

**APPENDIX B**  
**POTENTIAL EFFECTIVENESS OF SIGNAL**  
**OPTIMIZATION FOR VARIOUS**  
**CORRIDORS IN MICHIGAN**

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**Appendix B**  
**Potential Effectiveness of Signal Optimization for**  
**Various Corridors in Michigan**

**Prepared for**  
**Michigan Department of Transportation**

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| 15. Supplementary Notes<br><p>This appendix contains maps of geographically located crashes at 130 intersections on five corridors located in southeast Michigan both before and after signal timing. The intersections are grouped according to corridor. The corridors include Ford Road (M153, 26 intersections), Plymouth Road (Old M14, 18 intersections), Jefferson Avenue (10 intersections), Hall Road (M59, 28 intersections), and Woodward Avenue (M1, 48 intersections). The Michigan Crash data cover years 2001 through 2005. Dates of signal timing along with before days and after days are provided for each map. In addition, comparative statistics showing distributions of injury severity, time of day, day of week, and crash type before and after signal timing are shown.</p> |  |   |  |  |           |
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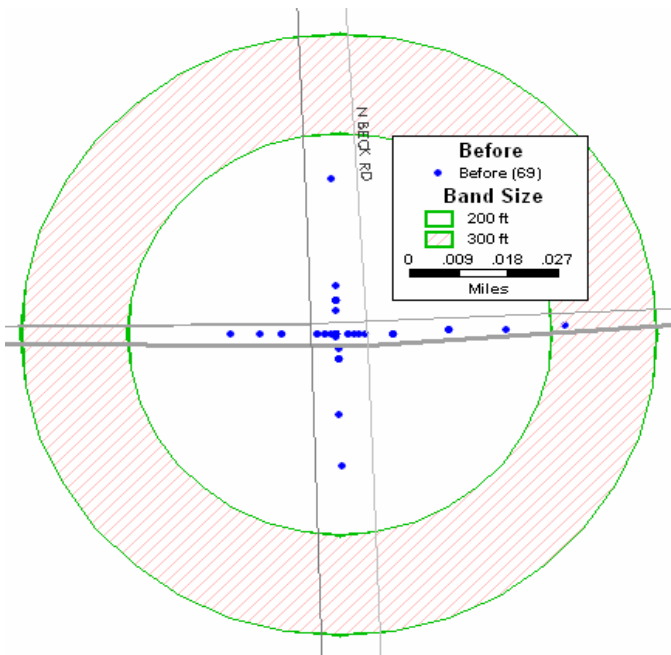
**Appendix B**  
**Potential Effectiveness of Signal Optimization**  
**for Various Corridors in Michigan**



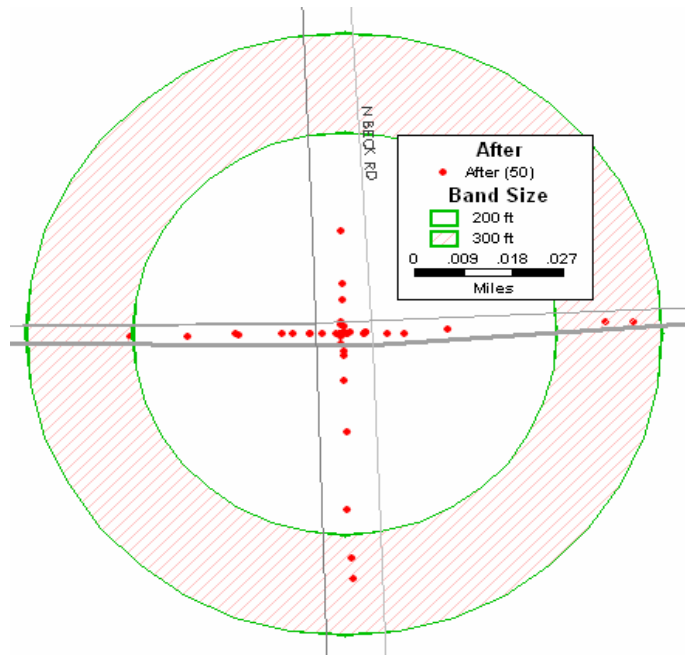
## **Ford Road (M153)**

**M153 (Ford Road) and Beck Road**

Date of Signal Optimization: May 1, 2004



1,217 days before



609 days after

| Injury Severity | Before | %     | After | %     |
|-----------------|--------|-------|-------|-------|
| Fatal           | 0      | 0.0   | 0     | 0.0   |
| A-Injury        | 1      | 1.4   | 1     | 2.0   |
| B-Injury        | 5      | 7.2   | 3     | 6.0   |
| C-Injury        | 19     | 27.5  | 5     | 10.0  |
| O-Injury        | 44     | 63.8  | 41    | 82.0  |
| Total           | 69     | 100.0 | 50    | 100.0 |

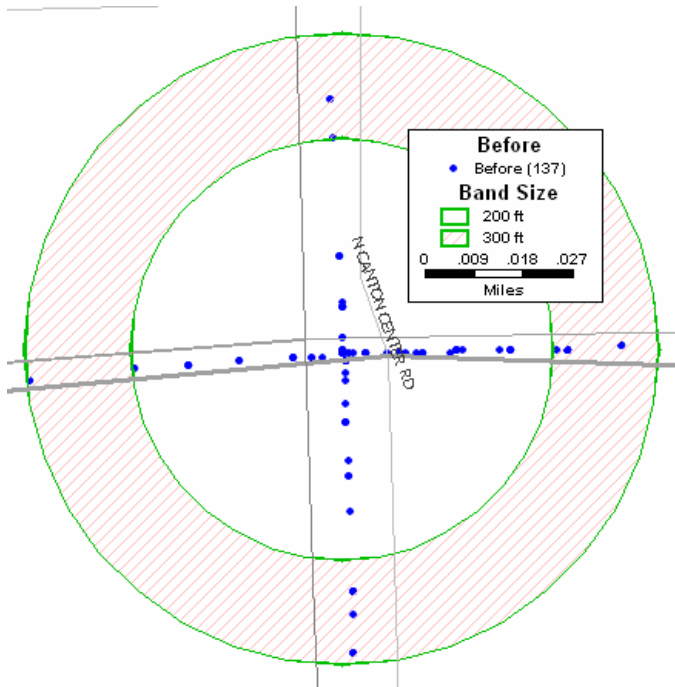
| Time of Day   | Before | %     | After | %     |
|---------------|--------|-------|-------|-------|
| 6am - 9:59am  | 20     | 29.0  | 10    | 20.0  |
| 10am - 3:59pm | 8      | 11.6  | 11    | 22.0  |
| 4pm - 7:59pm  | 17     | 24.6  | 14    | 28.0  |
| 8pm - 5:59am  | 20     | 29.0  | 15    | 30.0  |
| Unknown       | 4      | 5.8   | 0     | 0.0   |
| Total         | 69     | 100.0 | 50    | 100.0 |

| Day of Week | Before | %     | After | %     |
|-------------|--------|-------|-------|-------|
| Sunday      | 3      | 4.3   | 2     | 4.0   |
| Monday      | 8      | 11.6  | 8     | 16.0  |
| Tuesday     | 12     | 17.4  | 4     | 8.0   |
| Wednesday   | 9      | 13.0  | 8     | 16.0  |
| Thursday    | 13     | 18.8  | 7     | 14.0  |
| Friday      | 12     | 17.4  | 15    | 30.0  |
| Saturday    | 12     | 17.4  | 6     | 12.0  |
| Total       | 69     | 100.0 | 50    | 100.0 |

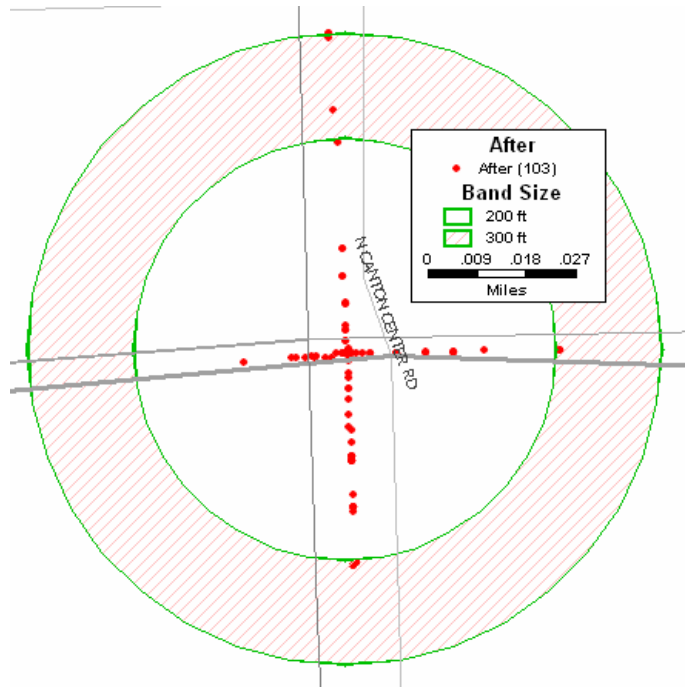
| Crash Type     | Before | %     | After | %     |
|----------------|--------|-------|-------|-------|
| Single vehicle | 4      | 5.8   | 1     | 2.0   |
| Head-on        | 9      | 13.0  | 9     | 18.0  |
| Angle          | 25     | 36.2  | 17    | 34.0  |
| Rear-end       | 22     | 31.9  | 18    | 36.0  |
| Sideswipe      | 3      | 4.3   | 4     | 8.0   |
| Other/unknown  | 6      | 8.7   | 1     | 2.0   |
| Total          | 69     | 100.0 | 50    | 100.0 |

**M153 (Ford Road) and Canton Center**

Date of Signal Optimization: May 1, 2004



1,217 days before



609 days after

| Injury Severity | Before | %     | After | %     |
|-----------------|--------|-------|-------|-------|
| Fatal           | 0      | 0.0   | 0     | 0.0   |
| A-Injury        | 1      | 0.7   | 0     | 0.0   |
| B-Injury        | 8      | 5.8   | 6     | 5.8   |
| C-Injury        | 20     | 14.6  | 19    | 18.4  |
| O-Injury        | 108    | 78.8  | 78    | 75.7  |
| Total           | 137    | 100.0 | 103   | 100.0 |

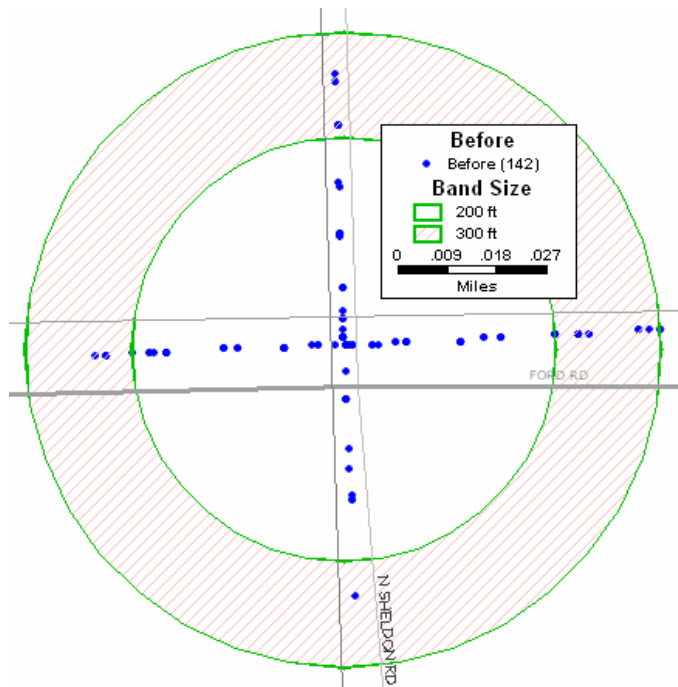
| Time of Day   | Before | %     | After | %     |
|---------------|--------|-------|-------|-------|
| 6am - 9:59am  | 21     | 15.3  | 20    | 19.4  |
| 10am - 3:59pm | 52     | 38.0  | 39    | 37.9  |
| 4pm - 7:59pm  | 43     | 31.4  | 27    | 26.2  |
| 8pm - 5:59am  | 12     | 8.8   | 17    | 16.5  |
| Unknown       | 9      | 6.6   | 0     | 0.0   |
| Total         | 137    | 100.0 | 103   | 100.0 |

| Day of Week | Before | %     | After | %     |
|-------------|--------|-------|-------|-------|
| Sunday      | 7      | 5.1   | 8     | 7.8   |
| Monday      | 22     | 16.1  | 9     | 8.7   |
| Tuesday     | 20     | 14.6  | 13    | 12.6  |
| Wednesday   | 17     | 12.4  | 25    | 24.3  |
| Thursday    | 25     | 18.2  | 21    | 20.4  |
| Friday      | 27     | 19.7  | 15    | 14.6  |
| Saturday    | 19     | 13.9  | 12    | 11.7  |
| Total       | 137    | 100.0 | 103   | 100.0 |

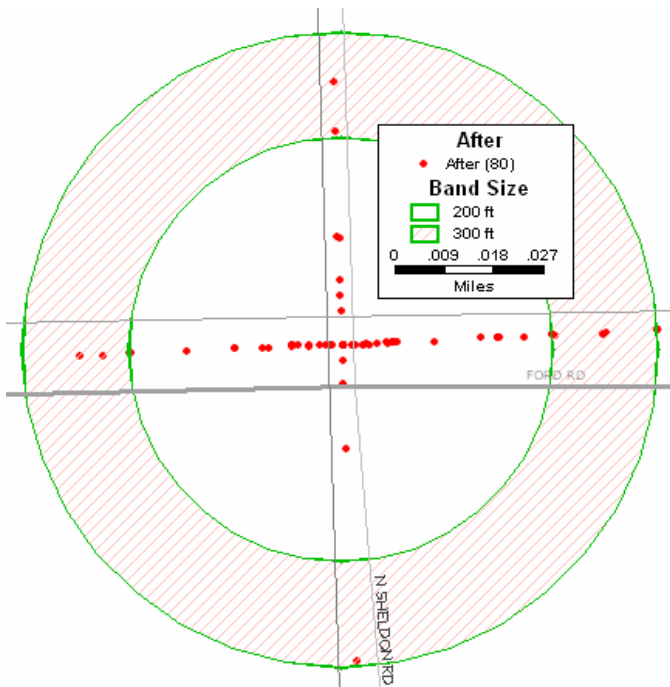
| Crash Type     | Before | %     | After | %     |
|----------------|--------|-------|-------|-------|
| Single vehicle | 7      | 5.1   | 4     | 3.9   |
| Head-on        | 12     | 8.8   | 6     | 5.8   |
| Angle          | 24     | 17.5  | 36    | 35.0  |
| Rear-end       | 62     | 45.3  | 41    | 39.8  |
| Sideswipe      | 26     | 19.0  | 16    | 15.5  |
| Other/unknown  | 6      | 4.4   | 0     | 0.0   |
| Total          | 137    | 100.0 | 103   | 100.0 |

### M153 (Ford Road) and Sheldon

Date of Signal Optimization: May 1, 2004



1,217 days before



609 days after

| Injury Severity | Before | %     | After | %     |
|-----------------|--------|-------|-------|-------|
| Fatal           | 0      | 0.0   | 0     | 0.0   |
| A-Injury        | 0      | 0.0   | 0     | 0.0   |
| B-Injury        | 2      | 1.4   | 4     | 5.0   |
| C-Injury        | 26     | 18.3  | 8     | 10.0  |
| O-Injury        | 114    | 80.3  | 68    | 85.0  |
| Total           | 142    | 100.0 | 80    | 100.0 |

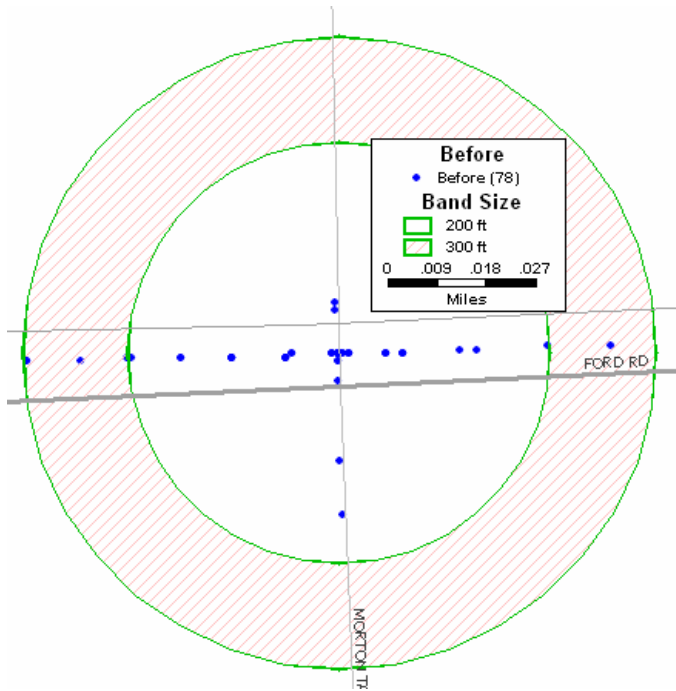
| Time of Day   | Before | %     | After | %     |
|---------------|--------|-------|-------|-------|
| 6am - 9:59am  | 9      | 6.3   | 8     | 10.0  |
| 10am - 3:59pm | 59     | 41.5  | 29    | 36.3  |
| 4pm - 7:59pm  | 52     | 36.6  | 32    | 40.0  |
| 8pm - 5:59am  | 9      | 6.3   | 10    | 12.5  |
| Unknown       | 13     | 9.2   | 1     | 1.3   |
| Total         | 142    | 100.0 | 80    | 100.0 |

| Day of Week | Before | %     | After | %     |
|-------------|--------|-------|-------|-------|
| Sunday      | 12     | 8.5   | 11    | 13.8  |
| Monday      | 25     | 17.6  | 7     | 8.8   |
| Tuesday     | 21     | 14.8  | 12    | 15.0  |
| Wednesday   | 21     | 14.8  | 8     | 10.0  |
| Thursday    | 17     | 12.0  | 12    | 15.0  |
| Friday      | 22     | 15.5  | 21    | 26.3  |
| Saturday    | 24     | 16.9  | 9     | 11.3  |
| Total       | 142    | 100.0 | 80    | 100.0 |

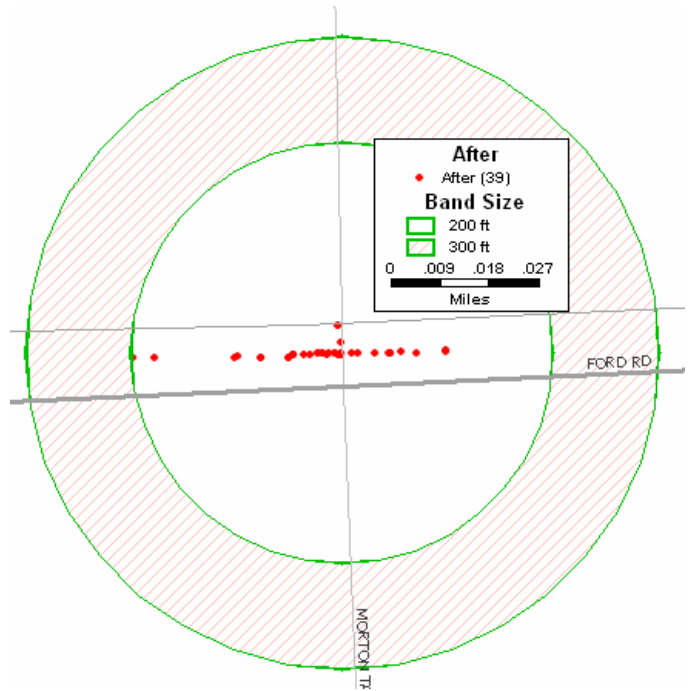
| Crash Type     | Before | %     | After | %     |
|----------------|--------|-------|-------|-------|
| Single vehicle | 1      | 0.7   | 3     | 3.8   |
| Head-on        | 15     | 10.6  | 6     | 7.5   |
| Angle          | 27     | 19.0  | 17    | 21.3  |
| Rear-end       | 73     | 51.4  | 41    | 51.3  |
| Sideswipe      | 17     | 12.0  | 8     | 10.0  |
| Other/unknown  | 9      | 6.3   | 5     | 6.3   |
| Total          | 142    | 100.0 | 80    | 100.0 |

**M153 (Ford Road) and Morton Taylor**

Date of Signal Optimization: May 1, 2004



1,217 days before



609 days after

| Injury Severity | Before | %     | After | %     |
|-----------------|--------|-------|-------|-------|
| Fatal           | 1      | 1.3   | 0     | 0.0   |
| A-Injury        | 3      | 3.8   | 1     | 2.6   |
| B-Injury        | 4      | 5.1   | 3     | 7.7   |
| C-Injury        | 21     | 26.9  | 7     | 17.9  |
| O-Injury        | 49     | 62.8  | 28    | 71.8  |
| Total           | 78     | 100.0 | 39    | 100.0 |

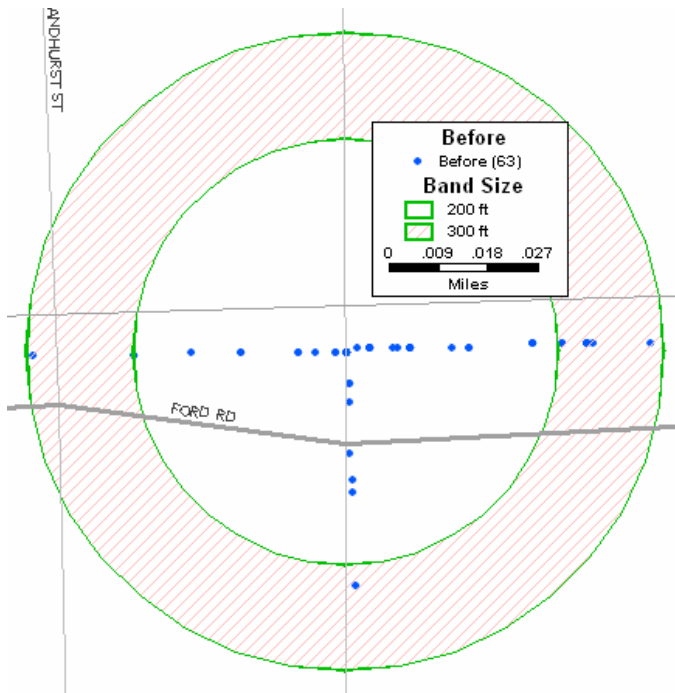
| Time of Day   | Before | %     | After | %     |
|---------------|--------|-------|-------|-------|
| 6am - 9:59am  | 5      | 6.4   | 6     | 15.4  |
| 10am - 3:59pm | 27     | 34.6  | 12    | 30.8  |
| 4pm - 7:59pm  | 26     | 33.3  | 13    | 33.3  |
| 8pm - 5:59am  | 10     | 12.8  | 8     | 20.5  |
| Unknown       | 10     | 12.8  | 0     | 0.0   |
| Total         | 78     | 100.0 | 39    | 100.0 |

| Day of Week | Before | %     | After | %     |
|-------------|--------|-------|-------|-------|
| Sunday      | 10     | 12.8  | 4     | 10.3  |
| Monday      | 12     | 15.4  | 7     | 17.9  |
| Tuesday     | 11     | 14.1  | 4     | 10.3  |
| Wednesday   | 13     | 16.7  | 3     | 7.7   |
| Thursday    | 10     | 12.8  | 3     | 7.7   |
| Friday      | 14     | 17.9  | 8     | 20.5  |
| Saturday    | 8      | 10.3  | 10    | 25.6  |
| Total       | 78     | 100.0 | 39    | 100.0 |

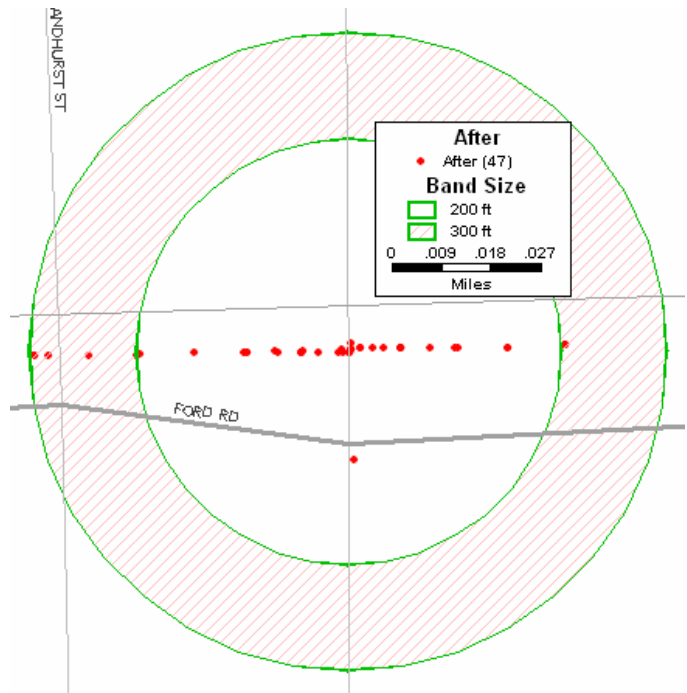
| Crash Type     | Before | %     | After | %     |
|----------------|--------|-------|-------|-------|
| Single vehicle | 4      | 5.1   | 4     | 10.3  |
| Head-on        | 9      | 11.5  | 7     | 17.9  |
| Angle          | 22     | 28.2  | 8     | 20.5  |
| Rear-end       | 30     | 38.5  | 16    | 41.0  |
| Sideswipe      | 5      | 6.4   | 1     | 2.6   |
| Other/unknown  | 8      | 10.3  | 3     | 7.7   |
| Total          | 78     | 100.0 | 39    | 100.0 |

**M153 (Ford Road) and Lotz**

Date of Signal Optimization: May 1, 2004



1,217 days before



609 days after

| Injury Severity | Before | %     | After | %     |
|-----------------|--------|-------|-------|-------|
| Fatal           | 0      | 0.0   | 0     | 0.0   |
| A-Injury        | 0      | 0.0   | 1     | 2.1   |
| B-Injury        | 4      | 6.3   | 2     | 4.3   |
| C-Injury        | 7      | 11.1  | 11    | 23.4  |
| O-Injury        | 52     | 82.5  | 33    | 70.2  |
| Total           | 63     | 100.0 | 47    | 100.0 |

