEAVY VEHICLES      |    |           |
|---------------------|-------------|---------|---------|---------|------------|---------------------|----|-----------|
|                     | APP. #1     | APP. #2 | APP. #3 | APP. #4 | 15 MIN TOT | TRUCKS              | RV | BUS       |
| 6:00-6:15AM         |             |         |         |         |            | 3                   |    | 2         |
| 6:15-6:30           |             |         |         | 1       | 1          | 8                   |    | 1         |
| 6:30-6:45           |             |         |         |         |            | 8                   |    | 2         |
| 6:45-7:00           |             | 1       |         |         | 1          | 8                   |    |           |
| <b>HOURLY TOTAL</b> |             |         |         |         | <b>2</b>   | <b>HOURLY TOTAL</b> |    | <b>32</b> |
| 7:00-7:15           |             |         |         |         |            | 8                   | 1  | 3         |
| 7:15-7:30           |             |         |         |         |            | 13                  |    |           |
| 7:30-7:45           |             |         |         |         |            | 16                  |    |           |
| 7:45-8:00           |             |         |         |         |            | 13                  |    |           |
| <b>HOURLY TOTAL</b> |             |         |         |         |            | <b>HOURLY TOTAL</b> |    | <b>54</b> |
| 8:00-8:15           |             |         |         |         |            | 13                  |    |           |
| 8:15-8:30           |             |         | 1       |         | 1          | 11                  |    |           |
| 8:30-8:45           |             |         |         |         |            | 15                  |    |           |
| 8:45-9:00           |             |         |         |         |            | 11                  |    |           |
| <b>HOURLY TOTAL</b> |             |         |         |         | <b>1</b>   | <b>HOURLY TOTAL</b> |    | <b>50</b> |
| 9:00-9:15           |             |         |         |         |            | 15                  |    |           |
| 9:15-9:30           |             |         |         |         |            | 17                  |    |           |
| 9:30-9:45           |             |         |         |         |            | 10                  |    |           |
| 9:45-10:00          |             |         |         |         |            | 8                   |    |           |
| <b>HOURLY TOTAL</b> |             |         |         |         |            | <b>HOURLY TOTAL</b> |    | <b>50</b> |
| 10:00-10:15         |             |         |         |         |            | 11                  |    |           |
| 10:15-10:30         |             |         |         |         |            | 7                   |    |           |
| 10:30-10:45         |             |         |         |         |            | 17                  |    |           |
| 10:45-11:00         |             |         |         |         |            | 11                  |    |           |
| <b>HOURLY TOTAL</b> |             |         |         |         |            | <b>HOURLY TOTAL</b> |    | <b>46</b> |
| 11:00-11:15         |             |         |         |         |            | 12                  |    |           |
| 11:15-11:30         |             |         |         |         |            | 12                  |    |           |
| 11:30-11:45         |             |         |         |         |            | 7                   |    |           |
| 11:45-12:00         |             |         |         |         |            | 14                  |    |           |
| <b>HOURLY TOTAL</b> |             |         |         |         |            | <b>HOURLY TOTAL</b> |    | <b>45</b> |
| 12:00-12:15         |             |         |         |         |            | 8                   |    |           |
| 12:15-12:30         |             |         |         |         |            | 5                   |    | 1         |
| 12:30-12:45         |             |         |         |         |            | 5                   |    |           |
| 12:45-1:00          |             |         |         |         |            | 12                  |    |           |
| <b>HOURLY TOTAL</b> |             |         |         |         |            | <b>HOURLY TOTAL</b> |    | <b>31</b> |
| 1:00-1:15           |             |         |         |         |            | 13                  |    |           |
| 1:15-1:30           |             |         |         |         |            | 10                  |    |           |
| 1:30-1:45           |             |         |         |         |            | 4                   |    |           |
| 1:45-2:00           |             |         |         |         |            | 8                   |    |           |
| <b>HOURLY TOTAL</b> |             |         |         |         |            | <b>HOURLY TOTAL</b> |    | <b>35</b> |

**COUNT LOCATION:** CSAH 23 (LAKE DRIVE) @  
CSAH 17 (LEXINGTON AVE)

**DATE:** 6/19/95

↓  
**NORTH**

|                                       |
|---------------------------------------|
| APP. #1=WB CSAH 23<br>(LAKE DRIVE)    |
| APP. #2=NB CSAH 17<br>(LEXINGTON AVE) |
| APP. #3=EB CSAH 23<br>(LAKE DRIVE)    |
| APP. #4=SB CSAH 17<br>(LEXINGTON AVE) |

|         |         |
|---------|---------|
| APP. #2 | APP. #3 |
| APP. #1 | APP. #4 |

HEAVY VEHICLE- ANY VEHICLE HAVING MORE THAN FOUR TIRES TOUCHING THE PAVEMENT

A. TRUCKS- A HEAVY VEHICLE INVOLVED PRIMARILY IN THE TRANSPORT OF GOODS OR IN THE DELIVERY OF A SERVICE.

B. RV- A HEAVY VEHICLE OPERATED BY A PRIVATE MOTORIST AND INVOLVED IN THE TRANSPORT OF RECREATIONAL EQUIPMENT OR FACILITIES.