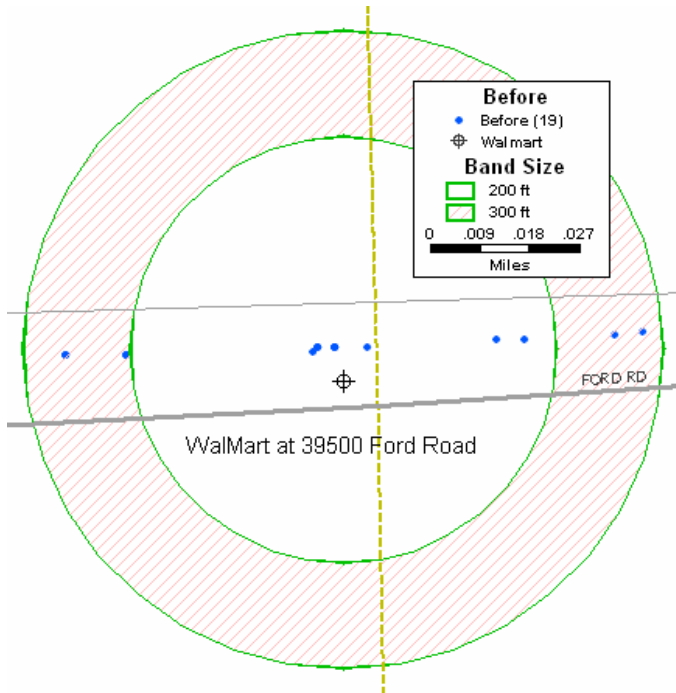
| Time of Day   | Before | %     | After | %     |
|---------------|--------|-------|-------|-------|
| 6am - 9:59am  | 6      | 9.5   | 4     | 8.5   |
| 10am - 3:59pm | 24     | 38.1  | 19    | 40.4  |
| 4pm - 7:59pm  | 19     | 30.2  | 12    | 25.5  |
| 8pm - 5:59am  | 8      | 12.7  | 12    | 25.5  |
| Unknown       | 6      | 9.5   | 0     | 0.0   |
| Total         | 63     | 100.0 | 47    | 100.0 |

| Day of Week | Before | %     | After | %     |
|-------------|--------|-------|-------|-------|
| Sunday      | 8      | 12.7  | 5     | 10.6  |
| Monday      | 9      | 14.3  | 2     | 4.3   |
| Tuesday     | 5      | 7.9   | 11    | 23.4  |
| Wednesday   | 12     | 19.0  | 7     | 14.9  |
| Thursday    | 9      | 14.3  | 4     | 8.5   |
| Friday      | 10     | 15.9  | 13    | 27.7  |
| Saturday    | 10     | 15.9  | 5     | 10.6  |
| Total       | 63     | 100.0 | 47    | 100.0 |

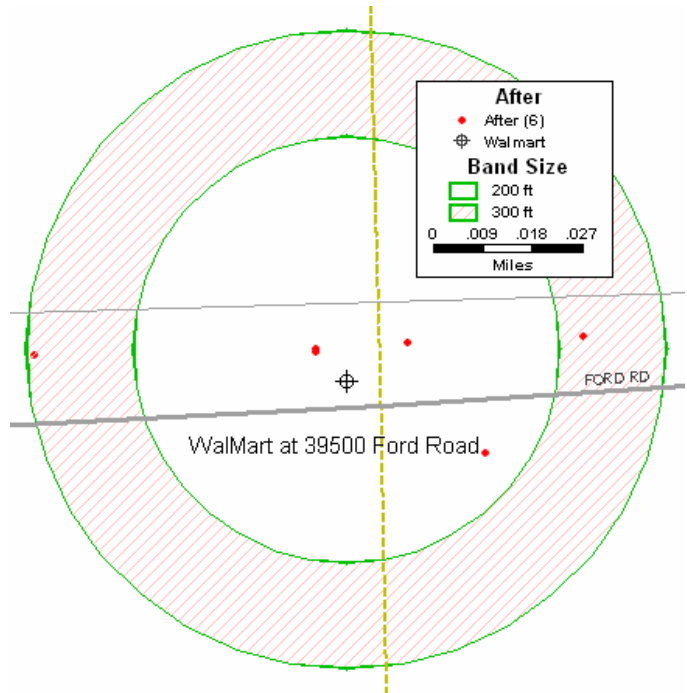
| Crash Type     | Before | %     | After | %     |
|----------------|--------|-------|-------|-------|
| Single vehicle | 3      | 4.8   | 5     | 10.6  |
| Head-on        | 3      | 4.8   | 6     | 12.8  |
| Angle          | 12     | 19.0  | 5     | 10.6  |
| Rear-end       | 40     | 63.5  | 28    | 59.6  |
| Sideswipe      | 3      | 4.8   | 1     | 2.1   |
| Other/unknown  | 2      | 3.2   | 2     | 4.3   |
| Total          | 63     | 100.0 | 47    | 100.0 |

**M153 (Ford Road) and Walmart/Home Depot**

Date of Signal Optimization: May 1, 2004



1,217 days before



609 days after

| Injury Severity | Before | %     | After | %     |
|-----------------|--------|-------|-------|-------|
| Fatal           | 0      | 0.0   | 0     | 0.0   |
| A-Injury        | 0      | 0.0   | 0     | 0.0   |
| B-Injury        | 0      | 0.0   | 0     | 0.0   |
| C-Injury        | 7      | 36.8  | 1     | 16.7  |
| O-Injury        | 12     | 63.2  | 5     | 83.3  |
| Total           | 19     | 100.0 | 6     | 100.0 |

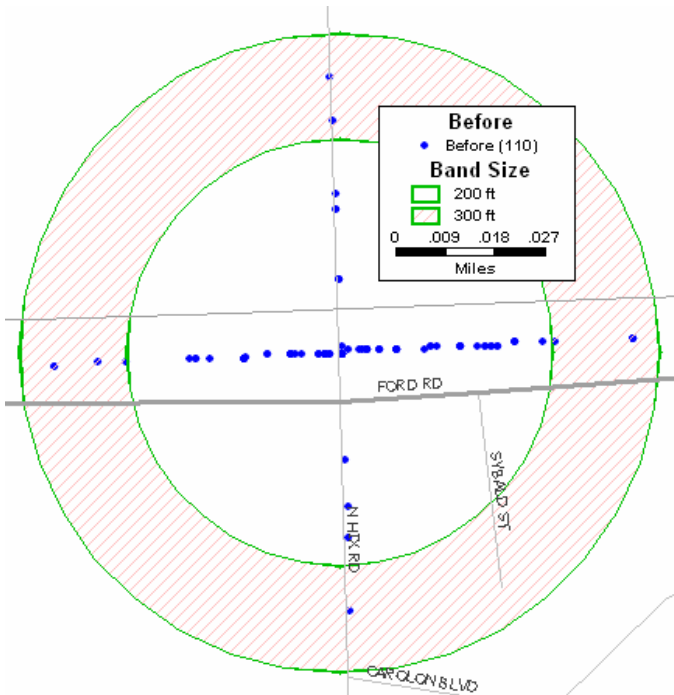
| Time of Day   | Before | %     | After | %     |
|---------------|--------|-------|-------|-------|
| 6am - 9:59am  | 0      | 0.0   | 1     | 16.7  |
| 10am - 3:59pm | 10     | 52.6  | 3     | 50.0  |
| 4pm - 7:59pm  | 8      | 42.1  | 1     | 16.7  |
| 8pm - 5:59am  | 1      | 5.3   | 1     | 16.7  |
| Unknown       | 0      | 0.0   | 0     | 0.0   |
| Total         | 19     | 100.0 | 6     | 100.0 |

| Day of Week | Before | %     | After | %     |
|-------------|--------|-------|-------|-------|
| Sunday      | 4      | 21.1  | 1     | 16.7  |
| Monday      | 1      | 5.3   | 0     | 0.0   |
| Tuesday     | 5      | 26.3  | 3     | 50.0  |
| Wednesday   | 0      | 0.0   | 0     | 0.0   |
| Thursday    | 2      | 10.5  | 1     | 16.7  |
| Friday      | 3      | 15.8  | 0     | 0.0   |
| Saturday    | 4      | 21.1  | 1     | 16.7  |
| Total       | 19     | 100.0 | 6     | 100.0 |

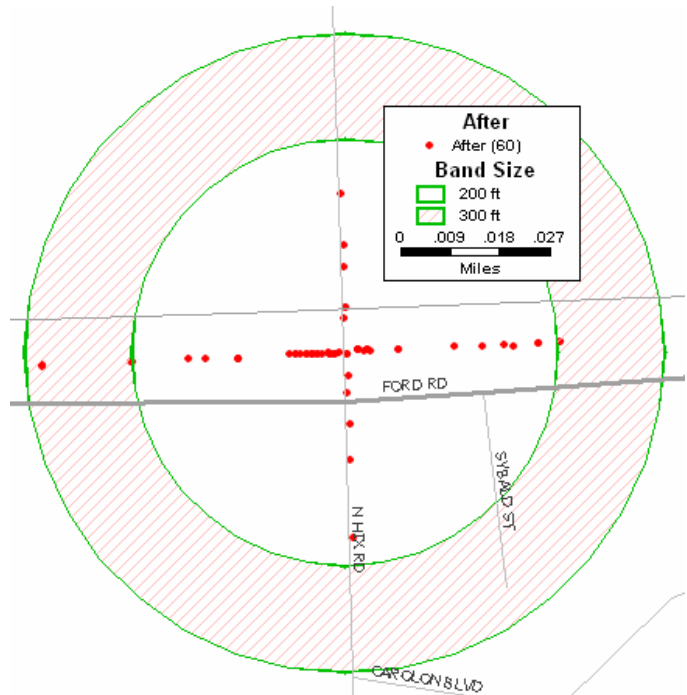
| Crash Type     | Before | %     | After | %     |
|----------------|--------|-------|-------|-------|
| Single vehicle | 0      | 0.0   | 1     | 16.7  |
| Head-on        | 0      | 0.0   | 0     | 0.0   |
| Angle          | 5      | 26.3  | 1     | 16.7  |
| Rear-end       | 12     | 63.2  | 3     | 50.0  |
| Sideswipe      | 2      | 10.5  | 0     | 0.0   |
| Other/unknown  | 0      | 0.0   | 1     | 16.7  |
| Total          | 19     | 100.0 | 6     | 100.0 |

### M153 (Ford Road) and Hix

Date of Signal Optimization: May 1, 2004



1,217 days before



609 days after

| Injury Severity | Before | %     | After | %     |
|-----------------|--------|-------|-------|-------|
| Fatal           | 0      | 0.0   | 0     | 0.0   |
| A-Injury        | 6      | 5.5   | 1     | 1.7   |
| B-Injury        | 6      | 5.5   | 3     | 5.0   |
| C-Injury        | 15     | 13.6  | 12    | 20.0  |
| O-Injury        | 83     | 75.5  | 44    | 73.3  |
| Total           | 110    | 100.0 | 60    | 100.0 |

| Time of Day   | Before | %     | After | %     |
|---------------|--------|-------|-------|-------|
| 6am - 9:59am  | 11     | 10.0  | 8     | 13.3  |
| 10am - 3:59pm | 55     | 50.0  | 25    | 41.7  |
| 4pm - 7:59pm  | 30     | 27.3  | 23    | 38.3  |
| 8pm - 5:59am  | 8      | 7.3   | 4     | 6.7   |
| Unknown       | 6      | 5.5   | 0     | 0.0   |
| Total         | 110    | 100.0 | 60    | 100.0 |

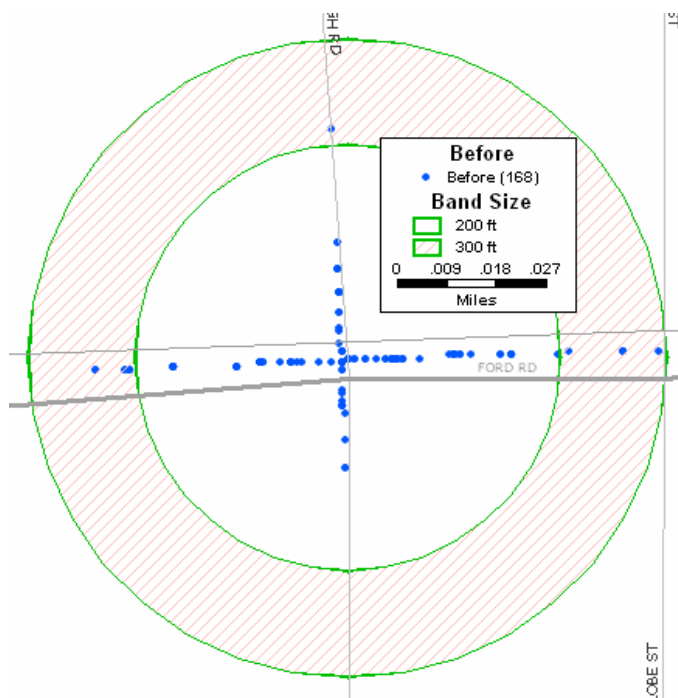
| Day of Week | Before | %     | After | %     |
|-------------|--------|-------|-------|-------|
| Sunday      | 9      | 8.2   | 6     | 10.0  |
| Monday      | 10     | 9.1   | 13    | 21.7  |
| Tuesday     | 15     | 13.6  | 7     | 11.7  |
| Wednesday   | 13     | 11.8  | 10    | 16.7  |
| Thursday    | 14     | 12.7  | 7     | 11.7  |
| Friday      | 29     | 26.4  | 9     | 15.0  |
| Saturday    | 20     | 18.2  | 8     | 13.3  |
| Total       | 110    | 100.0 | 60    | 100.0 |

| Crash Type     | Before | %     | After | %     |
|----------------|--------|-------|-------|-------|
| Single vehicle | 5      | 4.5   | 1     | 1.7   |
| Head-on        | 39     | 35.5  | 18    | 30.0  |
| Angle          | 19     | 17.3  | 12    | 20.0  |
| Rear-end       | 38     | 34.5  | 19    | 31.7  |
| Sideswipe      | 8      | 7.3   | 7     | 11.7  |
| Other/unknown  | 1      | 0.9   | 3     | 5.0   |
| Total          | 110    | 100.0 | 60    | 100.0 |

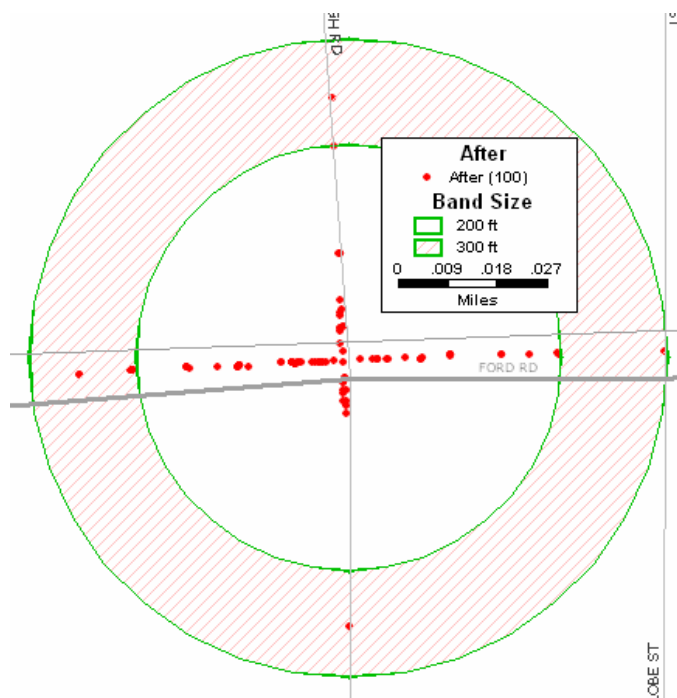


### M153 (Ford Road) and Newburgh

Date of Signal Optimization: May 1, 2004



1,217 days before



609 days after

| Injury Severity | Before | %     | After | %     |
|-----------------|--------|-------|-------|-------|
| Fatal           | 0      | 0.0   | 0     | 0.0   |
| A-Injury        | 1      | 0.6   | 2     | 2.0   |
| B-Injury        | 4      | 2.4   | 0     | 0.0   |
| C-Injury        | 26     | 15.5  | 17    | 17.0  |
| O-Injury        | 137    | 81.5  | 81    | 81.0  |
| Total           | 168    | 100.0 | 100   | 100.0 |

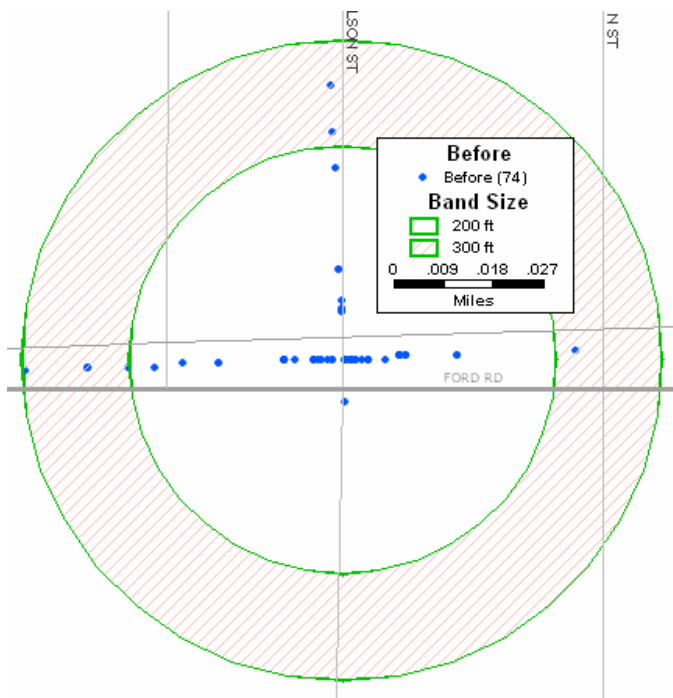
| Time of Day   | Before | %     | After | %     |
|---------------|--------|-------|-------|-------|
| 6am - 9:59am  | 19     | 11.3  | 15    | 15.0  |
| 10am - 3:59pm | 61     | 36.3  | 48    | 48.0  |
| 4pm - 7:59pm  | 53     | 31.5  | 29    | 29.0  |
| 8pm - 5:59am  | 29     | 17.3  | 8     | 8.0   |
| Unknown       | 6      | 3.6   | 0     | 0.0   |
| Total         | 168    | 100.0 | 100   | 100.0 |

| Day of Week | Before | %     | After | %     |
|-------------|--------|-------|-------|-------|
| Sunday      | 18     | 10.7  | 8     | 8.0   |
| Monday      | 24     | 14.3  | 14    | 14.0  |
| Tuesday     | 23     | 13.7  | 14    | 14.0  |
| Wednesday   | 25     | 14.9  | 19    | 19.0  |
| Thursday    | 25     | 14.9  | 13    | 13.0  |
| Friday      | 35     | 20.8  | 16    | 16.0  |
| Saturday    | 18     | 10.7  | 16    | 16.0  |
| Total       | 168    | 100.0 | 100   | 100.0 |

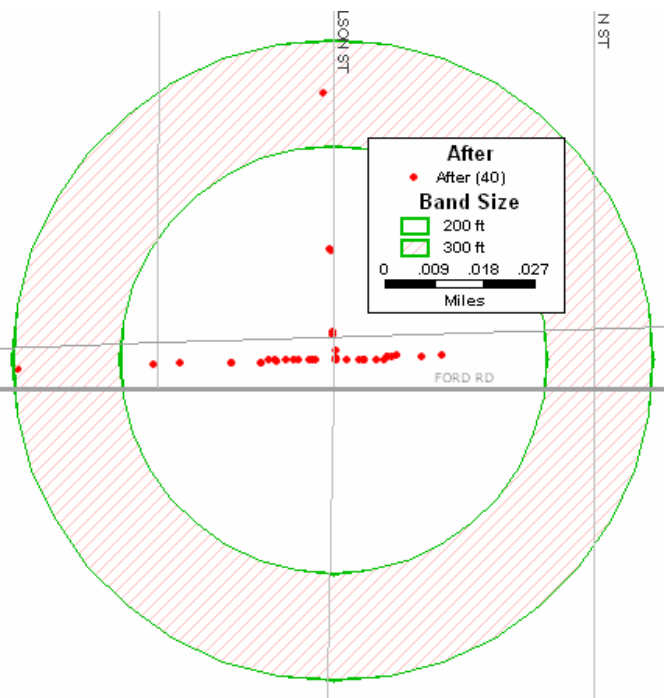
| Crash Type     | Before | %     | After | %     |
|----------------|--------|-------|-------|-------|
| Single vehicle | 3      | 1.8   | 2     | 2.0   |
| Head-on        | 22     | 13.1  | 8     | 8.0   |
| Angle          | 26     | 15.5  | 14    | 14.0  |
| Rear-end       | 96     | 57.1  | 57    | 57.0  |
| Sideswipe      | 18     | 10.7  | 16    | 16.0  |
| Other/unknown  | 3      | 1.8   | 3     | 3.0   |
| Total          | 168    | 100.0 | 100   | 100.0 |

**M153 (Ford Road) and Carlson/Central City**

Date of Signal Optimization: May 1, 2004



1,217 days before



609 days after

| Injury Severity | Before | %     | After | %     |
|-----------------|--------|-------|-------|-------|
| Fatal           | 0      | 0.0   | 0     | 0.0   |
| A-Injury        | 3      | 4.1   | 1     | 2.5   |
| B-Injury        | 4      | 5.4   | 3     | 7.5   |
| C-Injury        | 10     | 13.5  | 7     | 17.5  |
| O-Injury        | 57     | 77.0  | 29    | 72.5  |
| Total           | 74     | 100.0 | 40    | 100.0 |

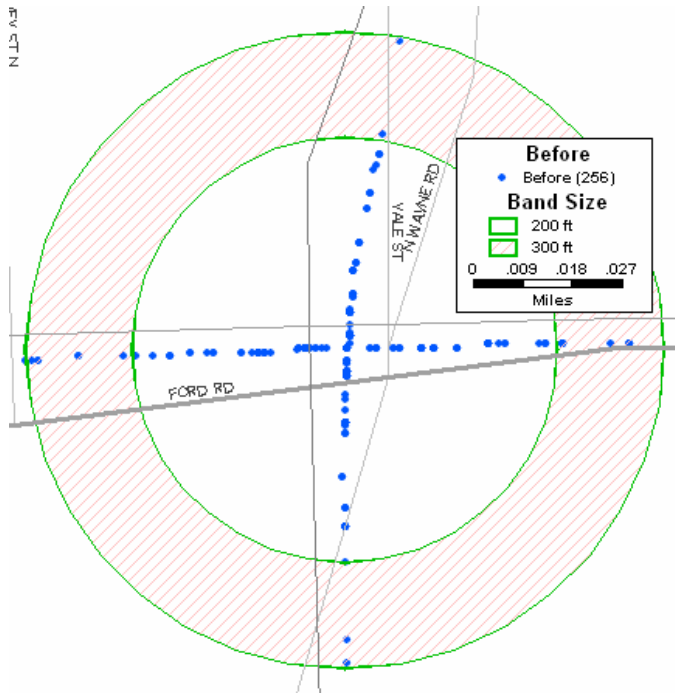
| Time of Day   | Before | %     | After | %     |
|---------------|--------|-------|-------|-------|
| 6am - 9:59am  | 2      | 2.7   | 3     | 7.5   |
| 10am - 3:59pm | 39     | 52.7  | 20    | 50.0  |
| 4pm - 7:59pm  | 21     | 28.4  | 13    | 32.5  |
| 8pm - 5:59am  | 7      | 9.5   | 4     | 10.0  |
| Unknown       | 5      | 6.8   | 0     | 0.0   |
| Total         | 74     | 100.0 | 40    | 100.0 |

| Day of Week | Before | %     | After | %     |
|-------------|--------|-------|-------|-------|
| Sunday      | 12     | 16.2  | 3     | 7.5   |
| Monday      | 10     | 13.5  | 5     | 12.5  |
| Tuesday     | 12     | 16.2  | 4     | 10.0  |
| Wednesday   | 11     | 14.9  | 7     | 17.5  |
| Thursday    | 9      | 12.2  | 6     | 15.0  |
| Friday      | 8      | 10.8  | 10    | 25.0  |
| Saturday    | 12     | 16.2  | 5     | 12.5  |
| Total       | 74     | 100.0 | 40    | 100.0 |

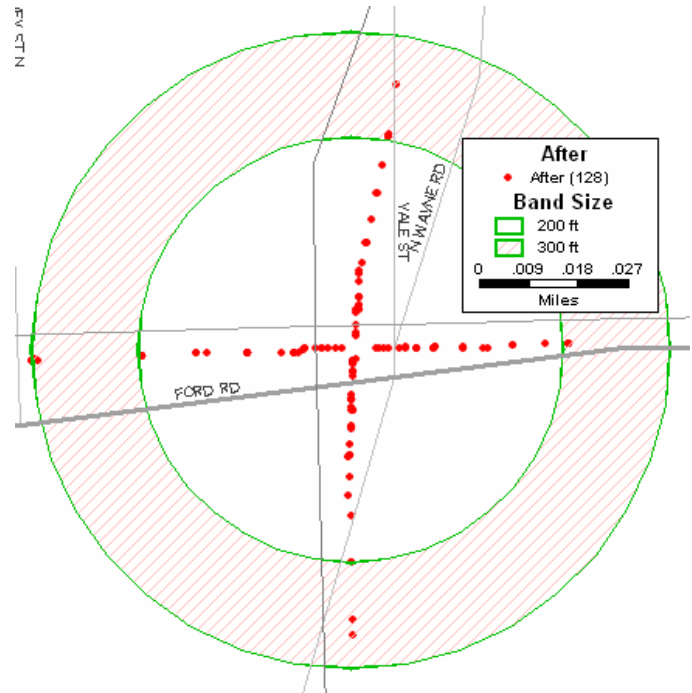
| Crash Type     | Before | %     | After | %     |
|----------------|--------|-------|-------|-------|
| Single vehicle | 4      | 5.4   | 1     | 2.5   |
| Head-on        | 23     | 31.1  | 5     | 12.5  |
| Angle          | 8      | 10.8  | 5     | 12.5  |
| Rear-end       | 36     | 48.6  | 23    | 57.5  |
| Sideswipe      | 3      | 4.1   | 5     | 12.5  |
| Other/unknown  | 0      | 0.0   | 1     | 2.5   |
| Total          | 74     | 100.0 | 40    | 100.0 |

### M153 (Ford Road) and Wayne

Date of Signal Optimization: May 1, 2004



1,217 days before



609 days after

| Injury Severity | Before | %     | After | %     |
|-----------------|--------|-------|-------|-------|
| Fatal           | 0      | 0.0   | 0     | 0.0   |
| A-Injury        | 5      | 2.0   | 1     | 0.8   |
| B-Injury        | 11     | 4.3   | 5     | 3.9   |
| C-Injury        | 40     | 15.6  | 19    | 14.8  |
| O-Injury        | 200    | 78.1  | 103   | 80.5  |
| Total           | 256    | 100.0 | 128   | 100.0 |

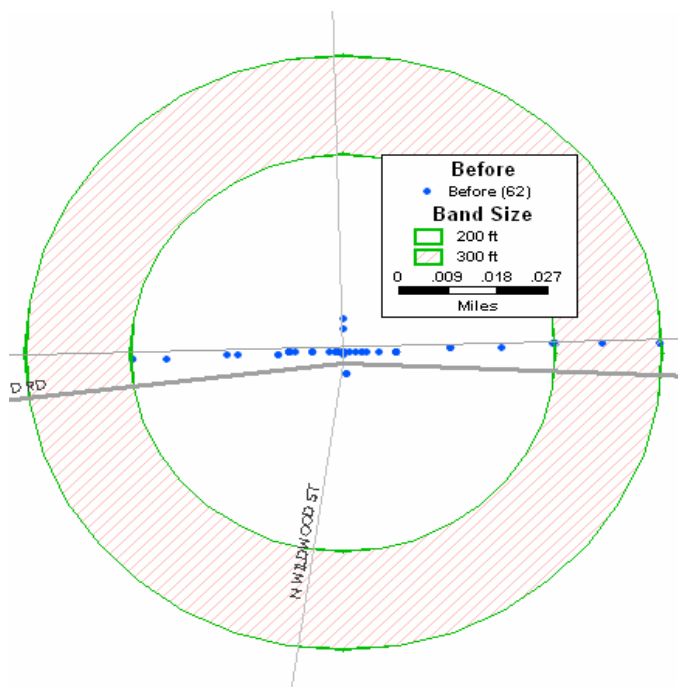
| Time of Day   | Before | %     | After | %     |
|---------------|--------|-------|-------|-------|
| 6am - 9:59am  | 31     | 12.1  | 18    | 14.1  |
| 10am - 3:59pm | 113    | 44.1  | 55    | 43.0  |
| 4pm - 7:59pm  | 68     | 26.6  | 38    | 29.7  |
| 8pm - 5:59am  | 35     | 13.7  | 17    | 13.3  |
| Unknown       | 9      | 3.5   | 0     | 0.0   |
| Total         | 256    | 100.0 | 128   | 100.0 |

| Day of Week | Before | %     | After | %     |
|-------------|--------|-------|-------|-------|
| Sunday      | 18     | 7.0   | 5     | 3.9   |
| Monday      | 30     | 11.7  | 20    | 15.6  |
| Tuesday     | 52     | 20.3  | 19    | 14.8  |
| Wednesday   | 34     | 13.3  | 18    | 14.1  |
| Thursday    | 32     | 12.5  | 19    | 14.8  |
| Friday      | 50     | 19.5  | 32    | 25.0  |
| Saturday    | 40     | 15.6  | 15    | 11.7  |
| Total       | 256    | 100.0 | 128   | 100.0 |

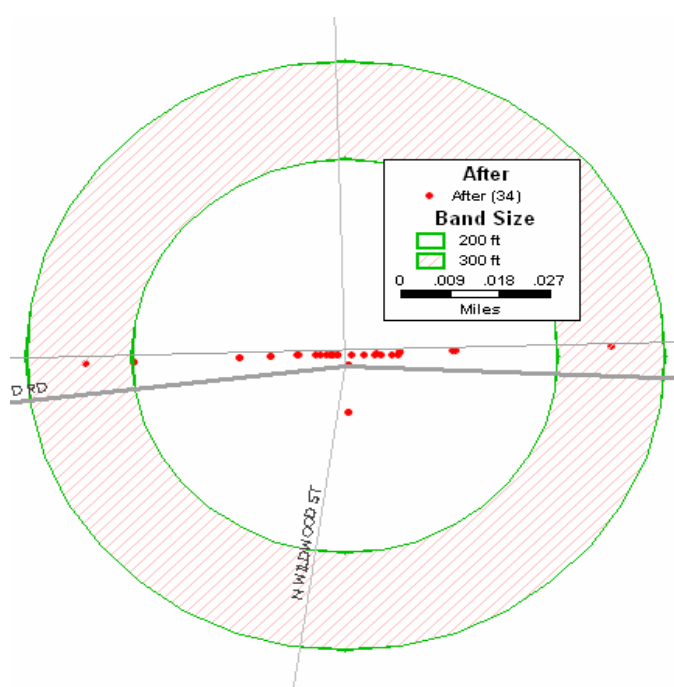
| Crash Type     | Before | %     | After | %     |
|----------------|--------|-------|-------|-------|
| Single vehicle | 6      | 2.3   | 4     | 3.1   |
| Head-on        | 40     | 15.6  | 16    | 12.5  |
| Angle          | 63     | 24.6  | 30    | 23.4  |
| Rear-end       | 114    | 44.5  | 59    | 46.1  |
| Sideswipe      | 32     | 12.5  | 17    | 13.3  |
| Other/unknown  | 1      | 0.4   | 2     | 1.6   |
| Total          | 256    | 100.0 | 128   | 100.0 |

### M153 (Ford Road) and Wildwood

Date of Signal Optimization: May 1, 2004



1,217 days before



609 days after

| Injury Severity | Before | %     | After | %     |
|-----------------|--------|-------|-------|-------|
| Fatal           | 0      | 0.0   | 0     | 0.0   |
| A-Injury        | 1      | 1.6   | 0     | 0.0   |
| B-Injury        | 5      | 8.1   | 0     | 0.0   |
| C-Injury        | 8      | 12.9  | 5     | 14.7  |
| O-Injury        | 48     | 77.4  | 29    | 85.3  |
| Total           | 62     | 100.0 | 34    | 100.0 |

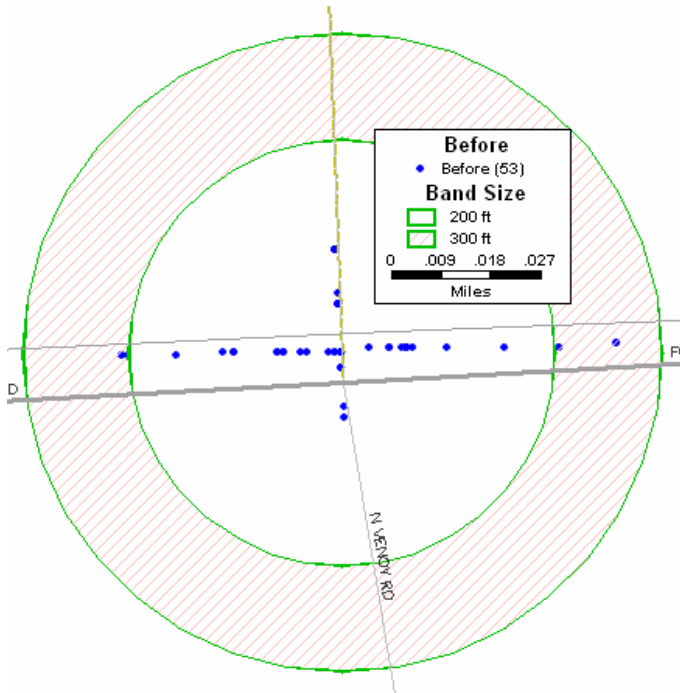
| Time of Day   | Before | %     | After | %     |
|---------------|--------|-------|-------|-------|
| 6am - 9:59am  | 4      | 6.5   | 2     | 5.9   |
| 10am - 3:59pm | 23     | 37.1  | 17    | 50.0  |
| 4pm - 7:59pm  | 17     | 27.4  | 8     | 23.5  |
| 8pm - 5:59am  | 15     | 24.2  | 7     | 20.6  |
| Unknown       | 3      | 4.8   | 0     | 0.0   |
| Total         | 62     | 100.0 | 34    | 100.0 |

| Day of Week | Before | %     | After | %     |
|-------------|--------|-------|-------|-------|
| Sunday      | 6      | 9.7   | 2     | 5.9   |
| Monday      | 12     | 19.4  | 4     | 11.8  |
| Tuesday     | 10     | 16.1  | 3     | 8.8   |
| Wednesday   | 6      | 9.7   | 13    | 38.2  |
| Thursday    | 14     | 22.6  | 1     | 2.9   |
| Friday      | 10     | 16.1  | 4     | 11.8  |
| Saturday    | 4      | 6.5   | 7     | 20.6  |
| Total       | 62     | 100.0 | 34    | 100.0 |

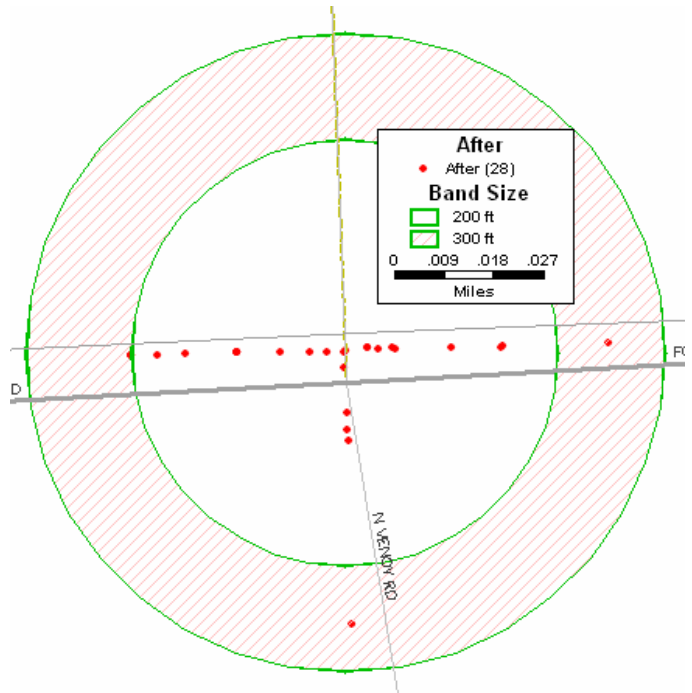
| Crash Type     | Before | %     | After | %     |
|----------------|--------|-------|-------|-------|
| Single vehicle | 1      | 1.6   | 1     | 2.9   |
| Head-on        | 13     | 21.0  | 7     | 20.6  |
| Angle          | 12     | 19.4  | 3     | 8.8   |
| Rear-end       | 31     | 50.0  | 19    | 55.9  |
| Sideswipe      | 5      | 8.1   | 4     | 11.8  |
| Other/unknown  | 0      | 0.0   | 0     | 0.0   |
| Total          | 62     | 100.0 | 34    | 100.0 |

### M153 (Ford Road) and Venoy

Date of Signal Optimization: May 1, 2004



1,217 days before



609 days after

| Injury Severity | Before | %     | After | %     |
|-----------------|--------|-------|-------|-------|
| Fatal           | 0      | 0.0   | 0     | 0.0   |
| A-Injury        | 1      | 1.9   | 0     | 0.0   |
| B-Injury        | 3      | 5.7   | 1     | 3.6   |
| C-Injury        | 10     | 18.9  | 6     | 21.4  |
| O-Injury        | 39     | 73.6  | 21    | 75.0  |
| Total           | 53     | 100.0 | 28    | 100.0 |

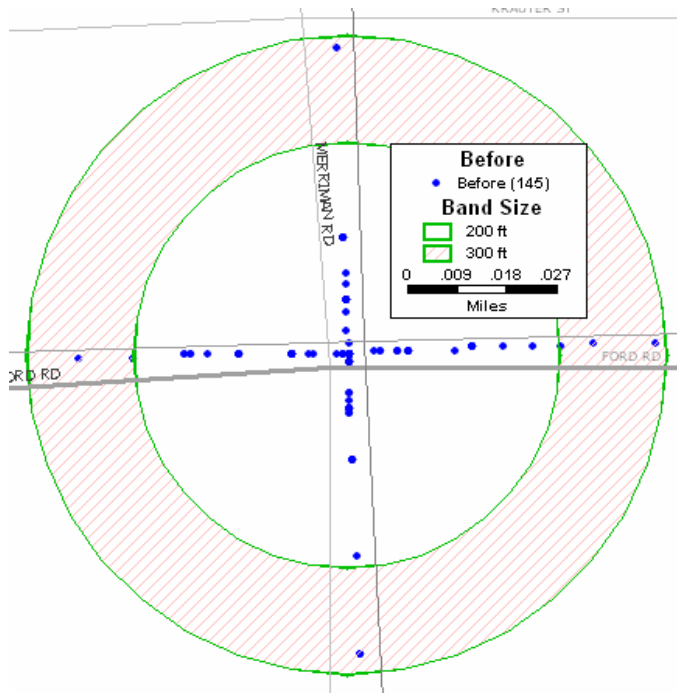
| Time of Day   | Before | %     | After | %     |
|---------------|--------|-------|-------|-------|
| 6am - 9:59am  | 12     | 22.6  | 1     | 3.6   |
| 10am - 3:59pm | 15     | 28.3  | 11    | 39.3  |
| 4pm - 7:59pm  | 19     | 35.8  | 12    | 42.9  |
| 8pm - 5:59am  | 6      | 11.3  | 4     | 14.3  |
| Unknown       | 1      | 1.9   | 0     | 0.0   |
| Total         | 53     | 100.0 | 28    | 100.0 |

| Day of Week | Before | %     | After | %     |
|-------------|--------|-------|-------|-------|
| Sunday      | 6      | 11.3  | 0     | 0.0   |
| Monday      | 9      | 17.0  | 4     | 14.3  |
| Tuesday     | 6      | 11.3  | 4     | 14.3  |
| Wednesday   | 11     | 20.8  | 4     | 14.3  |
| Thursday    | 6      | 11.3  | 2     | 7.1   |
| Friday      | 7      | 13.2  | 9     | 32.1  |
| Saturday    | 8      | 15.1  | 5     | 17.9  |
| Total       | 53     | 100.0 | 28    | 100.0 |

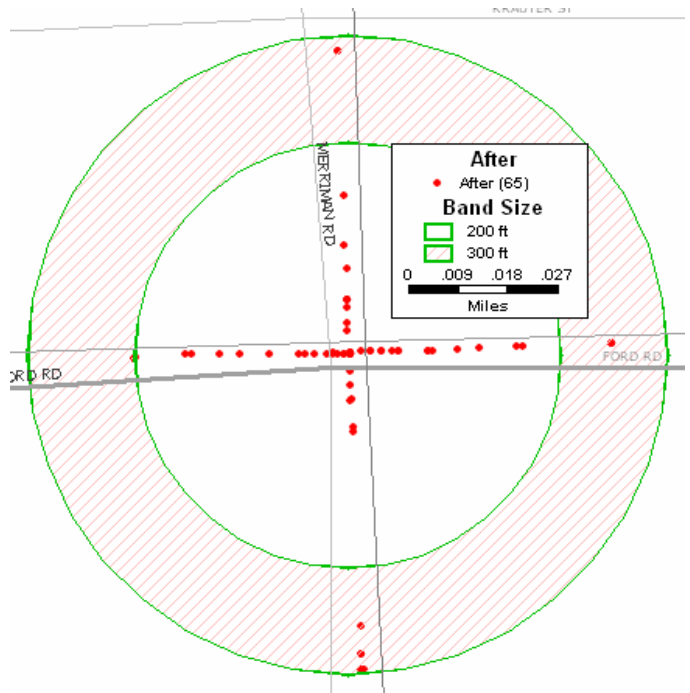
| Crash Type     | Before | %     | After | %     |
|----------------|--------|-------|-------|-------|
| Single vehicle | 0      | 0.0   | 0     | 0.0   |
| Head-on        | 7      | 13.2  | 2     | 7.1   |
| Angle          | 10     | 18.9  | 6     | 21.4  |
| Rear-end       | 32     | 60.4  | 15    | 53.6  |
| Sideswipe      | 4      | 7.5   | 5     | 17.9  |
| Other/unknown  | 0      | 0.0   | 0     | 0.0   |
| Total          | 53     | 100.0 | 28    | 100.0 |

### M153 (Ford Road) and Merriman

Date of Signal Optimization: May 1, 2004



1,217 days before



609 days after

| Injury Severity | Before | %     | After | %     |
|-----------------|--------|-------|-------|-------|
| Fatal           | 0      | 0.0   | 0     | 0.0   |
| A-Injury        | 3      | 2.1   | 1     | 1.5   |
| B-Injury        | 5      | 3.4   | 3     | 4.6   |
| C-Injury        | 24     | 16.6  | 11    | 16.9  |
| O-Injury        | 113    | 77.9  | 50    | 76.9  |
| Total           | 145    | 100.0 | 65    | 100.0 |

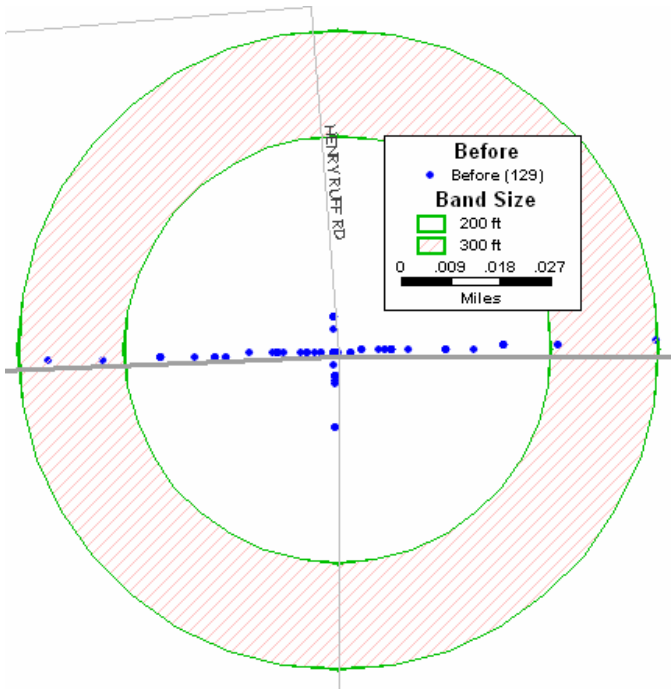
| Time of Day   | Before | %     | After | %     |
|---------------|--------|-------|-------|-------|
| 6am - 9:59am  | 22     | 15.2  | 7     | 10.8  |
| 10am - 3:59pm | 53     | 36.6  | 28    | 43.1  |
| 4pm - 7:59pm  | 39     | 26.9  | 18    | 27.7  |
| 8pm - 5:59am  | 25     | 17.2  | 12    | 18.5  |
| Unknown       | 6      | 4.1   | 0     | 0.0   |
| Total         | 145    | 100.0 | 65    | 100.0 |

| Day of Week | Before | %     | After | %     |
|-------------|--------|-------|-------|-------|
| Sunday      | 7      | 4.8   | 8     | 12.3  |
| Monday      | 18     | 12.4  | 7     | 10.8  |
| Tuesday     | 27     | 18.6  | 10    | 15.4  |
| Wednesday   | 26     | 17.9  | 14    | 21.5  |
| Thursday    | 18     | 12.4  | 9     | 13.8  |
| Friday      | 27     | 18.6  | 10    | 15.4  |
| Saturday    | 22     | 15.2  | 7     | 10.8  |
| Total       | 145    | 100.0 | 65    | 100.0 |

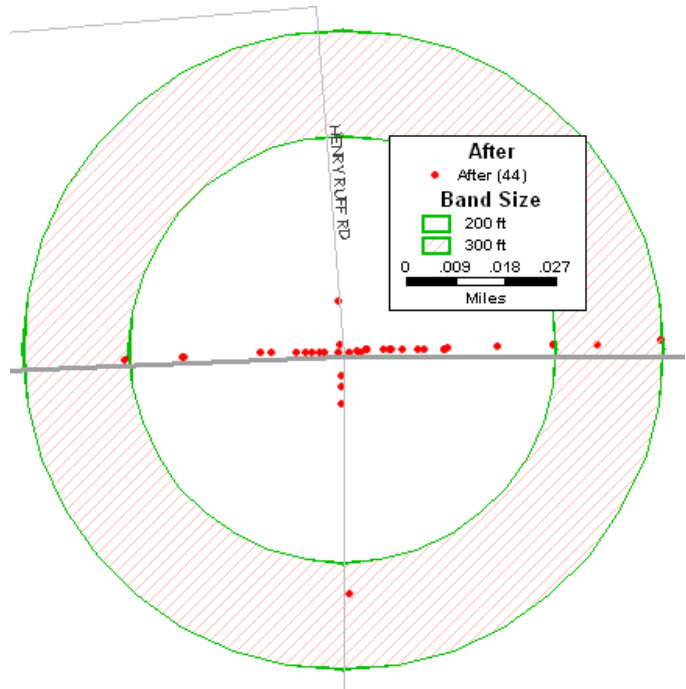
| Crash Type     | Before | %     | After | %     |
|----------------|--------|-------|-------|-------|
| Single vehicle | 4      | 2.8   | 0     | 0.0   |
| Head-on        | 14     | 9.7   | 6     | 9.2   |
| Angle          | 29     | 20.0  | 11    | 16.9  |
| Rear-end       | 82     | 56.6  | 41    | 63.1  |
| Sideswipe      | 14     | 9.7   | 6     | 9.2   |
| Other/unknown  | 2      | 1.4   | 1     | 1.5   |
| Total          | 145    | 100.0 | 65    | 100.0 |

**M153 (Ford Road) and Henry**

Date of Signal Optimization: May 1, 2004



1,217 days before



609 days after

| Injury Severity | Before | %     | After | %     |
|-----------------|--------|-------|-------|-------|
| Fatal           | 0      | 0.0   | 0     | 0.0   |
| A-Injury        | 2      | 1.6   | 1     | 2.3   |
| B-Injury        | 5      | 3.9   | 2     | 4.5   |
| C-Injury        | 26     | 20.2  | 4     | 9.1   |
| O-Injury        | 96     | 74.4  | 37    | 84.1  |
| Total           | 129    | 100.0 | 44    | 100.0 |

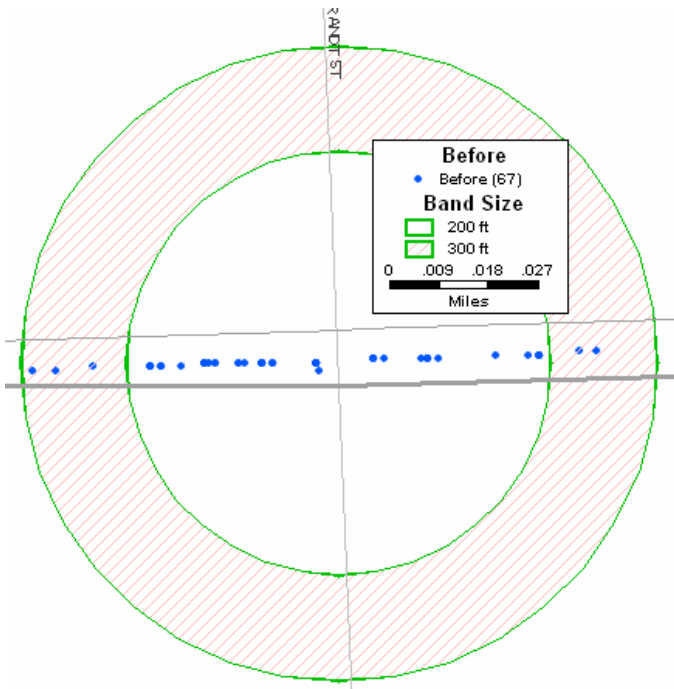
| Time of Day   | Before | %     | After | %     |
|---------------|--------|-------|-------|-------|
| 6am - 9:59am  | 10     | 7.8   | 5     | 11.4  |
| 10am - 3:59pm | 59     | 45.7  | 18    | 40.9  |
| 4pm - 7:59pm  | 33     | 25.6  | 9     | 20.5  |
| 8pm - 5:59am  | 25     | 19.4  | 12    | 27.3  |
| Unknown       | 2      | 1.6   | 0     | 0.0   |
| Total         | 129    | 100.0 | 44    | 100.0 |

| Day of Week | Before | %     | After | %     |
|-------------|--------|-------|-------|-------|
| Sunday      | 13     | 10.1  | 2     | 4.5   |
| Monday      | 21     | 16.3  | 9     | 20.5  |
| Tuesday     | 21     | 16.3  | 6     | 13.6  |
| Wednesday   | 16     | 12.4  | 5     | 11.4  |
| Thursday    | 10     | 7.8   | 8     | 18.2  |
| Friday      | 30     | 23.3  | 6     | 13.6  |
| Saturday    | 18     | 14.0  | 8     | 18.2  |
| Total       | 129    | 100.0 | 44    | 100.0 |

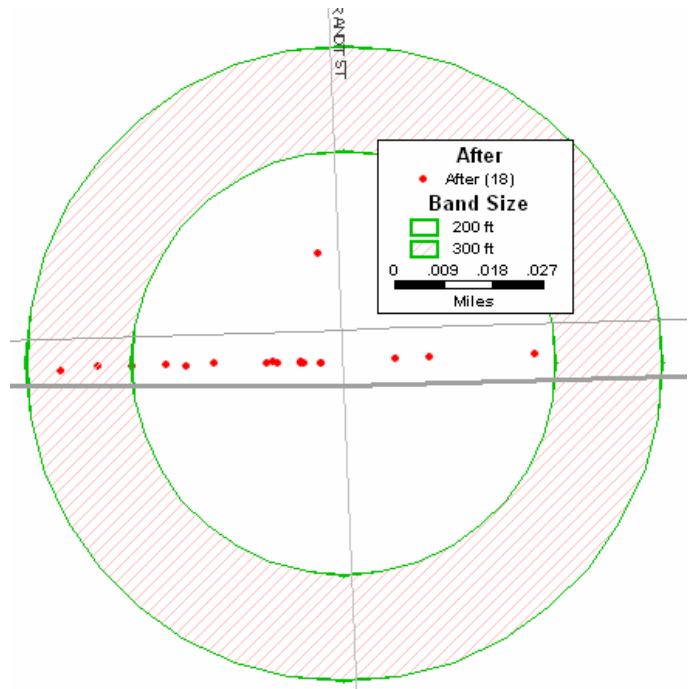
| Crash Type     | Before | %     | After | %     |
|----------------|--------|-------|-------|-------|
| Single vehicle | 2      | 1.6   | 2     | 4.5   |
| Head-on        | 19     | 14.7  | 1     | 2.3   |
| Angle          | 35     | 27.1  | 13    | 29.5  |
| Rear-end       | 57     | 44.2  | 19    | 43.2  |
| Sideswipe      | 14     | 10.9  | 8     | 18.2  |
| Other/unknown  | 2      | 1.6   | 1     | 2.3   |
| Total          | 129    | 100.0 | 44    | 100.0 |