C. BUSES- A HEAVY VEHICLE INVOLVED IN THE TRANSPORTATION OF GROUPS OF PEOPLE.

| TIME                | PEDESTRIANS |         |         |         |            | HEAVY VEHICLES      |    |           |
|---------------------|-------------|---------|---------|---------|------------|---------------------|----|-----------|
|                     | APP. #1     | APP. #2 | APP. #3 | APP. #4 | 15 MIN TOT | TRUCKS              | RV | BUS       |
| 2:00-2:15PM         |             |         |         |         |            | 9                   |    |           |
| 2:15-2:30           |             |         |         |         |            | 9                   |    |           |
| 2:30-2:45           |             |         |         |         |            | 8                   | 1  |           |
| 2:45-3:00           |             |         |         |         |            | 7                   |    |           |
| <b>HOURLY TOTAL</b> |             |         |         |         |            | <b>HOURLY TOTAL</b> |    | <b>34</b> |
| 3:00-3:15           |             |         |         |         |            | 6                   | 1  |           |
| 3:15-3:30           |             |         |         |         |            | 7                   |    |           |
| 3:30-3:45           |             |         |         |         |            | 8                   | 1  |           |
| 3:45-4:00           |             |         |         |         |            | 12                  |    |           |
| <b>HOURLY TOTAL</b> |             |         |         |         |            | <b>HOURLY TOTAL</b> |    | <b>35</b> |
| 4:00-4:15           |             |         |         |         |            | 2                   |    | 1         |
| 4:15-4:30           |             |         |         |         |            | 5                   |    | 1         |
| 4:30-4:45           |             |         |         |         |            | 6                   |    | 1         |
| 4:45-5:00           |             |         |         |         |            | 9                   | 1  | 1         |
| <b>HOURLY TOTAL</b> |             |         |         |         |            | <b>HOURLY TOTAL</b> |    | <b>27</b> |
| 5:00-5:15           |             |         |         |         |            | 6                   | 1  | 1         |
| 5:15-5:30           |             |         |         |         |            | 5                   |    | 1         |
| 5:30-5:45           |             |         |         |         |            | 5                   |    | 1         |
| 5:45-6:00           |             | 2       |         | 1       | 3          | 11                  |    | 2         |
| <b>HOURLY TOTAL</b> |             |         |         |         | <b>3</b>   | <b>HOURLY TOTAL</b> |    | <b>33</b> |
| 6:00-6:15           |             |         |         |         |            | 7                   |    | 1         |
| 6:15-6:30           |             |         |         | 1       | 1          | 4                   |    |           |
| 6:30-6:45           |             |         |         |         |            |                     |    |           |
| 6:45-7:00           |             |         |         |         |            |                     |    |           |
| <b>HOURLY TOTAL</b> |             |         |         |         | <b>1</b>   | <b>HOURLY TOTAL</b> |    | <b>12</b> |
| 7:00-7:15           |             |         |         |         |            | 4                   | 1  |           |
| 7:15-7:30           |             |         |         |         |            |                     |    |           |
| 7:30-7:45           |             |         |         |         |            |                     |    |           |
| 7:45-8:00           |             |         |         |         |            | 1                   |    |           |
| <b>HOURLY TOTAL</b> |             |         |         |         |            | <b>HOURLY TOTAL</b> |    | <b>6</b>  |
| 8:00-8:15           |             |         |         |         |            | 2                   |    |           |
| 8:15-8:30           |             |         |         |         |            | 7                   |    |           |
| 8:30-8:45           |             |         |         |         |            | 1                   |    |           |
| 8:45-9:00           |             |         |         |         |            | 4                   |    |           |
| <b>HOURLY TOTAL</b> |             |         |         |         |            | <b>HOURLY TOTAL</b> |    | <b>14</b> |
| 9:00-9:15           |             |         |         |         |            |                     |    |           |
| 9:15-9:30           |             |         |         |         |            |                     |    |           |
| 9:30-9:45           |             |         |         |         |            | 2                   |    |           |
| 9:45-10:00          |             |         |         |         |            |                     |    |           |
| <b>HOURLY TOTAL</b> |             |         |         |         |            | <b>HOURLY TOTAL</b> |    | <b>2</b>  |