### M153 (Ford Road) and Brandt

Date of Signal Optimization: May 1, 2004



1,217 days before



609 days after

| Injury Severity | Before | %     | After | %     |
|-----------------|--------|-------|-------|-------|
| Fatal           | 0      | 0.0   | 0     | 0.0   |
| A-Injury        | 1      | 1.5   | 0     | 0.0   |
| B-Injury        | 0      | 0.0   | 0     | 0.0   |
| C-Injury        | 10     | 14.9  | 5     | 27.8  |
| O-Injury        | 56     | 83.6  | 13    | 72.2  |
| Total           | 67     | 100.0 | 18    | 100.0 |

| Time of Day   | Before | %     | After | %     |
|---------------|--------|-------|-------|-------|
| 6am - 9:59am  | 3      | 4.5   | 0     | 0.0   |
| 10am - 3:59pm | 28     | 41.8  | 8     | 44.4  |
| 4pm - 7:59pm  | 29     | 43.3  | 7     | 38.9  |
| 8pm - 5:59am  | 3      | 4.5   | 3     | 16.7  |
| Unknown       | 4      | 6.0   | 0     | 0.0   |
| Total         | 67     | 100.0 | 18    | 100.0 |

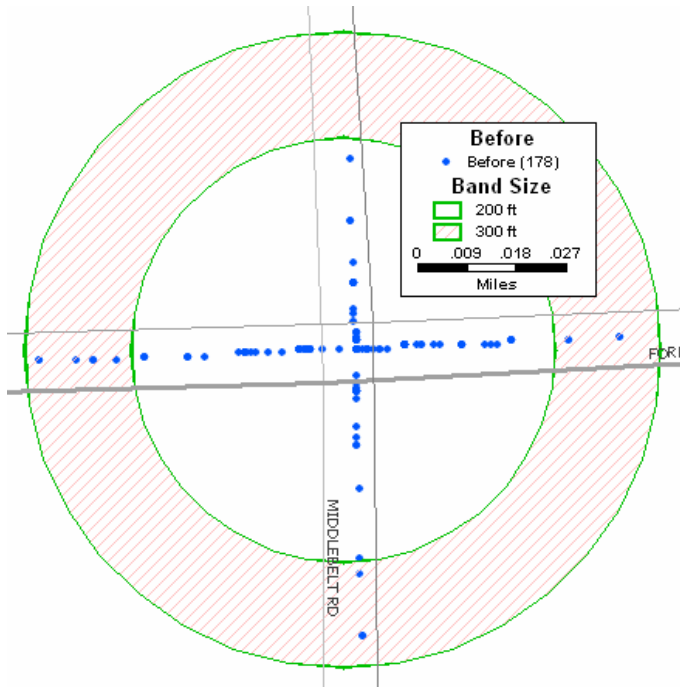
| Day of Week | Before | %     | After | %     |
|-------------|--------|-------|-------|-------|
| Sunday      | 8      | 11.9  | 2     | 11.1  |
| Monday      | 12     | 17.9  | 2     | 11.1  |
| Tuesday     | 5      | 7.5   | 1     | 5.6   |
| Wednesday   | 10     | 14.9  | 4     | 22.2  |
| Thursday    | 15     | 22.4  | 3     | 16.7  |
| Friday      | 11     | 16.4  | 3     | 16.7  |
| Saturday    | 6      | 9.0   | 3     | 16.7  |
| Total       | 67     | 100.0 | 18    | 100.0 |

| Crash Type     | Before | %     | After | %     |
|----------------|--------|-------|-------|-------|
| Single vehicle | 2      | 3.0   | 1     | 5.6   |
| Head-on        | 4      | 6.0   | 1     | 5.6   |
| Angle          | 20     | 29.9  | 4     | 22.2  |
| Rear-end       | 38     | 56.7  | 9     | 50.0  |
| Sideswipe      | 3      | 4.5   | 3     | 16.7  |
| Other/unknown  | 0      | 0.0   | 0     | 0.0   |
| Total          | 67     | 100.0 | 18    | 100.0 |

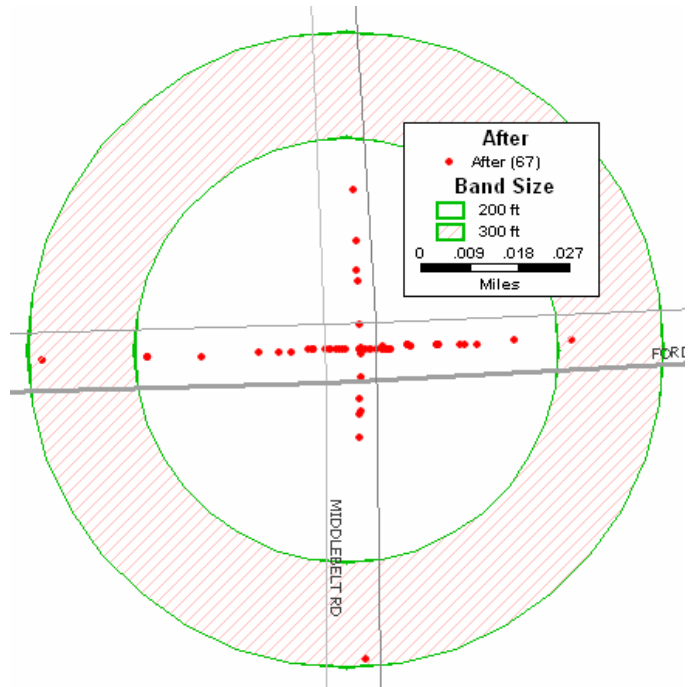


### M153 (Ford Road) and Middlebelt

Date of Signal Optimization: May 1, 2004



1,217 days before



609 days after

| Injury Severity | Before | %     | After | %     |
|-----------------|--------|-------|-------|-------|
| Fatal           | 0      | 0.0   | 0     | 0.0   |
| A-Injury        | 2      | 1.1   | 1     | 1.5   |
| B-Injury        | 9      | 5.1   | 6     | 9.0   |
| C-Injury        | 19     | 10.7  | 15    | 22.4  |
| O-Injury        | 148    | 83.1  | 45    | 67.2  |
| Total           | 178    | 100.0 | 67    | 100.0 |

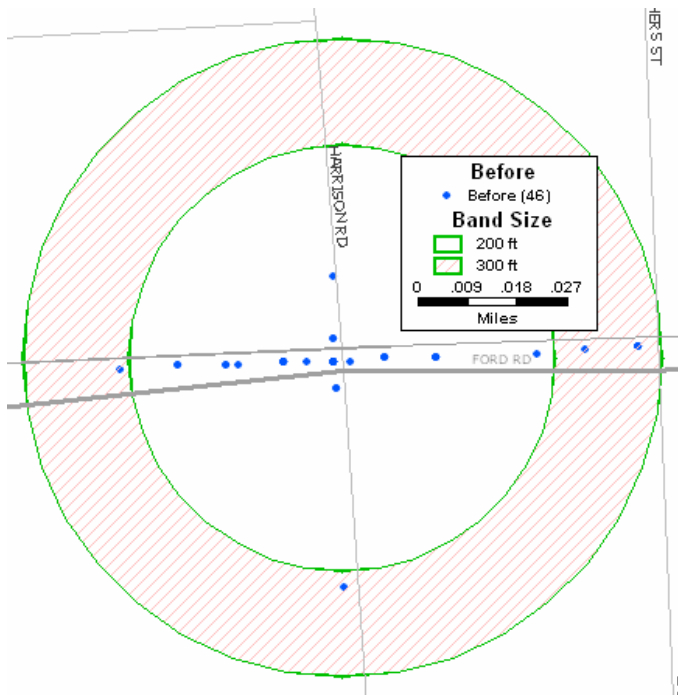
| Time of Day   | Before | %     | After | %     |
|---------------|--------|-------|-------|-------|
| 6am - 9:59am  | 27     | 15.2  | 3     | 4.5   |
| 10am - 3:59pm | 76     | 42.7  | 32    | 47.8  |
| 4pm - 7:59pm  | 51     | 28.7  | 22    | 32.8  |
| 8pm - 5:59am  | 20     | 11.2  | 9     | 13.4  |
| Unknown       | 4      | 2.2   | 1     | 1.5   |
| Total         | 178    | 100.0 | 67    | 100.0 |

| Day of Week | Before | %     | After | %     |
|-------------|--------|-------|-------|-------|
| Sunday      | 10     | 5.6   | 7     | 10.4  |
| Monday      | 30     | 16.9  | 13    | 19.4  |
| Tuesday     | 24     | 13.5  | 9     | 13.4  |
| Wednesday   | 27     | 15.2  | 8     | 11.9  |
| Thursday    | 33     | 18.5  | 7     | 10.4  |
| Friday      | 27     | 15.2  | 12    | 17.9  |
| Saturday    | 27     | 15.2  | 11    | 16.4  |
| Total       | 178    | 100.0 | 67    | 100.0 |

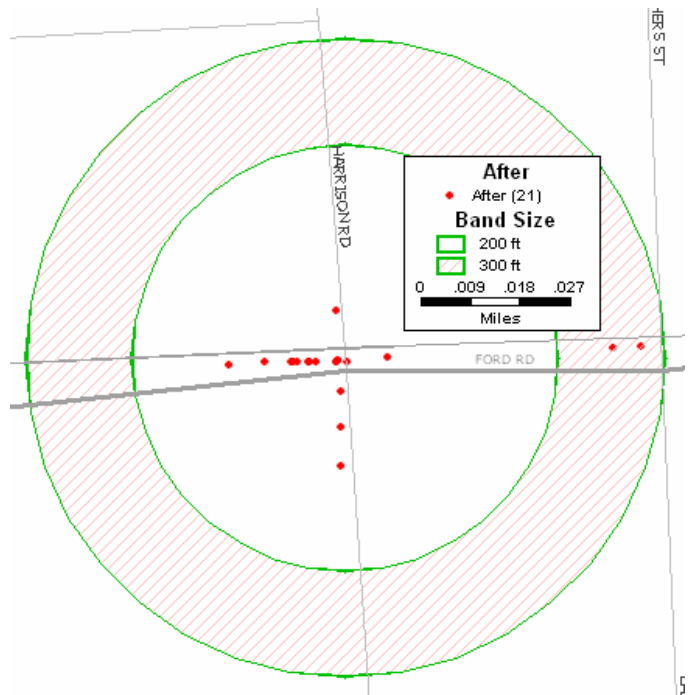
| Crash Type     | Before | %     | After | %     |
|----------------|--------|-------|-------|-------|
| Single vehicle | 3      | 1.7   | 3     | 4.5   |
| Head-on        | 7      | 3.9   | 4     | 6.0   |
| Angle          | 33     | 18.5  | 15    | 22.4  |
| Rear-end       | 110    | 61.8  | 32    | 47.8  |
| Sideswipe      | 19     | 10.7  | 12    | 17.9  |
| Other/unknown  | 6      | 3.4   | 1     | 1.5   |
| Total          | 178    | 100.0 | 67    | 100.0 |

**M153 (Ford Road) and Harrison**

Date of Signal Optimization: May 1, 2004



1,217 days before



609 days after

| Injury Severity | Before | %     | After | %     |
|-----------------|--------|-------|-------|-------|
| Fatal           | 0      | 0.0   | 0     | 0.0   |
| A-Injury        | 3      | 6.5   | 0     | 0.0   |
| B-Injury        | 4      | 8.7   | 1     | 4.8   |
| C-Injury        | 9      | 19.6  | 5     | 23.8  |
| O-Injury        | 30     | 65.2  | 15    | 71.4  |
| Total           | 46     | 100.0 | 21    | 100.0 |

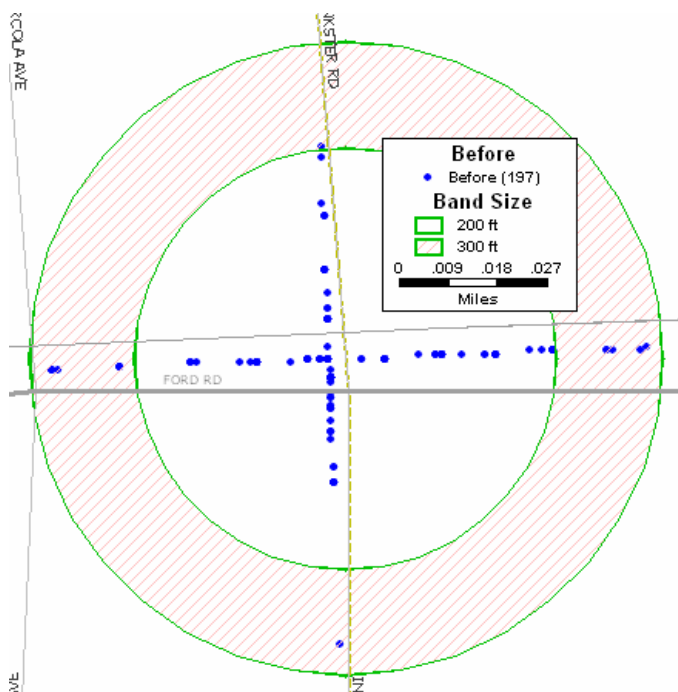
| Time of Day   | Before | %     | After | %     |
|---------------|--------|-------|-------|-------|
| 6am - 9:59am  | 4      | 8.7   | 2     | 9.5   |
| 10am - 3:59pm | 16     | 34.8  | 8     | 38.1  |
| 4pm - 7:59pm  | 14     | 30.4  | 8     | 38.1  |
| 8pm - 5:59am  | 10     | 21.7  | 3     | 14.3  |
| Unknown       | 2      | 4.3   | 0     | 0.0   |
| Total         | 46     | 100.0 | 21    | 100.0 |

| Day of Week | Before | %     | After | %     |
|-------------|--------|-------|-------|-------|
| Sunday      | 8      | 17.4  | 5     | 23.8  |
| Monday      | 6      | 13.0  | 1     | 4.8   |
| Tuesday     | 5      | 10.9  | 5     | 23.8  |
| Wednesday   | 10     | 21.7  | 2     | 9.5   |
| Thursday    | 5      | 10.9  | 5     | 23.8  |
| Friday      | 7      | 15.2  | 0     | 0.0   |
| Saturday    | 5      | 10.9  | 3     | 14.3  |
| Total       | 46     | 100.0 | 21    | 100.0 |

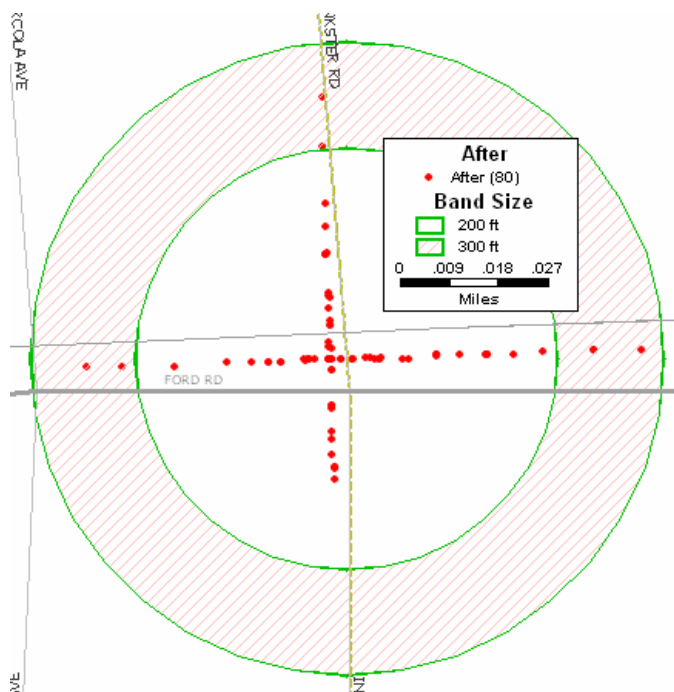
| Crash Type     | Before | %     | After | %     |
|----------------|--------|-------|-------|-------|
| Single vehicle | 4      | 8.7   | 0     | 0.0   |
| Head-on        | 5      | 10.9  | 2     | 9.5   |
| Angle          | 16     | 34.8  | 12    | 57.1  |
| Rear-end       | 18     | 39.1  | 5     | 23.8  |
| Sideswipe      | 3      | 6.5   | 2     | 9.5   |
| Other/unknown  | 0      | 0.0   | 0     | 0.0   |
| Total          | 46     | 100.0 | 21    | 100.0 |

### M153 (Ford Road) and Inkster

Date of Signal Optimization: May 1, 2004



1,217 days before



609 days after

| Injury Severity | Before | %     | After | %     |
|-----------------|--------|-------|-------|-------|
| Fatal           | 0      | 0.0   | 0     | 0.0   |
| A-Injury        | 3      | 1.5   | 1     | 1.3   |
| B-Injury        | 8      | 4.1   | 4     | 5.0   |
| C-Injury        | 34     | 17.3  | 9     | 11.3  |
| O-Injury        | 152    | 77.2  | 66    | 82.5  |
| Total           | 197    | 100.0 | 80    | 100.0 |

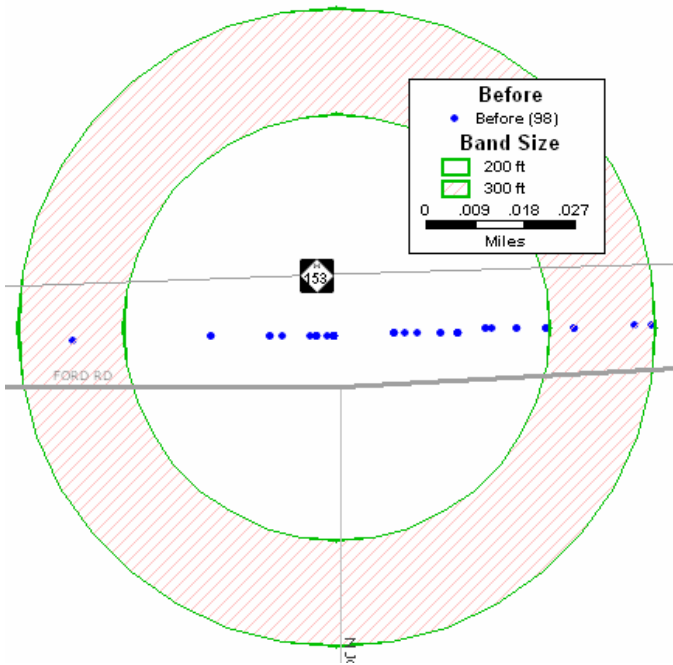
| Time of Day   | Before | %     | After | %     |
|---------------|--------|-------|-------|-------|
| 6am - 9:59am  | 16     | 8.1   | 7     | 8.8   |
| 10am - 3:59pm | 61     | 31.0  | 32    | 40.0  |
| 4pm - 7:59pm  | 56     | 28.4  | 23    | 28.8  |
| 8pm - 5:59am  | 21     | 10.7  | 18    | 22.5  |
| Unknown       | 43     | 21.8  | 0     | 0.0   |
| Total         | 197    | 100.0 | 80    | 100.0 |

| Day of Week | Before | %     | After | %     |
|-------------|--------|-------|-------|-------|
| Sunday      | 16     | 8.1   | 7     | 8.8   |
| Monday      | 31     | 15.7  | 11    | 13.8  |
| Tuesday     | 36     | 18.3  | 8     | 10.0  |
| Wednesday   | 27     | 13.7  | 9     | 11.3  |
| Thursday    | 30     | 15.2  | 14    | 17.5  |
| Friday      | 27     | 13.7  | 19    | 23.8  |
| Saturday    | 30     | 15.2  | 12    | 15.0  |
| Total       | 197    | 100.0 | 80    | 100.0 |

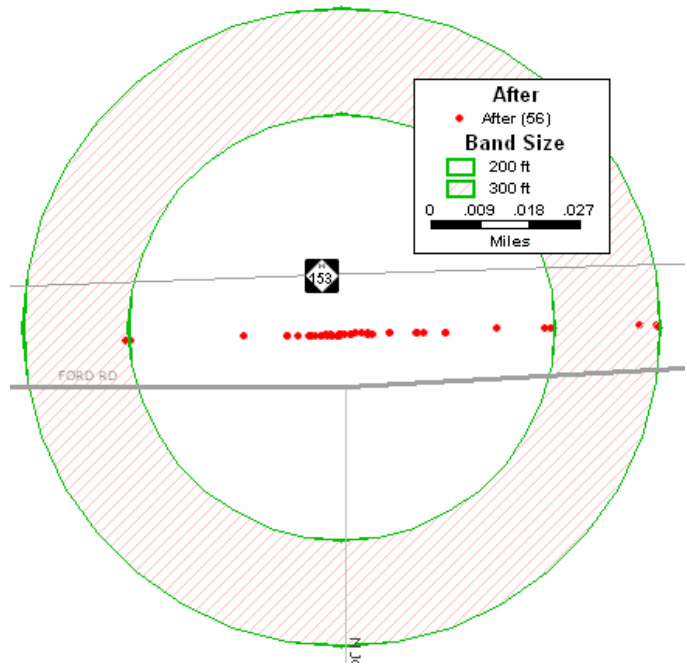
| Crash Type     | Before | %     | After | %     |
|----------------|--------|-------|-------|-------|
| Single vehicle | 2      | 1.0   | 6     | 7.5   |
| Head-on        | 14     | 7.1   | 2     | 2.5   |
| Angle          | 52     | 26.4  | 20    | 25.0  |
| Rear-end       | 91     | 46.2  | 38    | 47.5  |
| Sideswipe      | 21     | 10.7  | 14    | 17.5  |
| Other/unknown  | 17     | 8.6   | 0     | 0.0   |
| Total          | 197    | 100.0 | 80    | 100.0 |

### M153 (Ford Road) and John Daly

Date of Signal Optimization: May 1, 2004



1,217 days before



609 days after

| Injury Severity | Before | %     | After | %     |
|-----------------|--------|-------|-------|-------|
| Fatal           | 0      | 0.0   | 0     | 0.0   |
| A-Injury        | 3      | 3.1   | 0     | 0.0   |
| B-Injury        | 7      | 7.1   | 2     | 3.6   |
| C-Injury        | 17     | 17.3  | 9     | 16.1  |
| O-Injury        | 71     | 72.4  | 45    | 80.4  |
| Total           | 98     | 100.0 | 56    | 100.0 |

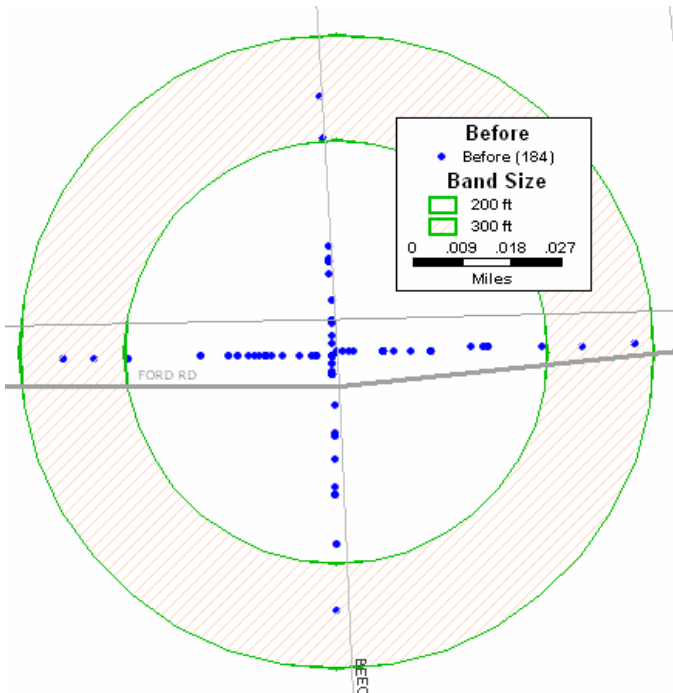
| Time of Day   | Before | %     | After | %     |
|---------------|--------|-------|-------|-------|
| 6am - 9:59am  | 11     | 11.2  | 7     | 12.5  |
| 10am - 3:59pm | 34     | 34.7  | 27    | 48.2  |
| 4pm - 7:59pm  | 19     | 19.4  | 14    | 25.0  |
| 8pm - 5:59am  | 10     | 10.2  | 8     | 14.3  |
| Unknown       | 24     | 24.5  | 0     | 0.0   |
| Total         | 98     | 100.0 | 56    | 100.0 |

| Day of Week | Before | %     | After | %     |
|-------------|--------|-------|-------|-------|
| Sunday      | 6      | 6.1   | 5     | 8.9   |
| Monday      | 9      | 9.2   | 9     | 16.1  |
| Tuesday     | 5      | 5.1   | 11    | 19.6  |
| Wednesday   | 18     | 18.4  | 7     | 12.5  |
| Thursday    | 19     | 19.4  | 8     | 14.3  |
| Friday      | 20     | 20.4  | 8     | 14.3  |
| Saturday    | 21     | 21.4  | 8     | 14.3  |
| Total       | 98     | 100.0 | 56    | 100.0 |

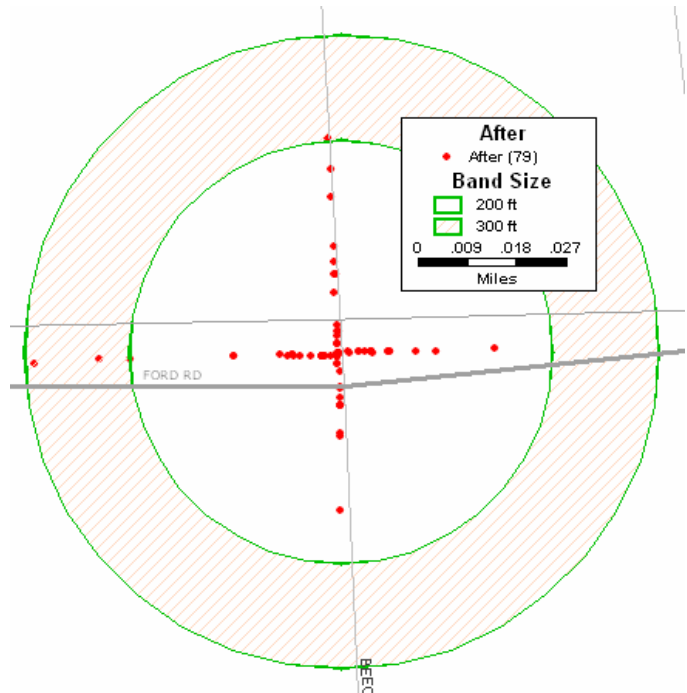
| Crash Type     | Before | %     | After | %     |
|----------------|--------|-------|-------|-------|
| Single vehicle | 5      | 5.1   | 0     | 0.0   |
| Head-on        | 16     | 16.3  | 4     | 7.1   |
| Angle          | 33     | 33.7  | 28    | 50.0  |
| Rear-end       | 29     | 29.6  | 17    | 30.4  |
| Sideswipe      | 6      | 6.1   | 6     | 10.7  |
| Other/unknown  | 9      | 9.2   | 1     | 1.8   |
| Total          | 98     | 100.0 | 56    | 100.0 |

### M153 (Ford Road) and Beech Daly

Date of Signal Optimization: May 1, 2004



1,217 days before



609 days after

| Injury Severity | Before | %     | After | %     |
|-----------------|--------|-------|-------|-------|
| Fatal           | 0      | 0.0   | 0     | 0.0   |
| A-Injury        | 2      | 1.1   | 1     | 1.3   |
| B-Injury        | 7      | 3.8   | 1     | 1.3   |
| C-Injury        | 27     | 14.7  | 9     | 11.4  |
| O-Injury        | 148    | 80.4  | 68    | 86.1  |
| Total           | 184    | 100.0 | 79    | 100.0 |

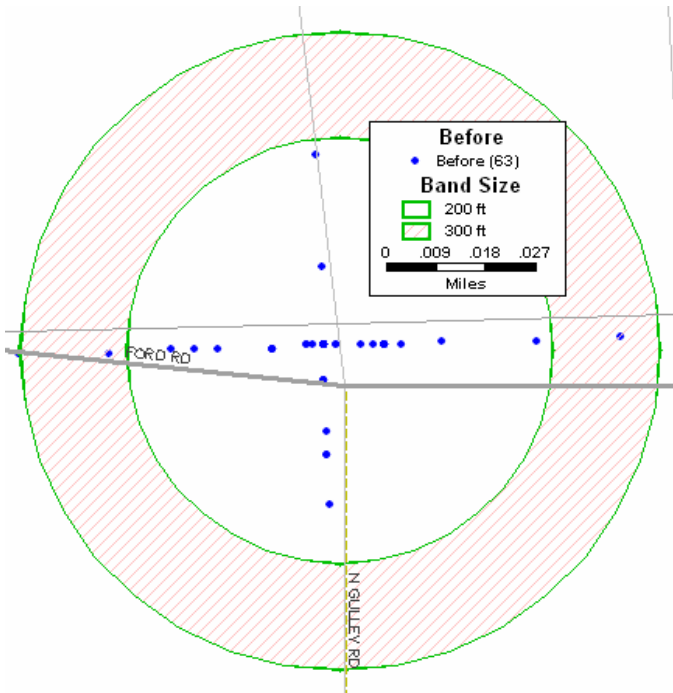
| Time of Day   | Before | %     | After | %     |
|---------------|--------|-------|-------|-------|
| 6am - 9:59am  | 22     | 12.0  | 12    | 15.2  |
| 10am - 3:59pm | 65     | 35.3  | 36    | 45.6  |
| 4pm - 7:59pm  | 40     | 21.7  | 26    | 32.9  |
| 8pm - 5:59am  | 20     | 10.9  | 5     | 6.3   |
| Unknown       | 37     | 20.1  | 0     | 0.0   |
| Total         | 184    | 100.0 | 79    | 100.0 |

| Day of Week | Before | %     | After | %     |
|-------------|--------|-------|-------|-------|
| Sunday      | 14     | 7.6   | 6     | 7.6   |
| Monday      | 33     | 17.9  | 11    | 13.9  |
| Tuesday     | 30     | 16.3  | 10    | 12.7  |
| Wednesday   | 31     | 16.8  | 14    | 17.7  |
| Thursday    | 25     | 13.6  | 12    | 15.2  |
| Friday      | 25     | 13.6  | 16    | 20.3  |
| Saturday    | 26     | 14.1  | 10    | 12.7  |
| Total       | 184    | 100.0 | 79    | 100.0 |

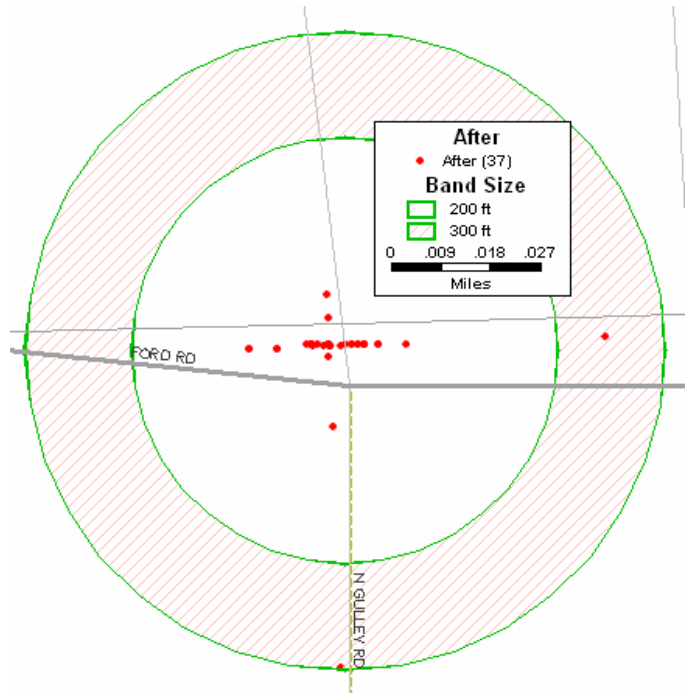
| Crash Type     | Before | %     | After | %     |
|----------------|--------|-------|-------|-------|
| Single vehicle | 2      | 1.1   | 0     | 0.0   |
| Head-on        | 9      | 4.9   | 11    | 13.9  |
| Angle          | 56     | 30.4  | 29    | 36.7  |
| Rear-end       | 78     | 42.4  | 35    | 44.3  |
| Sideswipe      | 15     | 8.2   | 2     | 2.5   |
| Other/unknown  | 24     | 13.0  | 2     | 2.5   |
| Total          | 184    | 100.0 | 79    | 100.0 |

### M153 (Ford Road) and Gulley

Date of Signal Optimization: May 1, 2004



1,217 days before



609 days after

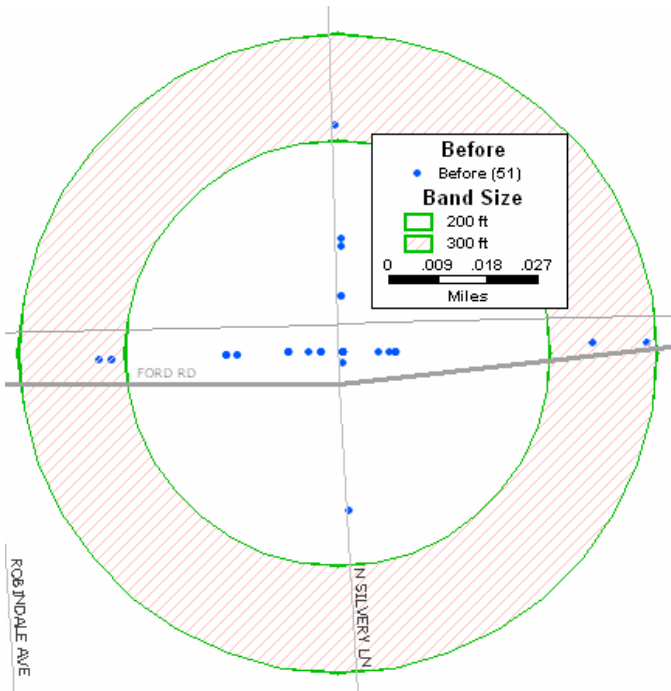
| Injury Severity | Before | %     | After | %     |
|-----------------|--------|-------|-------|-------|
| Fatal           | 0      | 0.0   | 0     | 0.0   |
| A-Injury        | 1      | 1.6   | 1     | 2.7   |
| B-Injury        | 3      | 4.8   | 1     | 2.7   |
| C-Injury        | 11     | 17.5  | 6     | 16.2  |
| O-Injury        | 48     | 76.2  | 29    | 78.4  |
| Total           | 63     | 100.0 | 37    | 100.0 |

| Time of Day   | Before | %     | After | %     |
|---------------|--------|-------|-------|-------|
| 6am - 9:59am  | 6      | 9.5   | 1     | 2.7   |
| 10am - 3:59pm | 21     | 33.3  | 21    | 56.8  |
| 4pm - 7:59pm  | 17     | 27.0  | 12    | 32.4  |
| 8pm - 5:59am  | 3      | 4.8   | 3     | 8.1   |
| Unknown       | 16     | 25.4  | 0     | 0.0   |
| Total         | 63     | 100.0 | 37    | 100.0 |

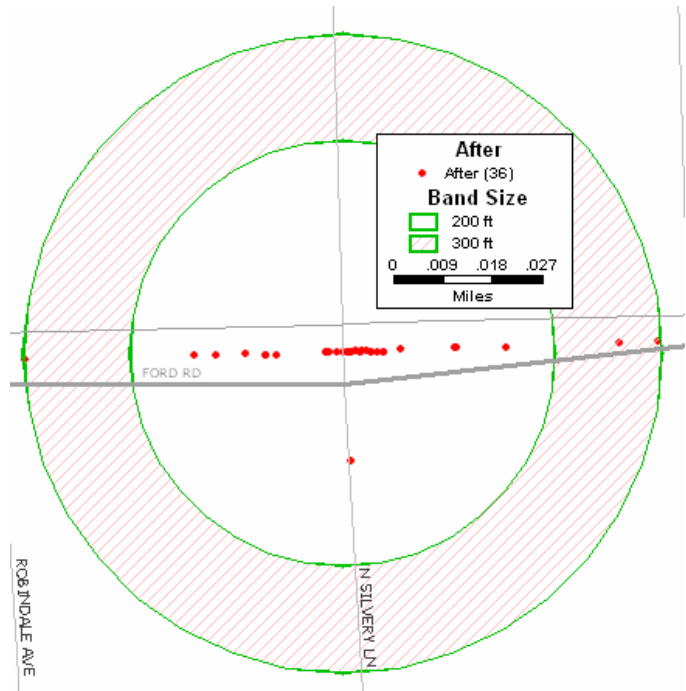
| Day of Week | Before | %     | After | %     |
|-------------|--------|-------|-------|-------|
| Sunday      | 4      | 6.3   | 5     | 13.5  |
| Monday      | 8      | 12.7  | 2     | 5.4   |
| Tuesday     | 9      | 14.3  | 6     | 16.2  |
| Wednesday   | 9      | 14.3  | 9     | 24.3  |
| Thursday    | 15     | 23.8  | 8     | 21.6  |
| Friday      | 14     | 22.2  | 6     | 16.2  |
| Saturday    | 4      | 6.3   | 1     | 2.7   |
| Total       | 63     | 100.0 | 37    | 100.0 |

| Crash Type     | Before | %     | After | %     |
|----------------|--------|-------|-------|-------|
| Single vehicle | 1      | 1.6   | 0     | 0.0   |
| Head-on        | 7      | 11.1  | 4     | 10.8  |
| Angle          | 23     | 36.5  | 9     | 24.3  |
| Rear-end       | 21     | 33.3  | 18    | 48.6  |
| Sideswipe      | 3      | 4.8   | 2     | 5.4   |
| Other/unknown  | 8      | 12.7  | 4     | 10.8  |
| Total          | 63     | 100.0 | 37    | 100.0 |

**M153 (Ford Road) and Silvery Lane**  
 Date of Signal Optimization: May 1, 2004



1,217 days before



609 days after

| Injury Severity | Before | %     | After | %     |
|-----------------|--------|-------|-------|-------|
| Fatal           | 0      | 0.0   | 0     | 0.0   |
| A-Injury        | 0      | 0.0   | 0     | 0.0   |
| B-Injury        | 1      | 2.0   | 0     | 0.0   |
| C-Injury        | 10     | 19.6  | 8     | 22.2  |
| O-Injury        | 40     | 78.4  | 28    | 77.8  |
| Total           | 51     | 100.0 | 36    | 100.0 |

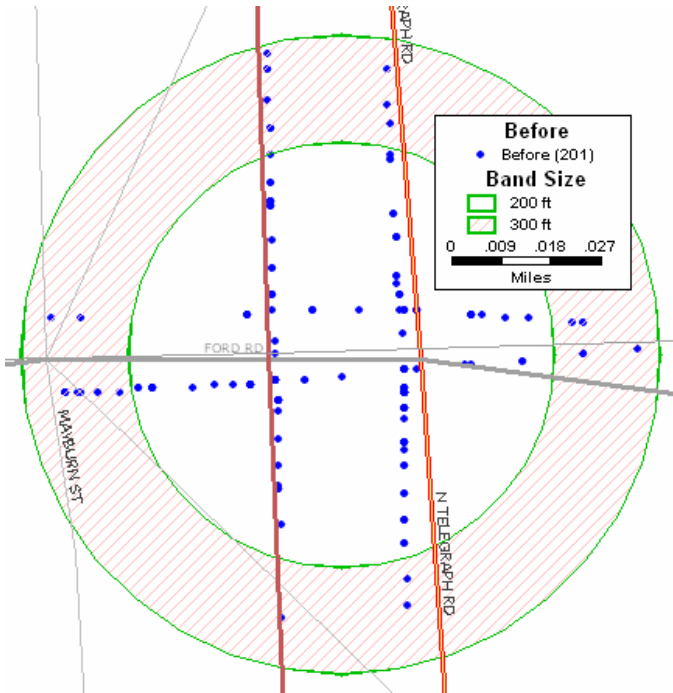
| Time of Day   | Before | %     | After | %     |
|---------------|--------|-------|-------|-------|
| 6am - 9:59am  | 12     | 23.5  | 6     | 16.7  |
| 10am - 3:59pm | 13     | 25.5  | 16    | 44.4  |
| 4pm - 7:59pm  | 13     | 25.5  | 9     | 25.0  |
| 8pm - 5:59am  | 7      | 13.7  | 5     | 13.9  |
| Unknown       | 6      | 11.8  | 0     | 0.0   |
| Total         | 51     | 100.0 | 36    | 100.0 |

| Day of Week | Before | %     | After | %     |
|-------------|--------|-------|-------|-------|
| Sunday      | 1      | 2.0   | 1     | 2.8   |
| Monday      | 7      | 13.7  | 6     | 16.7  |
| Tuesday     | 6      | 11.8  | 4     | 11.1  |
| Wednesday   | 11     | 21.6  | 8     | 22.2  |
| Thursday    | 6      | 11.8  | 4     | 11.1  |
| Friday      | 10     | 19.6  | 10    | 27.8  |
| Saturday    | 10     | 19.6  | 3     | 8.3   |
| Total       | 51     | 100.0 | 36    | 100.0 |

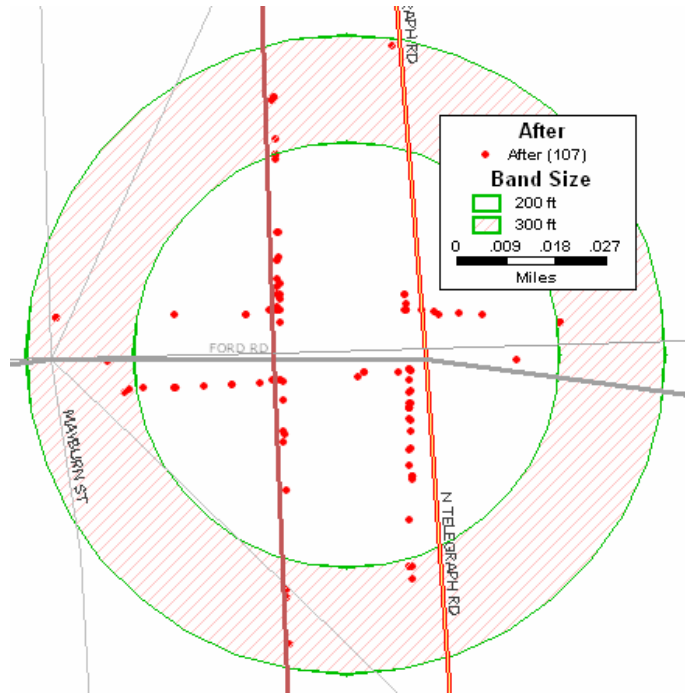
| Crash Type     | Before | %     | After | %     |
|----------------|--------|-------|-------|-------|
| Single vehicle | 1      | 2.0   | 0     | 0.0   |
| Head-on        | 4      | 7.8   | 3     | 8.3   |
| Angle          | 12     | 23.5  | 8     | 22.2  |
| Rear-end       | 27     | 52.9  | 19    | 52.8  |
| Sideswipe      | 4      | 7.8   | 6     | 16.7  |
| Other/unknown  | 3      | 5.9   | 0     | 0.0   |
| Total          | 51     | 100.0 | 36    | 100.0 |

### M153 (Ford Road) and Telegraph

Date of Signal Optimization: May 1, 2004



1,217 days before



609 days after

| Injury Severity | Before     | %            | After      | %            |
|-----------------|------------|--------------|------------|--------------|
| Fatal           | 0          | 0.0          | 0          | 0.0          |
| A-Injury        | 4          | 2.0          | 1          | 0.9          |
| B-Injury        | 4          | 2.0          | 5          | 4.7          |
| C-Injury        | 27         | 13.4         | 14         | 13.1         |
| O-Injury        | 166        | 82.6         | 87         | 81.3         |
| <b>Total</b>    | <b>201</b> | <b>100.0</b> | <b>107</b> | <b>100.0</b> |

| Time of Day   | Before     | %            | After      | %            |
|---------------|------------|--------------|------------|--------------|
| 6am - 9:59am  | 36         | 17.9         | 13         | 12.1         |
| 10am - 3:59pm | 71         | 35.3         | 42         | 39.3         |
| 4pm - 7:59pm  | 41         | 20.4         | 22         | 20.6         |
| 8pm - 5:59am  | 32         | 15.9         | 30         | 28.0         |
| Unknown       | 21         | 10.4         | 0          | 0.0          |
| <b>Total</b>  | <b>201</b> | <b>100.0</b> | <b>107</b> | <b>100.0</b> |

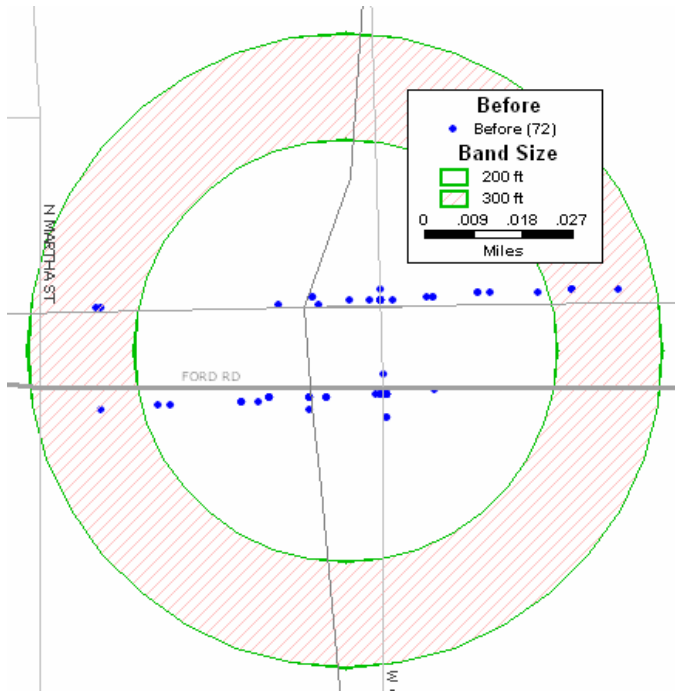
| Day of Week  | Before     | %            | After      | %            |
|--------------|------------|--------------|------------|--------------|
| Sunday       | 23         | 11.4         | 10         | 9.3          |
| Monday       | 34         | 16.9         | 19         | 17.8         |
| Tuesday      | 26         | 12.9         | 16         | 15.0         |
| Wednesday    | 35         | 17.4         | 14         | 13.1         |
| Thursday     | 29         | 14.4         | 16         | 15.0         |
| Friday       | 31         | 15.4         | 19         | 17.8         |
| Saturday     | 23         | 11.4         | 13         | 12.1         |
| <b>Total</b> | <b>201</b> | <b>100.0</b> | <b>107</b> | <b>100.0</b> |

| Crash Type     | Before     | %            | After      | %            |
|----------------|------------|--------------|------------|--------------|
| Single vehicle | 7          | 3.5          | 7          | 6.5          |
| Head-on        | 1          | 0.5          | 0          | 0.0          |
| Angle          | 35         | 17.4         | 23         | 21.5         |
| Rear-end       | 134        | 66.7         | 66         | 61.7         |
| Sideswipe      | 15         | 7.5          | 10         | 9.3          |
| Other/unknown  | 9          | 4.5          | 1          | 0.9          |
| <b>Total</b>   | <b>201</b> | <b>100.0</b> | <b>107</b> | <b>100.0</b> |

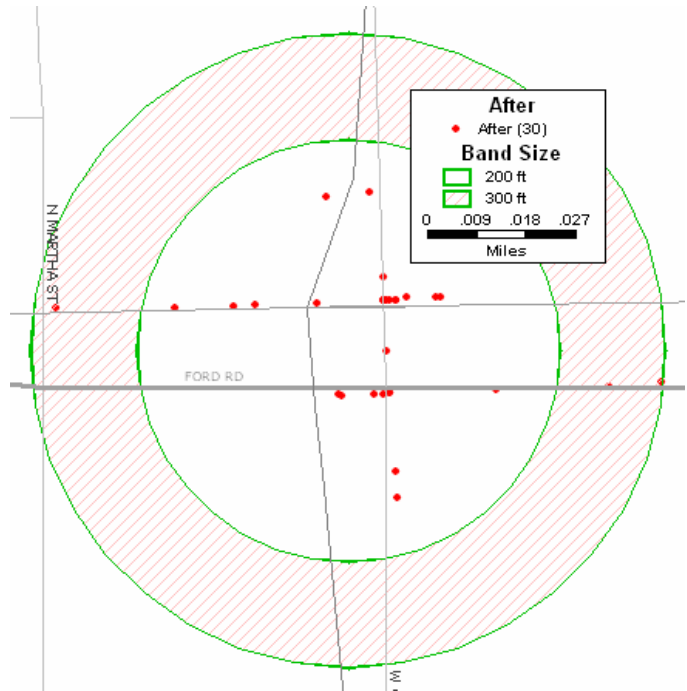


### M153 (Ford Road) and Outer Drive

Date of Signal Optimization: May 1, 2004



1,217 days before



609 days after

| Injury Severity | Before | %     | After | %     |
|-----------------|--------|-------|-------|-------|
| Fatal           | 0      | 0.0   | 0     | 0.0   |
| A-Injury        | 1      | 1.4   | 0     | 0.0   |
| B-Injury        | 3      | 4.2   | 0     | 0.0   |
| C-Injury        | 10     | 13.9  | 5     | 16.7  |
| O-Injury        | 58     | 80.6  | 25    | 83.3  |
| Total           | 72     | 100.0 | 30    | 100.0 |

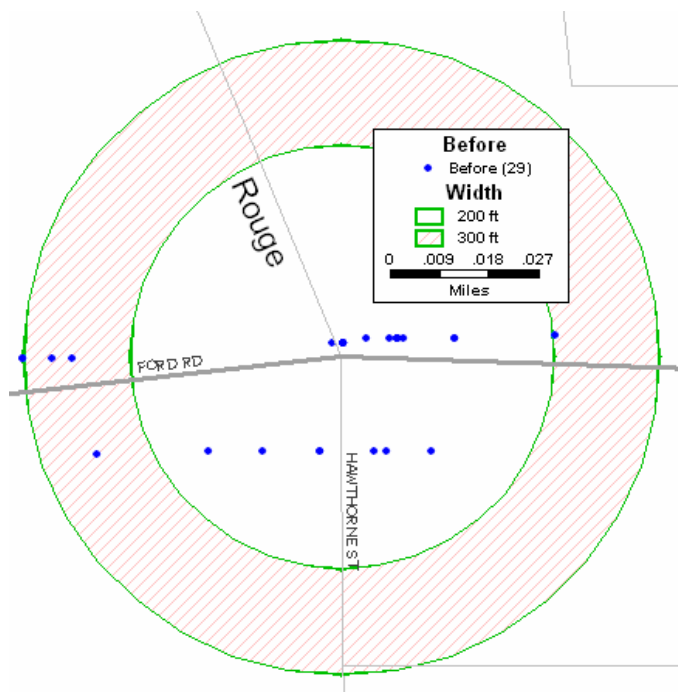
| Time of Day   | Before | %     | After | %     |
|---------------|--------|-------|-------|-------|
| 6am - 9:59am  | 7      | 9.7   | 4     | 13.3  |
| 10am - 3:59pm | 26     | 36.1  | 10    | 33.3  |
| 4pm - 7:59pm  | 18     | 25.0  | 11    | 36.7  |
| 8pm - 5:59am  | 8      | 11.1  | 5     | 16.7  |
| Unknown       | 13     | 18.1  | 0     | 0.0   |
| Total         | 72     | 100.0 | 30    | 100.0 |

| Day of Week | Before | %     | After | %     |
|-------------|--------|-------|-------|-------|
| Sunday      | 4      | 5.6   | 4     | 13.3  |
| Monday      | 10     | 13.9  | 2     | 6.7   |
| Tuesday     | 13     | 18.1  | 5     | 16.7  |
| Wednesday   | 15     | 20.8  | 7     | 23.3  |
| Thursday    | 5      | 6.9   | 7     | 23.3  |
| Friday      | 14     | 19.4  | 2     | 6.7   |
| Saturday    | 11     | 15.3  | 3     | 10.0  |
| Total       | 72     | 100.0 | 30    | 100.0 |

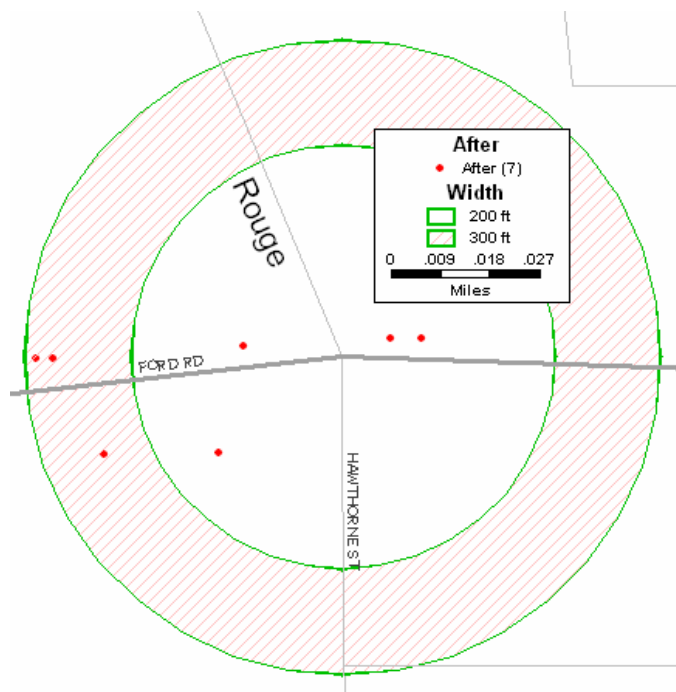
| Crash Type     | Before | %     | After | %     |
|----------------|--------|-------|-------|-------|
| Single vehicle | 4      | 5.6   | 2     | 6.7   |
| Head-on        | 1      | 1.4   | 0     | 0.0   |
| Angle          | 14     | 19.4  | 5     | 16.7  |
| Rear-end       | 37     | 51.4  | 17    | 56.7  |
| Sideswipe      | 10     | 13.9  | 5     | 16.7  |
| Other/unknown  | 6      | 8.3   | 1     | 3.3   |
| Total          | 72     | 100.0 | 30    | 100.0 |

### M153 (Ford Road) and Rouge Circle

Date of Signal Optimization: May 1, 2004



1,217 days before



609 days after

| Injury Severity | Before | %     | After | %     |
|-----------------|--------|-------|-------|-------|
| Fatal           | 0      | 0.0   | 0     | 0.0   |
| A-Injury        | 0      | 0.0   | 0     | 0.0   |
| B-Injury        | 0      | 0.0   | 0     | 0.0   |
| C-Injury        | 5      | 17.2  | 3     | 42.9  |
| O-Injury        | 24     | 82.8  | 4     | 57.1  |
| Total           | 29     | 100.0 | 7     | 100.0 |

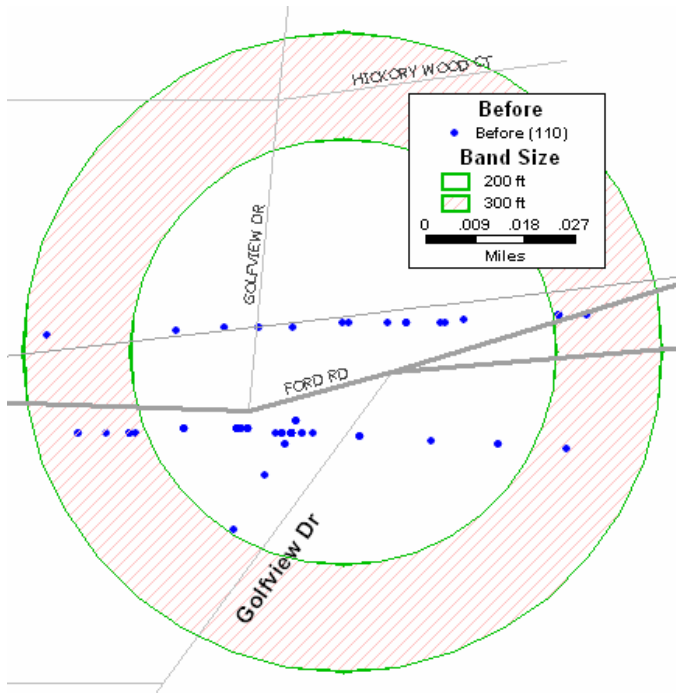
| Time of Day   | Before | %     | After | %     |
|---------------|--------|-------|-------|-------|
| 6am - 9:59am  | 5      | 17.2  | 1     | 14.3  |
| 10am - 3:59pm | 11     | 37.9  | 4     | 57.1  |
| 4pm - 7:59pm  | 8      | 27.6  | 2     | 28.6  |
| 8pm - 5:59am  | 0      | 0.0   | 0     | 0.0   |
| Unknown       | 5      | 17.2  | 0     | 0.0   |
| Total         | 29     | 100.0 | 7     | 100.0 |

| Day of Week | Before | %     | After | %     |
|-------------|--------|-------|-------|-------|
| Sunday      | 0      | 0.0   | 0     | 0.0   |
| Monday      | 6      | 20.7  | 3     | 42.9  |
| Tuesday     | 10     | 34.5  | 1     | 14.3  |
| Wednesday   | 3      | 10.3  | 0     | 0.0   |
| Thursday    | 1      | 3.4   | 0     | 0.0   |
| Friday      | 7      | 24.1  | 2     | 28.6  |
| Saturday    | 2      | 6.9   | 1     | 14.3  |
| Total       | 29     | 100.0 | 7     | 100.0 |

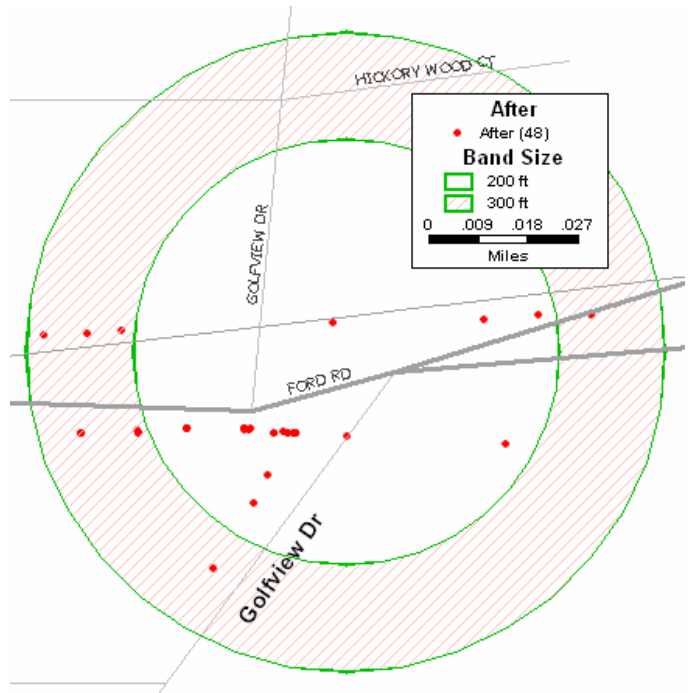
| Crash Type     | Before | %     | After | %     |
|----------------|--------|-------|-------|-------|
| Single vehicle | 1      | 3.4   | 0     | 0.0   |
| Head-on        | 0      | 0.0   | 0     | 0.0   |
| Angle          | 2      | 6.9   | 0     | 0.0   |
| Rear-end       | 20     | 69.0  | 6     | 85.7  |
| Sideswipe      | 4      | 13.8  | 1     | 14.3  |
| Other/unknown  | 2      | 6.9   | 0     | 0.0   |
| Total          | 29     | 100.0 | 7     | 100.0 |

**M153 (Ford Road) and Golfview**

Date of Signal Optimization: May 1, 2004



1,217 days before



609 days after

| Injury Severity | Before | %     | After | %     |
|-----------------|--------|-------|-------|-------|
| Fatal           | 0      | 0.0   | 0     | 0.0   |
| A-Injury        | 1      | 0.9   | 0     | 0.0   |
| B-Injury        | 3      | 2.7   | 0     | 0.0   |
| C-Injury        | 25     | 22.7  | 13    | 27.1  |
| O-Injury        | 81     | 73.6  | 35    | 72.9  |
| Total           | 110    | 100.0 | 48    | 100.0 |

| Time of Day   | Before | %     | After | %     |
|---------------|--------|-------|-------|-------|
| 6am - 9:59am  | 16     | 14.5  | 14    | 29.2  |
| 10am - 3:59pm | 42     | 38.2  | 16    | 33.3  |
| 4pm - 7:59pm  | 32     | 29.1  | 12    | 25.0  |
| 8pm - 5:59am  | 11     | 10.0  | 5     | 10.4  |
| Unknown       | 9      | 8.2   | 1     | 2.1   |
| Total         | 110    | 100.0 | 48    | 100.0 |

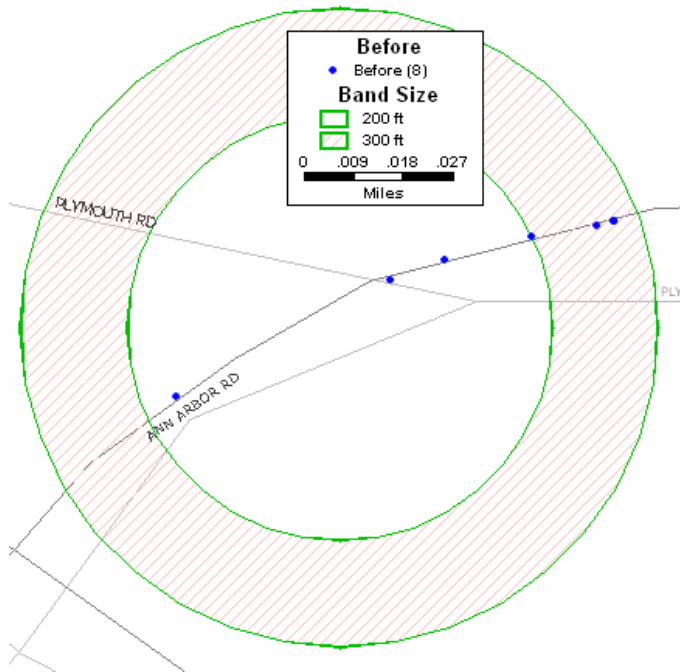
| Day of Week | Before | %     | After | %     |
|-------------|--------|-------|-------|-------|
| Sunday      | 7      | 6.4   | 5     | 10.4  |
| Monday      | 19     | 17.3  | 10    | 20.8  |
| Tuesday     | 10     | 9.1   | 6     | 12.5  |
| Wednesday   | 17     | 15.5  | 5     | 10.4  |
| Thursday    | 12     | 10.9  | 9     | 18.8  |
| Friday      | 27     | 24.5  | 11    | 22.9  |
| Saturday    | 18     | 16.4  | 2     | 4.2   |
| Total       | 110    | 100.0 | 48    | 100.0 |

| Crash Type     | Before | %     | After | %     |
|----------------|--------|-------|-------|-------|
| Single vehicle | 7      | 6.4   | 3     | 6.3   |
| Head-on        | 0      | 0.0   | 1     | 2.1   |
| Angle          | 10     | 9.1   | 5     | 10.4  |
| Rear-end       | 79     | 71.8  | 34    | 70.8  |
| Sideswipe      | 6      | 5.5   | 5     | 10.4  |
| Other/unknown  | 8      | 7.3   | 0     | 0.0   |
| Total          | 110    | 100.0 | 48    | 100.0 |

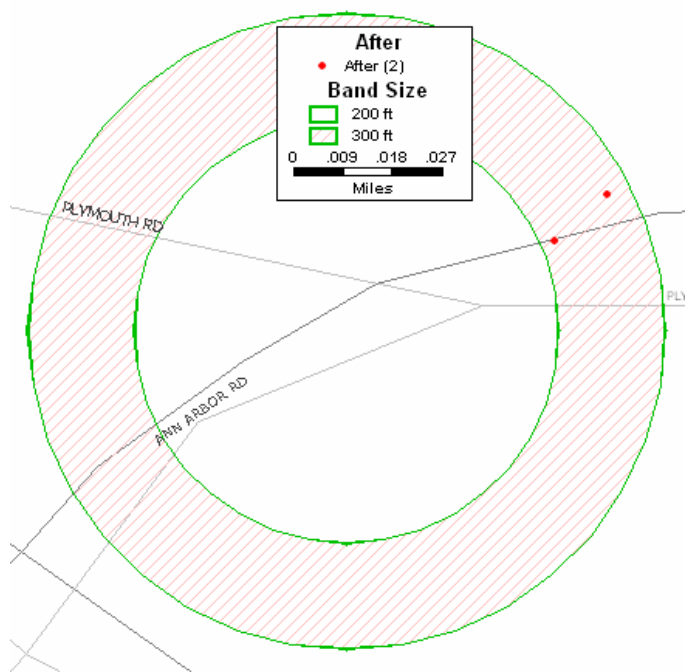
## **Plymouth Road (M14)**

**M14 (Plymouth Road) and Ann Arbor**

Date of Signal Optimization: May 1, 2004



1,217 days before



609 days after

| Injury Severity | Before | %     | After | %     |
|-----------------|--------|-------|-------|-------|
| Fatal           | 0      | 0.0   | 0     | 0.0   |
| A-Injury        | 0      | 0.0   | 0     | 0.0   |
| B-Injury        | 0      | 0.0   | 0     | 0.0   |
| C-Injury        | 2      | 25.0  | 2     | 100.0 |
| O-Injury        | 6      | 75.0  | 0     | 0.0   |
| Total           | 8      | 100.0 | 2     | 100.0 |

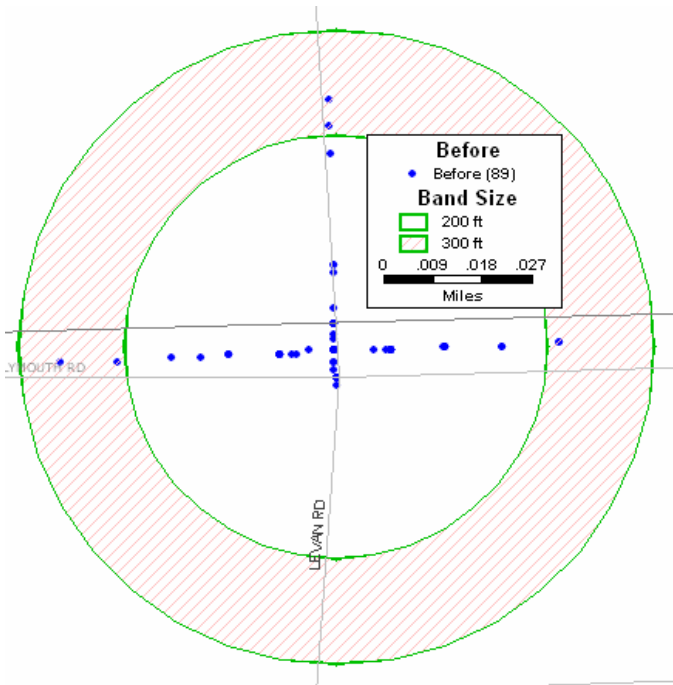
| Time of Day   | Before | %     | After | %     |
|---------------|--------|-------|-------|-------|
| 6am - 9:59am  | 1      | 12.5  | 0     | 0.0   |
| 10am - 3:59pm | 3      | 37.5  | 0     | 0.0   |
| 4pm - 7:59pm  | 2      | 25.0  | 1     | 50.0  |
| 8pm - 5:59am  | 1      | 12.5  | 1     | 50.0  |
| Unknown       | 1      | 12.5  | 0     | 0.0   |
| Total         | 8      | 100.0 | 2     | 100.0 |

| Day of Week | Before | %     | After | %     |
|-------------|--------|-------|-------|-------|
| Sunday      | 1      | 12.5  | 0     | 0.0   |
| Monday      | 3      | 37.5  | 1     | 50.0  |
| Tuesday     | 0      | 0.0   | 1     | 50.0  |
| Wednesday   | 1      | 12.5  | 0     | 0.0   |
| Thursday    | 2      | 25.0  | 0     | 0.0   |
| Friday      | 1      | 12.5  | 0     | 0.0   |
| Saturday    | 0      | 0.0   | 0     | 0.0   |
| Total       | 8      | 100.0 | 2     | 100.0 |

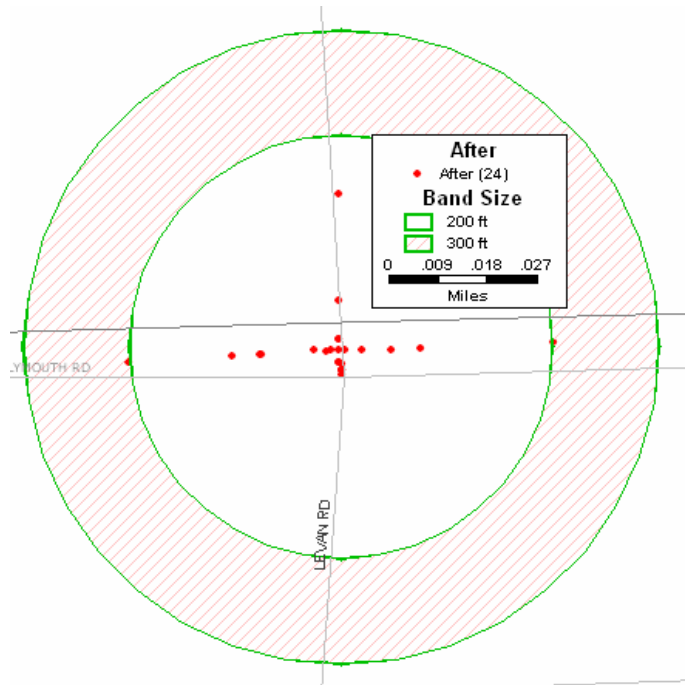
| Crash Type     | Before | %     | After | %     |
|----------------|--------|-------|-------|-------|
| Single vehicle | 1      | 12.5  | 1     | 50.0  |
| Head-on        | 0      | 0.0   | 0     | 0.0   |
| Angle          | 0      | 0.0   | 0     | 0.0   |
| Rear-end       | 4      | 50.0  | 1     | 50.0  |
| Sideswipe      | 3      | 37.5  | 0     | 0.0   |
| Other/unknown  | 0      | 0.0   | 0     | 0.0   |
| Total          | 8      | 100.0 | 2     | 100.0 |

### M14 (Plymouth Road) and Levan

Date of Signal Optimization: May 1, 2004



1,217 days before



609 days after

| Injury Severity | Before | %     | After | %     |
|-----------------|--------|-------|-------|-------|
| Fatal           | 0      | 0.0   | 0     | 0.0   |
| A-Injury        | 2      | 2.2   | 0     | 0.0   |
| B-Injury        | 8      | 9.0   | 0     | 0.0   |
| C-Injury        | 13     | 14.6  | 5     | 20.8  |
| O-Injury        | 66     | 74.2  | 19    | 79.2  |
| Total           | 89     | 100.0 | 24    | 100.0 |

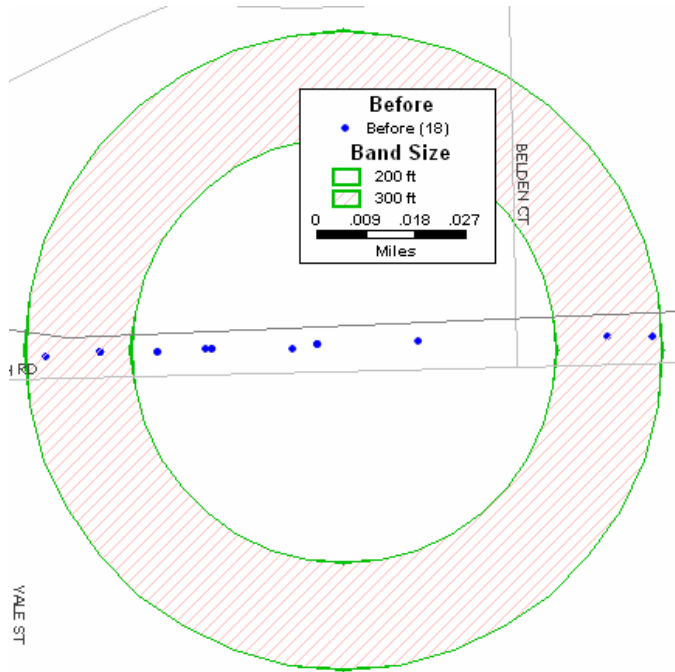
| Time of Day   | Before | %     | After | %     |
|---------------|--------|-------|-------|-------|
| 6am - 9:59am  | 13     | 14.6  | 5     | 20.8  |
| 10am - 3:59pm | 35     | 39.3  | 9     | 37.5  |
| 4pm - 7:59pm  | 23     | 25.8  | 8     | 33.3  |
| 8pm - 5:59am  | 7      | 7.9   | 2     | 8.3   |
| Unknown       | 11     | 12.4  | 0     | 0.0   |
| Total         | 89     | 100.0 | 24    | 100.0 |

| Day of Week | Before | %     | After | %     |
|-------------|--------|-------|-------|-------|
| Sunday      | 1      | 1.1   | 0     | 0.0   |
| Monday      | 17     | 19.1  | 4     | 16.7  |
| Tuesday     | 15     | 16.9  | 5     | 20.8  |
| Wednesday   | 14     | 15.7  | 7     | 29.2  |
| Thursday    | 10     | 11.2  | 2     | 8.3   |
| Friday      | 22     | 24.7  | 3     | 12.5  |
| Saturday    | 10     | 11.2  | 3     | 12.5  |
| Total       | 89     | 100.0 | 24    | 100.0 |

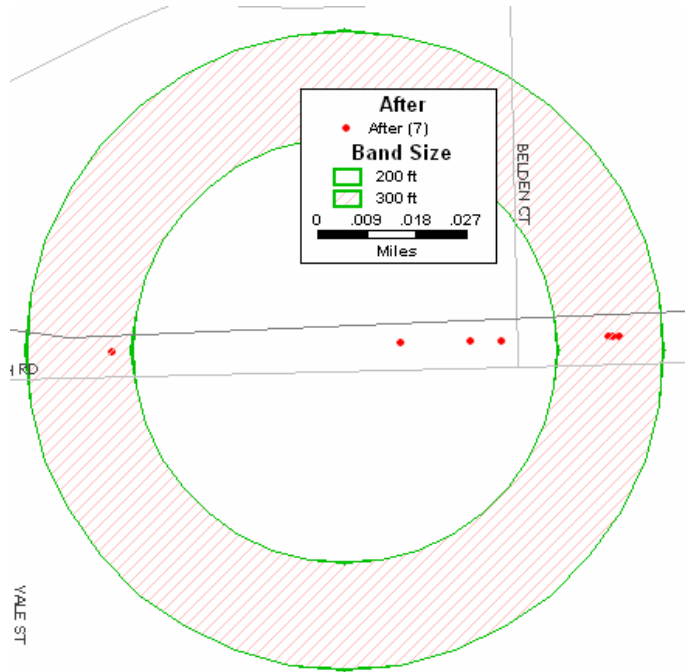
| Crash Type     | Before | %     | After | %     |
|----------------|--------|-------|-------|-------|
| Single vehicle | 4      | 4.5   | 0     | 0.0   |
| Head-on        | 19     | 21.3  | 5     | 20.8  |
| Angle          | 23     | 25.8  | 9     | 37.5  |
| Rear-end       | 26     | 29.2  | 5     | 20.8  |
| Sideswipe      | 15     | 16.9  | 4     | 16.7  |
| Other/unknown  | 2      | 2.2   | 1     | 4.2   |
| Total          | 89     | 100.0 | 24    | 100.0 |

### M14 (Plymouth Road) and Ford Transmission

Date of Signal Optimization: May 1, 2004



1,217 days before



609 days after

| Injury Severity | Before | %     | After | %     |
|-----------------|--------|-------|-------|-------|
| Fatal           | 0      | 0.0   | 0     | 0.0   |
| A-Injury        | 1      | 5.6   | 0     | 0.0   |
| B-Injury        | 1      | 5.6   | 1     | 14.3  |
| C-Injury        | 4      | 22.2  | 0     | 0.0   |
| O-Injury        | 12     | 66.7  | 6     | 85.7  |
| Total           | 18     | 100.0 | 7     | 100.0 |

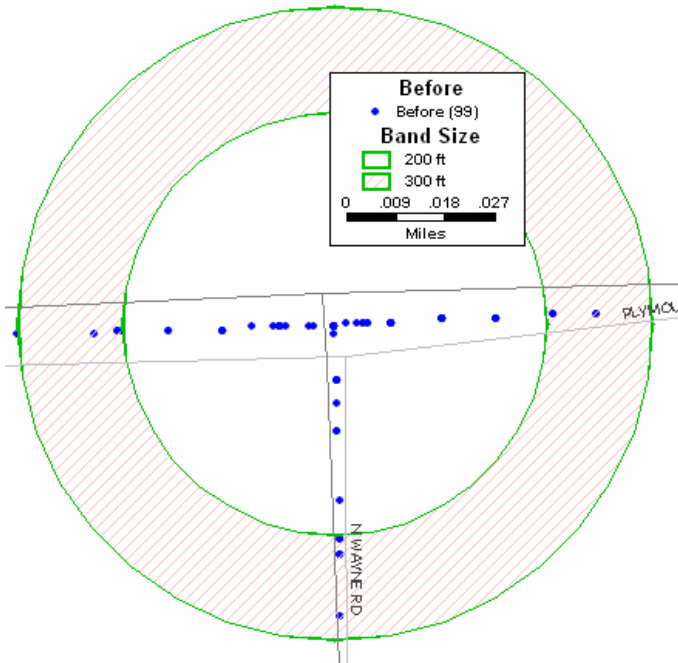
| Time of Day   | Before | %     | After | %     |
|---------------|--------|-------|-------|-------|
| 6am - 9:59am  | 1      | 5.6   | 2     | 28.6  |
| 10am - 3:59pm | 7      | 38.9  | 4     | 57.1  |
| 4pm - 7:59pm  | 4      | 22.2  | 1     | 14.3  |
| 8pm - 5:59am  | 5      | 27.8  | 0     | 0.0   |
| Unknown       | 1      | 5.6   | 0     | 0.0   |
| Total         | 18     | 100.0 | 7     | 100.0 |

| Day of Week | Before | %     | After | %     |
|-------------|--------|-------|-------|-------|
| Sunday      | 1      | 5.6   | 0     | 0.0   |
| Monday      | 3      | 16.7  | 0     | 0.0   |
| Tuesday     | 1      | 5.6   | 1     | 14.3  |
| Wednesday   | 3      | 16.7  | 2     | 28.6  |
| Thursday    | 1      | 5.6   | 1     | 14.3  |
| Friday      | 7      | 38.9  | 2     | 28.6  |
| Saturday    | 2      | 11.1  | 1     | 14.3  |
| Total       | 18     | 100.0 | 7     | 100.0 |

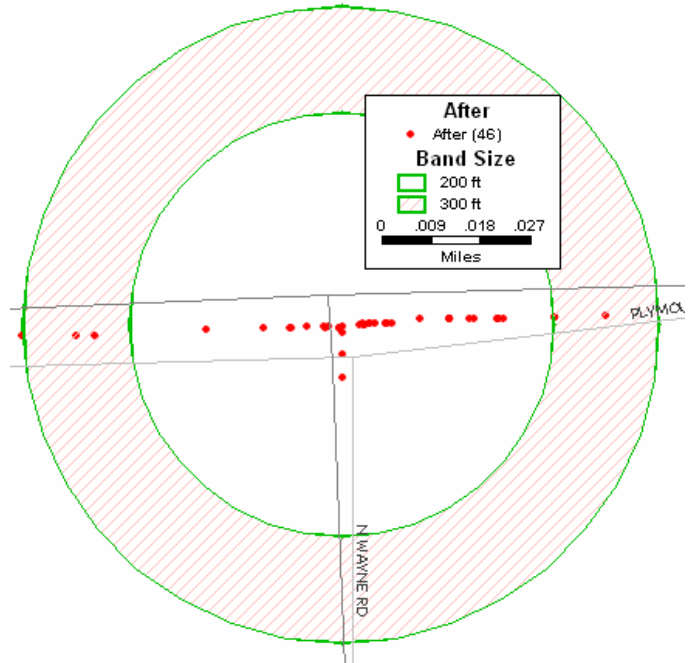
| Crash Type     | Before | %     | After | %     |
|----------------|--------|-------|-------|-------|
| Single vehicle | 3      | 16.7  | 0     | 0.0   |
| Head-on        | 0      | 0.0   | 0     | 0.0   |
| Angle          | 3      | 16.7  | 2     | 28.6  |
| Rear-end       | 10     | 55.6  | 4     | 57.1  |
| Sideswipe      | 1      | 5.6   | 1     | 14.3  |
| Other/unknown  | 1      | 5.6   | 0     | 0.0   |
| Total          | 18     | 100.0 | 7     | 100.0 |

### M14 (Plymouth Road) and Wayne

Date of Signal Optimization: May 1, 2004



1,217 days before



609 days after

| Injury Severity | Before | %     | After | %     |
|-----------------|--------|-------|-------|-------|
| Fatal           | 0      | 0.0   | 0     | 0.0   |
| A-Injury        | 0      | 0.0   | 0     | 0.0   |
| B-Injury        | 5      | 5.1   | 0     | 0.0   |
| C-Injury        | 16     | 16.2  | 10    | 21.7  |
| O-Injury        | 78     | 78.8  | 36    | 78.3  |
| Total           | 99     | 100.0 | 46    | 100.0 |

| Time of Day   | Before | %     | After | %     |
|---------------|--------|-------|-------|-------|
| 6am - 9:59am  | 11     | 11.1  | 1     | 2.2   |
| 10am - 3:59pm | 42     | 42.4  | 28    | 60.9  |
| 4pm - 7:59pm  | 27     | 27.3  | 10    | 21.7  |
| 8pm - 5:59am  | 12     | 12.1  | 7     | 15.2  |
| Unknown       | 7      | 7.1   | 0     | 0.0   |
| Total         | 99     | 100.0 | 46    | 100.0 |

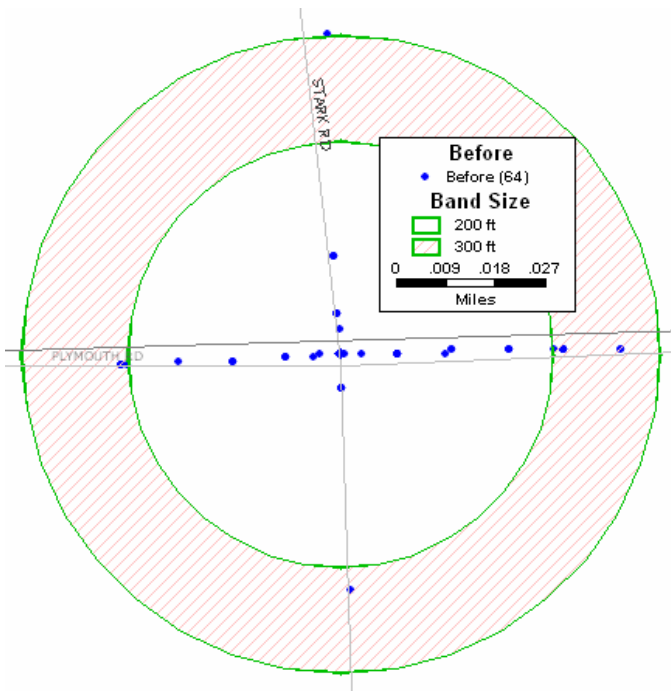
| Day of Week | Before | %     | After | %     |
|-------------|--------|-------|-------|-------|
| Sunday      | 7      | 7.1   | 2     | 4.3   |
| Monday      | 19     | 19.2  | 7     | 15.2  |
| Tuesday     | 16     | 16.2  | 8     | 17.4  |
| Wednesday   | 18     | 18.2  | 10    | 21.7  |
| Thursday    | 13     | 13.1  | 7     | 15.2  |
| Friday      | 19     | 19.2  | 9     | 19.6  |
| Saturday    | 7      | 7.1   | 3     | 6.5   |
| Total       | 99     | 100.0 | 46    | 100.0 |

| Crash Type     | Before | %     | After | %     |
|----------------|--------|-------|-------|-------|
| Single vehicle | 1      | 1.0   | 2     | 4.3   |
| Head-on        | 1      | 1.0   | 5     | 10.9  |
| Angle          | 16     | 16.2  | 9     | 19.6  |
| Rear-end       | 55     | 55.6  | 19    | 41.3  |
| Sideswipe      | 25     | 25.3  | 11    | 23.9  |
| Other/unknown  | 1      | 1.0   | 0     | 0.0   |
| Total          | 99     | 100.0 | 46    | 100.0 |

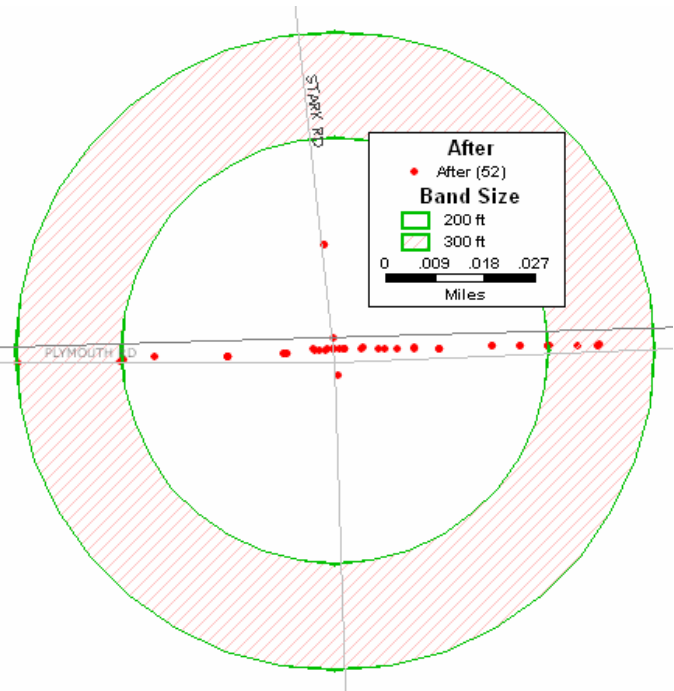


### M14 (Plymouth Road) and Stark

Date of Signal Optimization: May 1, 2004



1,217 days before



609 days after

| Injury Severity | Before | %     | After | %     |
|-----------------|--------|-------|-------|-------|
| Fatal           | 0      | 0.0   | 0     | 0.0   |
| A-Injury        | 1      | 1.6   | 1     | 1.9   |
| B-Injury        | 2      | 3.1   | 3     | 5.8   |
| C-Injury        | 10     | 15.6  | 6     | 11.5  |
| O-Injury        | 51     | 79.7  | 42    | 80.8  |
| Total           | 64     | 100.0 | 52    | 100.0 |

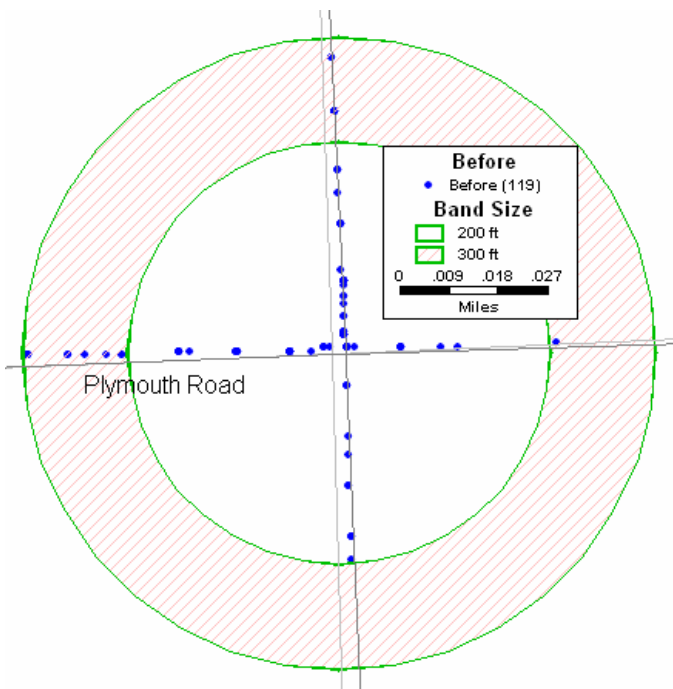
| Time of Day   | Before | %     | After | %     |
|---------------|--------|-------|-------|-------|
| 6am - 9:59am  | 7      | 10.9  | 6     | 11.5  |
| 10am - 3:59pm | 27     | 42.2  | 25    | 48.1  |
| 4pm - 7:59pm  | 14     | 21.9  | 15    | 28.8  |
| 8pm - 5:59am  | 9      | 14.1  | 6     | 11.5  |
| Unknown       | 7      | 10.9  | 0     | 0.0   |
| Total         | 64     | 100.0 | 52    | 100.0 |

| Day of Week | Before | %     | After | %     |
|-------------|--------|-------|-------|-------|
| Sunday      | 0      | 0.0   | 3     | 5.8   |
| Monday      | 7      | 10.9  | 7     | 13.5  |
| Tuesday     | 15     | 23.4  | 9     | 17.3  |
| Wednesday   | 16     | 25.0  | 14    | 26.9  |
| Thursday    | 10     | 15.6  | 6     | 11.5  |
| Friday      | 12     | 18.8  | 5     | 9.6   |
| Saturday    | 4      | 6.3   | 8     | 15.4  |
| Total       | 64     | 100.0 | 52    | 100.0 |

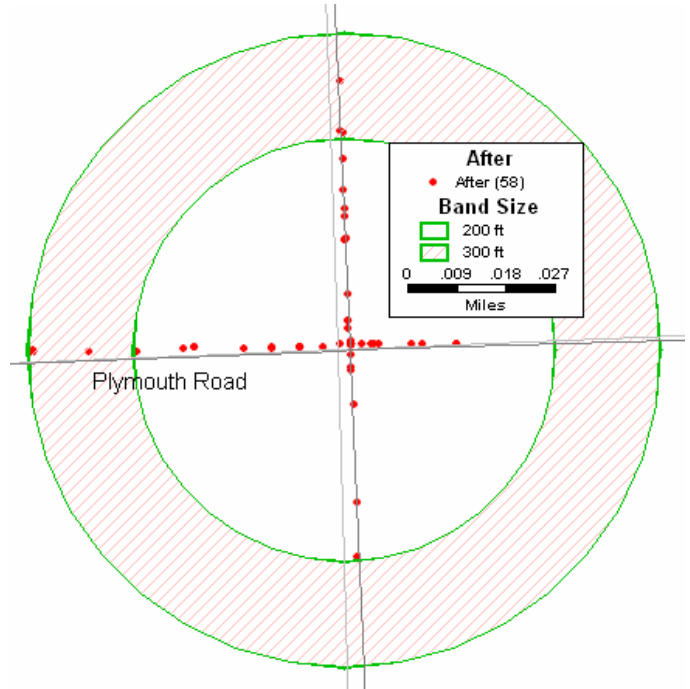
| Crash Type     | Before | %     | After | %     |
|----------------|--------|-------|-------|-------|
| Single vehicle | 4      | 6.3   | 1     | 1.9   |
| Head-on        | 4      | 6.3   | 6     | 11.5  |
| Angle          | 19     | 29.7  | 15    | 28.8  |
| Rear-end       | 28     | 43.8  | 26    | 50.0  |
| Sideswipe      | 5      | 7.8   | 4     | 7.7   |
| Other/unknown  | 4      | 6.3   | 0     | 0.0   |
| Total          | 64     | 100.0 | 52    | 100.0 |

### M14 (Plymouth Road) and Farmington

Date of Signal Optimization: May 1, 2004



1,217 days before



609 days after

| Injury Severity | Before | %     | After | %     |
|-----------------|--------|-------|-------|-------|
| Fatal           | 0      | 0.0   | 0     | 0.0   |
| A-Injury        | 0      | 0.0   | 1     | 1.7   |
| B-Injury        | 3      | 2.5   | 4     | 6.9   |
| C-Injury        | 12     | 10.1  | 4     | 6.9   |
| O-Injury        | 104    | 87.4  | 49    | 84.5  |
| Total           | 119    | 100.0 | 58    | 100.0 |

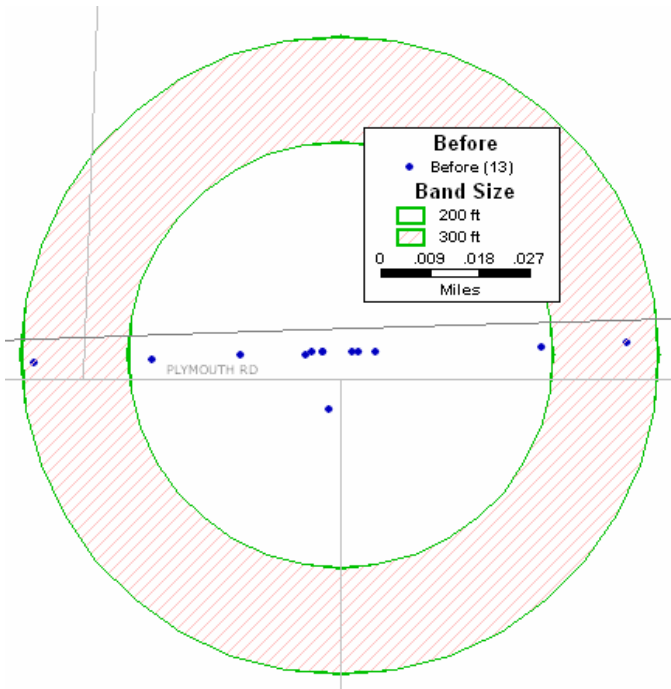
| Time of Day   | Before | %     | After | %     |
|---------------|--------|-------|-------|-------|
| 6am - 9:59am  | 19     | 16.0  | 7     | 12.1  |
| 10am - 3:59pm | 52     | 43.7  | 29    | 50.0  |
| 4pm - 7:59pm  | 32     | 26.9  | 18    | 31.0  |
| 8pm - 5:59am  | 9      | 7.6   | 4     | 6.9   |
| Unknown       | 7      | 5.9   | 0     | 0.0   |
| Total         | 119    | 100.0 | 58    | 100.0 |

| Day of Week | Before | %     | After | %     |
|-------------|--------|-------|-------|-------|
| Sunday      | 2      | 1.7   | 5     | 8.6   |
| Monday      | 14     | 11.8  | 9     | 15.5  |
| Tuesday     | 22     | 18.5  | 10    | 17.2  |
| Wednesday   | 20     | 16.8  | 13    | 22.4  |
| Thursday    | 19     | 16.0  | 6     | 10.3  |
| Friday      | 27     | 22.7  | 12    | 20.7  |
| Saturday    | 15     | 12.6  | 3     | 5.2   |
| Total       | 119    | 100.0 | 58    | 100.0 |

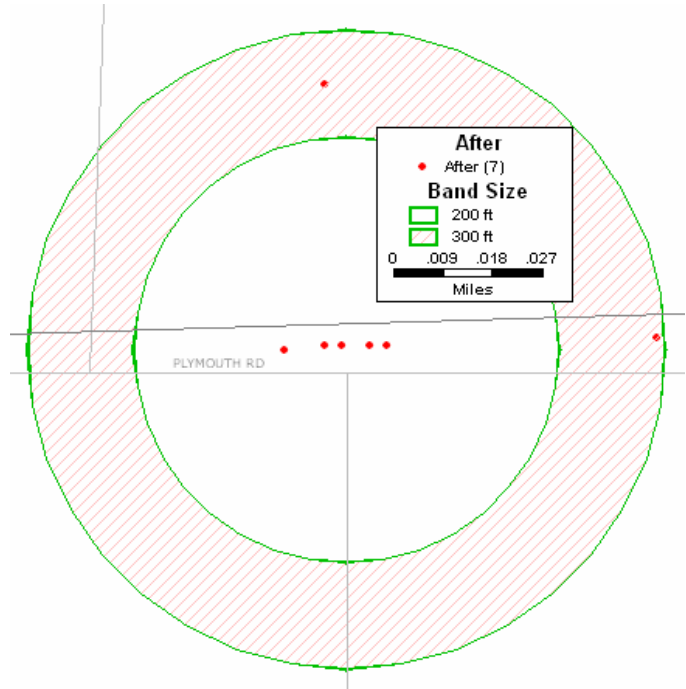
| Crash Type     | Before | %     | After | %     |
|----------------|--------|-------|-------|-------|
| Single vehicle | 3      | 2.5   | 1     | 1.7   |
| Head-on        | 5      | 4.2   | 6     | 10.3  |
| Angle          | 30     | 25.2  | 17    | 29.3  |
| Rear-end       | 60     | 50.4  | 29    | 50.0  |
| Sideswipe      | 15     | 12.6  | 4     | 6.9   |
| Other/unknown  | 6      | 5.0   | 1     | 1.7   |
| Total          | 119    | 100.0 | 58    | 100.0 |

### M14 (Plymouth Road) and Hubbard

Date of Signal Optimization: May 1, 2004



1,217 days before



609 days after

| Injury Severity | Before | %     | After | %     |
|-----------------|--------|-------|-------|-------|
| Fatal           | 0      | 0.0   | 1     | 14.3  |
| A-Injury        | 0      | 0.0   | 0     | 0.0   |
| B-Injury        | 1      | 7.7   | 1     | 14.3  |
| C-Injury        | 5      | 38.5  | 3     | 42.9  |
| O-Injury        | 7      | 53.8  | 2     | 28.6  |
| Total           | 13     | 100.0 | 7     | 100.0 |

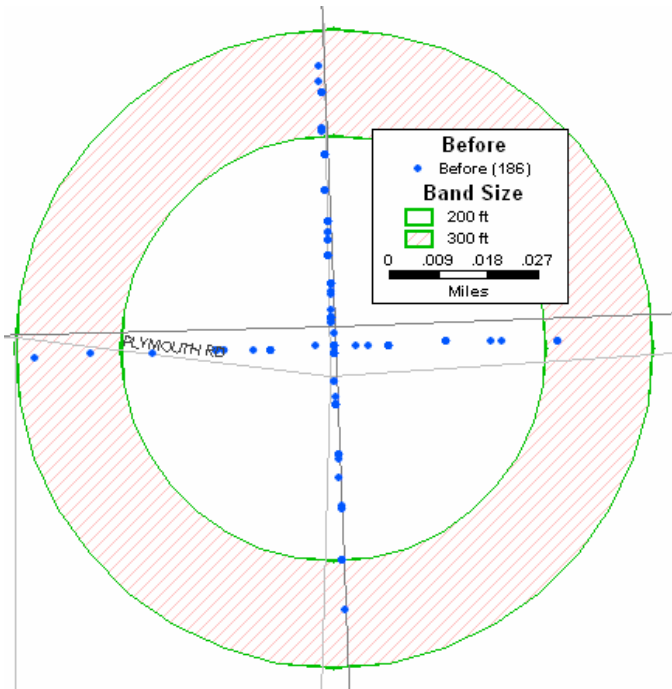
| Time of Day   | Before | %     | After | %     |
|---------------|--------|-------|-------|-------|
| 6am - 9:59am  | 1      | 7.7   | 0     | 0.0   |
| 10am - 3:59pm | 7      | 53.8  | 6     | 85.7  |
| 4pm - 7:59pm  | 3      | 23.1  | 1     | 14.3  |
| 8pm - 5:59am  | 0      | 0.0   | 0     | 0.0   |
| Unknown       | 2      | 15.4  | 0     | 0.0   |
| Total         | 13     | 100.0 | 7     | 100.0 |

| Day of Week | Before | %     | After | %     |
|-------------|--------|-------|-------|-------|
| Sunday      | 0      | 0.0   | 2     | 28.6  |
| Monday      | 4      | 30.8  | 0     | 0.0   |
| Tuesday     | 2      | 15.4  | 0     | 0.0   |
| Wednesday   | 1      | 7.7   | 0     | 0.0   |
| Thursday    | 2      | 15.4  | 3     | 42.9  |
| Friday      | 4      | 30.8  | 1     | 14.3  |
| Saturday    | 0      | 0.0   | 1     | 14.3  |
| Total       | 13     | 100.0 | 7     | 100.0 |

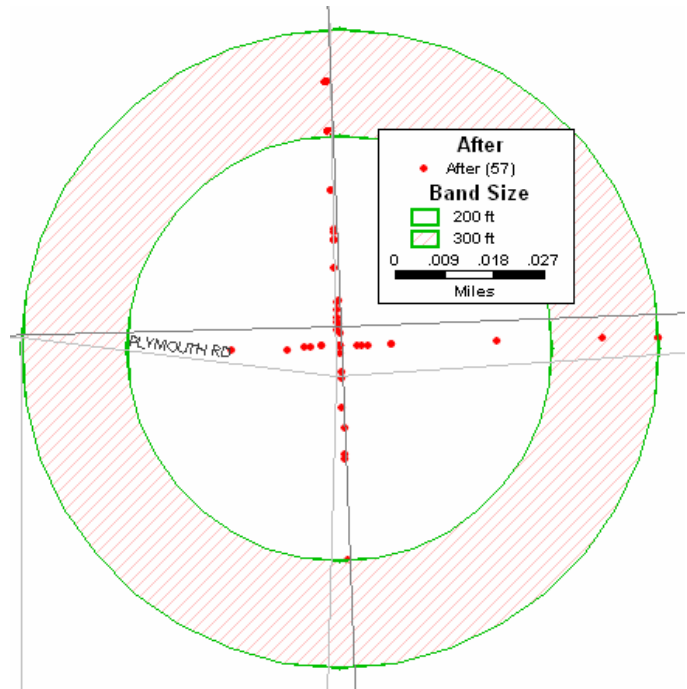
| Crash Type     | Before | %     | After | %     |
|----------------|--------|-------|-------|-------|
| Single vehicle | 2      | 15.4  | 1     | 14.3  |
| Head-on        | 1      | 7.7   | 0     | 0.0   |
| Angle          | 2      | 15.4  | 3     | 42.9  |
| Rear-end       | 8      | 61.5  | 1     | 14.3  |
| Sideswipe      | 0      | 0.0   | 1     | 14.3  |
| Other/unknown  | 0      | 0.0   | 1     | 14.3  |
| Total          | 13     | 100.0 | 7     | 100.0 |

### M14 (Plymouth Road) and Merriman

Date of Signal Optimization: May 1, 2004



1,217 days before



609 days after

| Injury Severity | Before | %     | After | %     |
|-----------------|--------|-------|-------|-------|
| Fatal           | 0      | 0.0   | 1     | 1.8   |
| A-Injury        | 0      | 0.0   | 0     | 0.0   |
| B-Injury        | 9      | 4.8   | 2     | 3.5   |
| C-Injury        | 29     | 15.6  | 11    | 19.3  |
| O-Injury        | 148    | 79.6  | 43    | 75.4  |
| Total           | 186    | 100.0 | 57    | 100.0 |

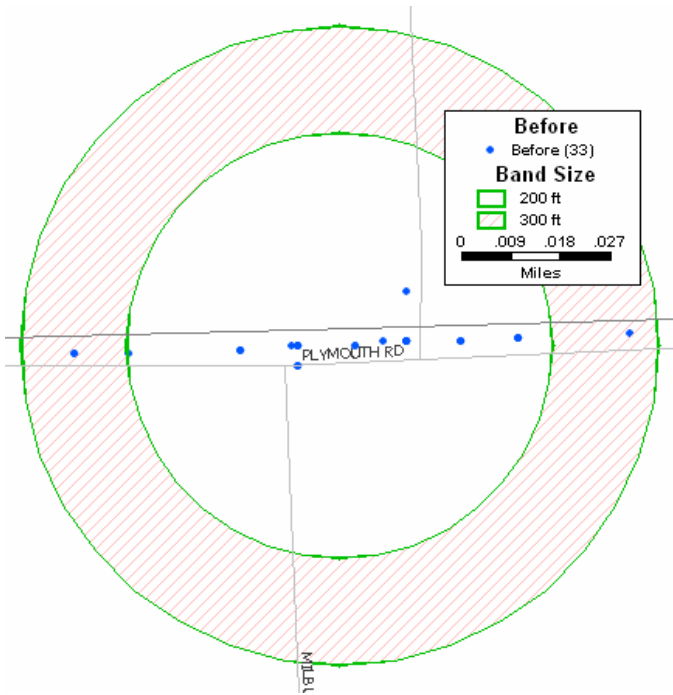
| Time of Day   | Before | %     | After | %     |
|---------------|--------|-------|-------|-------|
| 6am - 9:59am  | 29     | 15.6  | 7     | 12.3  |
| 10am - 3:59pm | 69     | 37.1  | 21    | 36.8  |
| 4pm - 7:59pm  | 64     | 34.4  | 22    | 38.6  |
| 8pm - 5:59am  | 13     | 7.0   | 7     | 12.3  |
| Unknown       | 11     | 5.9   | 0     | 0.0   |
| Total         | 186    | 100.0 | 57    | 100.0 |

| Day of Week | Before | %     | After | %     |
|-------------|--------|-------|-------|-------|
| Sunday      | 13     | 7.0   | 2     | 3.5   |
| Monday      | 34     | 18.3  | 13    | 22.8  |
| Tuesday     | 35     | 18.8  | 9     | 15.8  |
| Wednesday   | 27     | 14.5  | 13    | 22.8  |
| Thursday    | 39     | 21.0  | 9     | 15.8  |
| Friday      | 26     | 14.0  | 8     | 14.0  |
| Saturday    | 12     | 6.5   | 3     | 5.3   |
| Total       | 186    | 100.0 | 57    | 100.0 |

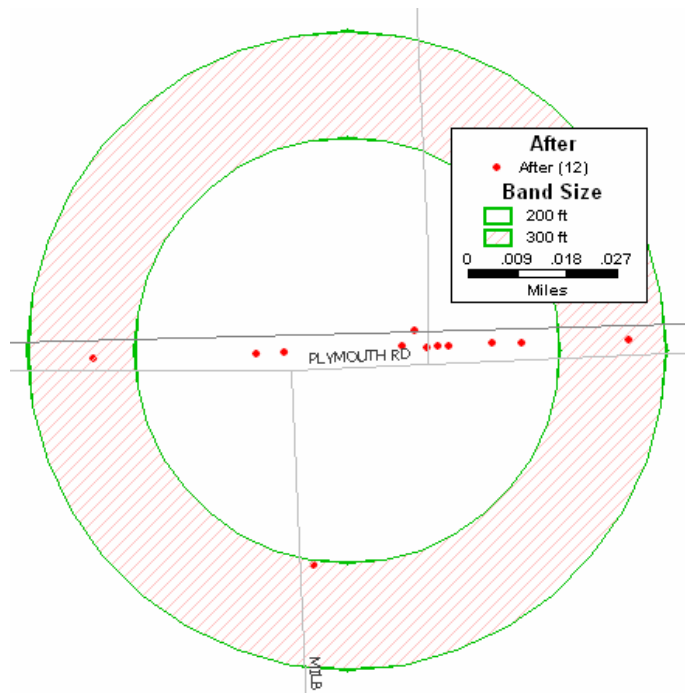
| Crash Type     | Before | %     | After | %     |
|----------------|--------|-------|-------|-------|
| Single vehicle | 4      | 2.2   | 2     | 3.5   |
| Head-on        | 9      | 4.8   | 4     | 7.0   |
| Angle          | 68     | 36.6  | 26    | 45.6  |
| Rear-end       | 87     | 46.8  | 23    | 40.4  |
| Sideswipe      | 13     | 7.0   | 2     | 3.5   |
| Other/unknown  | 5      | 2.7   | 0     | 0.0   |
| Total          | 186    | 100.0 | 57    | 100.0 |

**M14 (Plymouth Road) and Milburn/Sears**

Date of Signal Optimization: May 1, 2004



1,217 days before



609 days after

| Injury Severity | Before | %     | After | %     |
|-----------------|--------|-------|-------|-------|
| Fatal           | 0      | 0.0   | 0     | 0.0   |
| A-Injury        | 0      | 0.0   | 0     | 0.0   |
| B-Injury        | 2      | 6.1   | 0     | 0.0   |
| C-Injury        | 5      | 15.2  | 2     | 16.7  |
| O-Injury        | 26     | 78.8  | 10    | 83.3  |
| Total           | 33     | 100.0 | 12    | 100.0 |

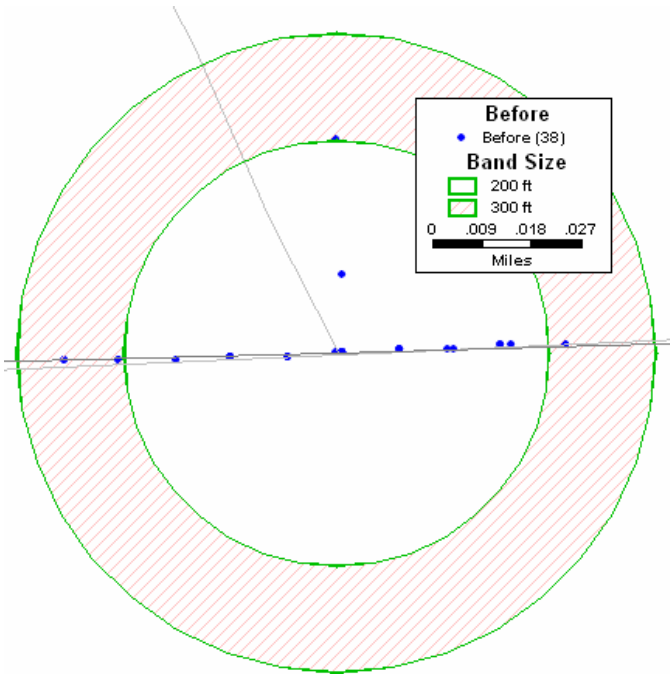
| Time of Day   | Before | %     | After | %     |
|---------------|--------|-------|-------|-------|
| 6am - 9:59am  | 2      | 6.1   | 2     | 16.7  |
| 10am - 3:59pm | 18     | 54.5  | 5     | 41.7  |
| 4pm - 7:59pm  | 8      | 24.2  | 4     | 33.3  |
| 8pm - 5:59am  | 4      | 12.1  | 1     | 8.3   |
| Unknown       | 1      | 3.0   | 0     | 0.0   |
| Total         | 33     | 100.0 | 12    | 100.0 |

| Day of Week | Before | %     | After | %     |
|-------------|--------|-------|-------|-------|
| Sunday      | 2      | 6.1   | 0     | 0.0   |
| Monday      | 4      | 12.1  | 3     | 25.0  |
| Tuesday     | 3      | 9.1   | 2     | 16.7  |
| Wednesday   | 8      | 24.2  | 2     | 16.7  |
| Thursday    | 6      | 18.2  | 0     | 0.0   |
| Friday      | 8      | 24.2  | 3     | 25.0  |
| Saturday    | 2      | 6.1   | 2     | 16.7  |
| Total       | 33     | 100.0 | 12    | 100.0 |

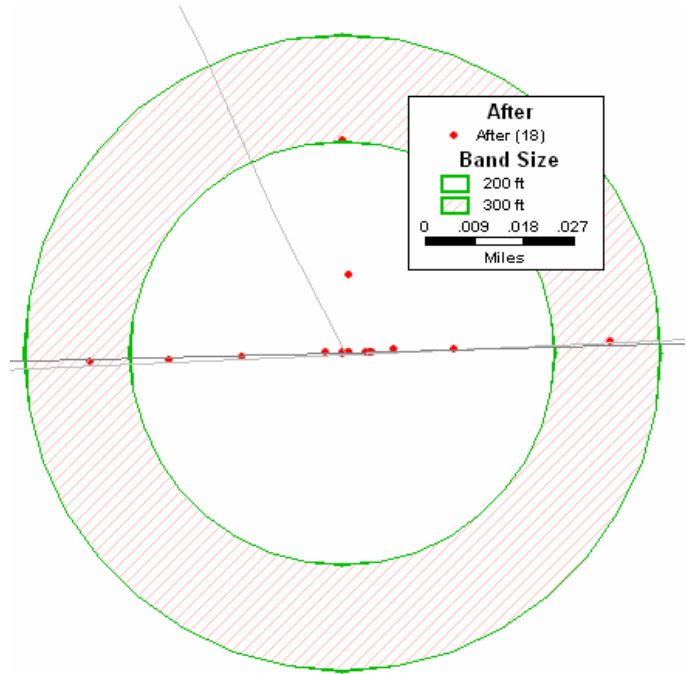
| Crash Type     | Before | %     | After | %     |
|----------------|--------|-------|-------|-------|
| Single vehicle | 1      | 3.0   | 0     | 0.0   |
| Head-on        | 2      | 6.1   | 0     | 0.0   |
| Angle          | 7      | 21.2  | 2     | 16.7  |
| Rear-end       | 18     | 54.5  | 5     | 41.7  |
| Sideswipe      | 3      | 9.1   | 4     | 33.3  |
| Other/unknown  | 2      | 6.1   | 1     | 8.3   |
| Total          | 33     | 100.0 | 12    | 100.0 |

**M14 (Plymouth Road) and Tech Center**

Date of Signal Optimization: May 1, 2004



1,217 days before



609 days after

| Injury Severity | Before | %     | After | %     |
|-----------------|--------|-------|-------|-------|
| Fatal           | 0      | 0.0   | 0     | 0.0   |
| A-Injury        | 0      | 0.0   | 0     | 0.0   |
| B-Injury        | 3      | 7.9   | 2     | 11.1  |
| C-Injury        | 5      | 13.2  | 2     | 11.1  |
| O-Injury        | 30     | 78.9  | 14    | 77.8  |
| Total           | 38     | 100.0 | 18    | 100.0 |

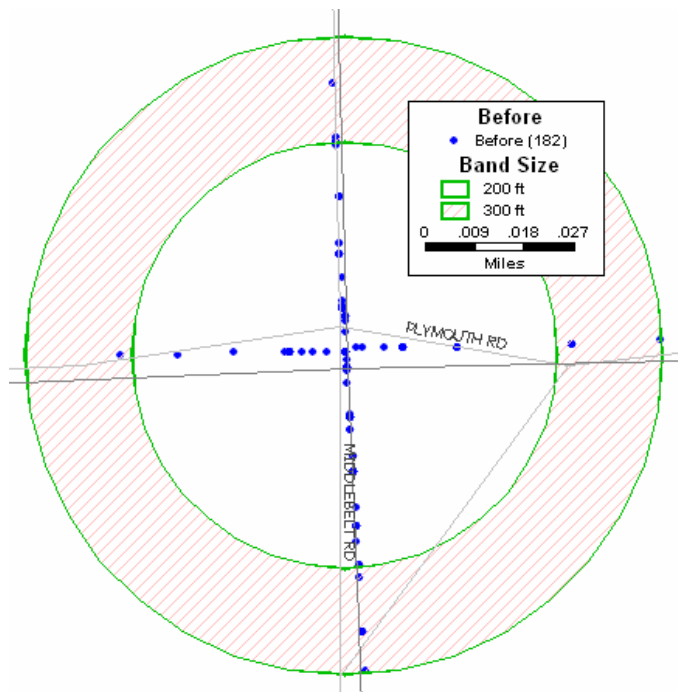
| Time of Day   | Before | %     | After | %     |
|---------------|--------|-------|-------|-------|
| 6am - 9:59am  | 4      | 10.5  | 3     | 16.7  |
| 10am - 3:59pm | 18     | 47.4  | 8     | 44.4  |
| 4pm - 7:59pm  | 12     | 31.6  | 4     | 22.2  |
| 8pm - 5:59am  | 2      | 5.3   | 3     | 16.7  |
| Unknown       | 2      | 5.3   | 0     | 0.0   |
| Total         | 38     | 100.0 | 18    | 100.0 |

| Day of Week | Before | %     | After | %     |
|-------------|--------|-------|-------|-------|
| Sunday      | 3      | 7.9   | 1     | 5.6   |
| Monday      | 3      | 7.9   | 2     | 11.1  |
| Tuesday     | 5      | 13.2  | 5     | 27.8  |
| Wednesday   | 6      | 15.8  | 5     | 27.8  |
| Thursday    | 7      | 18.4  | 0     | 0.0   |
| Friday      | 12     | 31.6  | 3     | 16.7  |
| Saturday    | 2      | 5.3   | 2     | 11.1  |
| Total       | 38     | 100.0 | 18    | 100.0 |

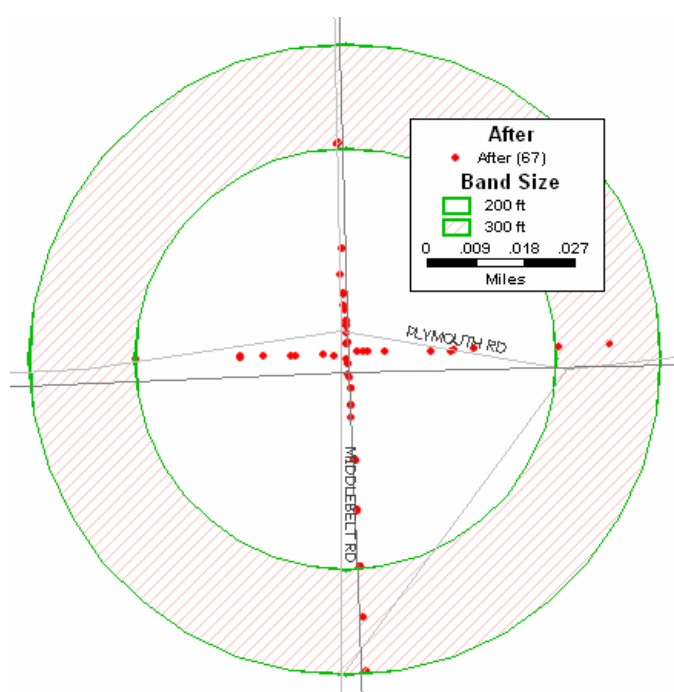
| Crash Type     | Before | %     | After | %     |
|----------------|--------|-------|-------|-------|
| Single vehicle | 2      | 5.3   | 1     | 5.6   |
| Head-on        | 3      | 7.9   | 1     | 5.6   |
| Angle          | 17     | 44.7  | 8     | 44.4  |
| Rear-end       | 11     | 28.9  | 8     | 44.4  |
| Sideswipe      | 5      | 13.2  | 0     | 0.0   |
| Other/unknown  | 0      | 0.0   | 0     | 0.0   |
| Total          | 38     | 100.0 | 18    | 100.0 |

### M14 (Plymouth Road) and Middlebelt

Date of Signal Optimization: May 1, 2004



1,217 days before



609 days after

| Injury Severity | Before | %     | After | %     |
|-----------------|--------|-------|-------|-------|
| Fatal           | 0      | 0.0   | 0     | 0.0   |
| A-Injury        | 2      | 1.1   | 1     | 1.5   |
| B-Injury        | 4      | 2.2   | 2     | 3.0   |
| C-Injury        | 39     | 21.4  | 13    | 19.4  |
| O-Injury        | 137    | 75.3  | 51    | 76.1  |
| Total           | 182    | 100.0 | 67    | 100.0 |

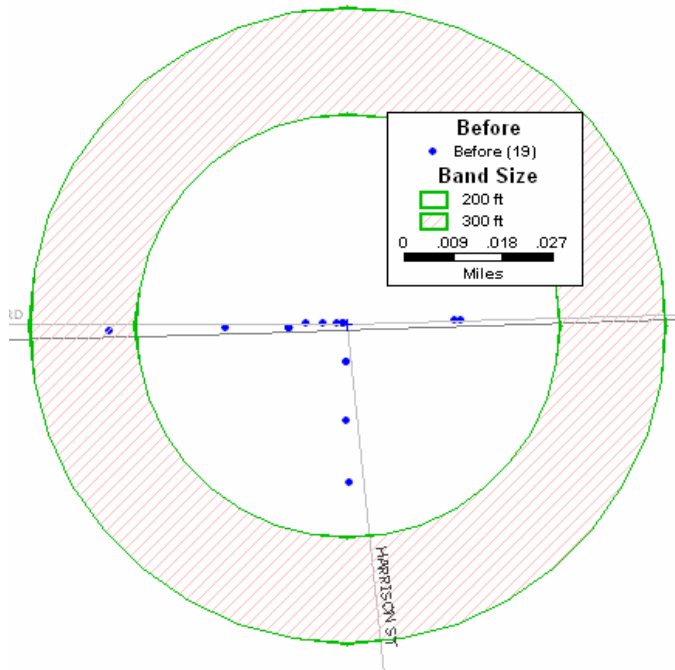
| Time of Day   | Before | %     | After | %     |
|---------------|--------|-------|-------|-------|
| 6am - 9:59am  | 25     | 13.7  | 4     | 6.0   |
| 10am - 3:59pm | 82     | 45.1  | 31    | 46.3  |
| 4pm - 7:59pm  | 45     | 24.7  | 23    | 34.3  |
| 8pm - 5:59am  | 25     | 13.7  | 9     | 13.4  |
| Unknown       | 5      | 2.7   | 0     | 0.0   |
| Total         | 182    | 100.0 | 67    | 100.0 |

| Day of Week | Before | %     | After | %     |
|-------------|--------|-------|-------|-------|
| Sunday      | 17     | 9.3   | 3     | 4.5   |
| Monday      | 22     | 12.1  | 11    | 16.4  |
| Tuesday     | 18     | 9.9   | 13    | 19.4  |
| Wednesday   | 22     | 12.1  | 12    | 17.9  |
| Thursday    | 37     | 20.3  | 12    | 17.9  |
| Friday      | 37     | 20.3  | 9     | 13.4  |
| Saturday    | 29     | 15.9  | 7     | 10.4  |
| Total       | 182    | 100.0 | 67    | 100.0 |

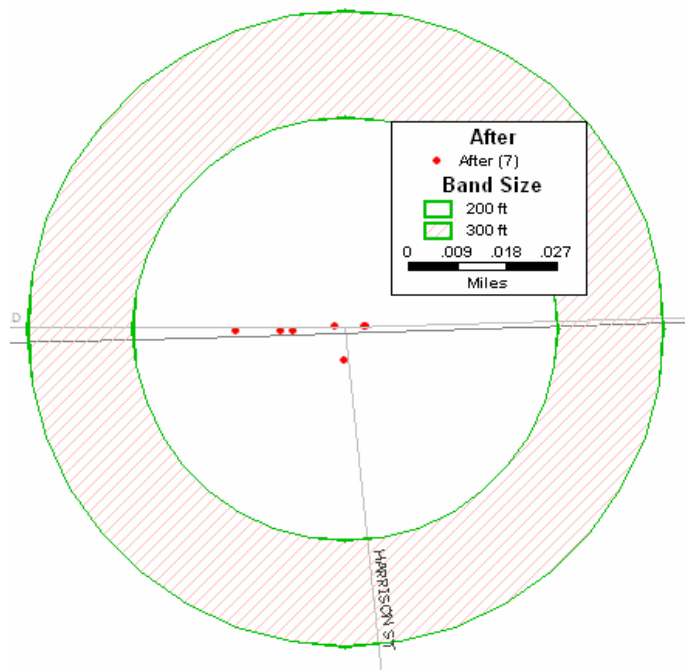
| Crash Type     | Before | %     | After | %     |
|----------------|--------|-------|-------|-------|
| Single vehicle | 6      | 3.3   | 3     | 4.5   |
| Head-on        | 15     | 8.2   | 4     | 6.0   |
| Angle          | 47     | 25.8  | 14    | 20.9  |
| Rear-end       | 91     | 50.0  | 33    | 49.3  |
| Sideswipe      | 18     | 9.9   | 11    | 16.4  |
| Other/unknown  | 5      | 2.7   | 2     | 3.0   |
| Total          | 182    | 100.0 | 67    | 100.0 |

### M14 (Plymouth Road) and Harrison

Date of Signal Optimization: May 1, 2004



1,217 days before



609 days after

| Injury Severity | Before | %     | After | %     |
|-----------------|--------|-------|-------|-------|
| Fatal           | 0      | 0.0   | 0     | 0.0   |
| A-Injury        | 1      | 5.3   | 0     | 0.0   |
| B-Injury        | 1      | 5.3   | 0     | 0.0   |
| C-Injury        | 5      | 26.3  | 2     | 28.6  |
| O-Injury        | 12     | 63.2  | 5     | 71.4  |
| Total           | 19     | 100.0 | 7     | 100.0 |

| Time of Day   | Before | %     | After | %     |
|---------------|--------|-------|-------|-------|
| 6am - 9:59am  | 4      | 21.1  | 0     | 0.0   |
| 10am - 3:59pm | 9      | 47.4  | 7     | 100.0 |
| 4pm - 7:59pm  | 4      | 21.1  | 0     | 0.0   |
| 8pm - 5:59am  | 2      | 10.5  | 0     | 0.0   |
| Unknown       | 0      | 0.0   | 0     | 0.0   |
| Total         | 19     | 100.0 | 7     | 100.0 |

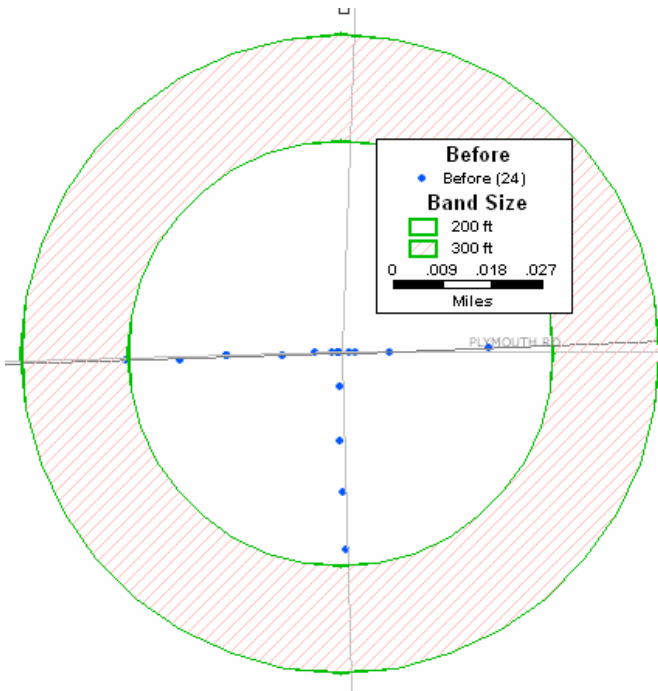
| Day of Week | Before | %     | After | %     |
|-------------|--------|-------|-------|-------|
| Sunday      | 3      | 15.8  | 0     | 0.0   |
| Monday      | 3      | 15.8  | 0     | 0.0   |
| Tuesday     | 1      | 5.3   | 2     | 28.6  |
| Wednesday   | 3      | 15.8  | 0     | 0.0   |
| Thursday    | 3      | 15.8  | 2     | 28.6  |
| Friday      | 4      | 21.1  | 1     | 14.3  |
| Saturday    | 2      | 10.5  | 2     | 28.6  |
| Total       | 19     | 100.0 | 7     | 100.0 |

| Crash Type     | Before | %     | After | %     |
|----------------|--------|-------|-------|-------|
| Single vehicle | 3      | 15.8  | 0     | 0.0   |
| Head-on        | 1      | 5.3   | 0     | 0.0   |
| Angle          | 6      | 31.6  | 1     | 14.3  |
| Rear-end       | 8      | 42.1  | 5     | 71.4  |
| Sideswipe      | 1      | 5.3   | 0     | 0.0   |
| Other/unknown  | 0      | 0.0   | 1     | 14.3  |
| Total          | 19     | 100.0 | 7     | 100.0 |

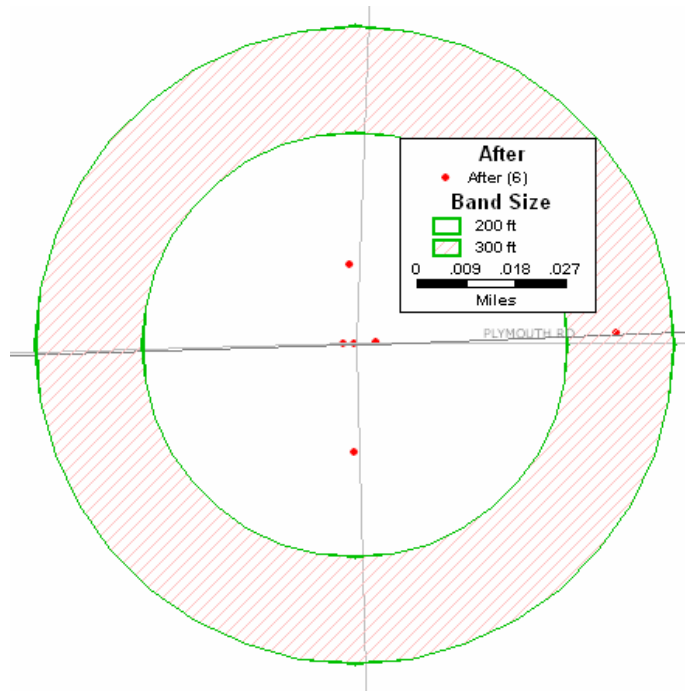


### M14 (Plymouth Road) and Deering

Date of Signal Optimization: May 1, 2004



1,217 days before



609 days after

| Injury Severity | Before | %     | After | %     |
|-----------------|--------|-------|-------|-------|
| Fatal           | 0      | 0.0   | 0     | 0.0   |
| A-Injury        | 1      | 4.2   | 0     | 0.0   |
| B-Injury        | 3      | 12.5  | 0     | 0.0   |
| C-Injury        | 3      | 12.5  | 1     | 16.7  |
| O-Injury        | 17     | 70.8  | 5     | 83.3  |
| Total           | 24     | 100.0 | 6     | 100.0 |

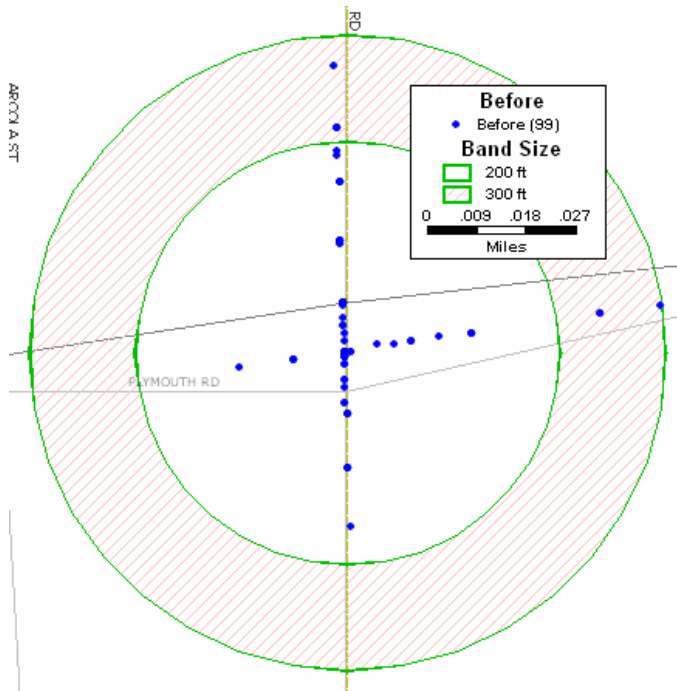
| Time of Day   | Before | %     | After | %     |
|---------------|--------|-------|-------|-------|
| 6am - 9:59am  | 3      | 12.5  | 1     | 16.7  |
| 10am - 3:59pm | 8      | 33.3  | 4     | 66.7  |
| 4pm - 7:59pm  | 6      | 25.0  | 1     | 16.7  |
| 8pm - 5:59am  | 5      | 20.8  | 0     | 0.0   |
| Unknown       | 2      | 8.3   | 0     | 0.0   |
| Total         | 24     | 100.0 | 6     | 100.0 |

| Day of Week | Before | %     | After | %     |
|-------------|--------|-------|-------|-------|
| Sunday      | 2      | 8.3   | 0     | 0.0   |
| Monday      | 2      | 8.3   | 0     | 0.0   |
| Tuesday     | 2      | 8.3   | 1     | 16.7  |
| Wednesday   | 3      | 12.5  | 0     | 0.0   |
| Thursday    | 3      | 12.5  | 1     | 16.7  |
| Friday      | 9      | 37.5  | 1     | 16.7  |
| Saturday    | 3      | 12.5  | 3     | 50.0  |
| Total       | 24     | 100.0 | 6     | 100.0 |

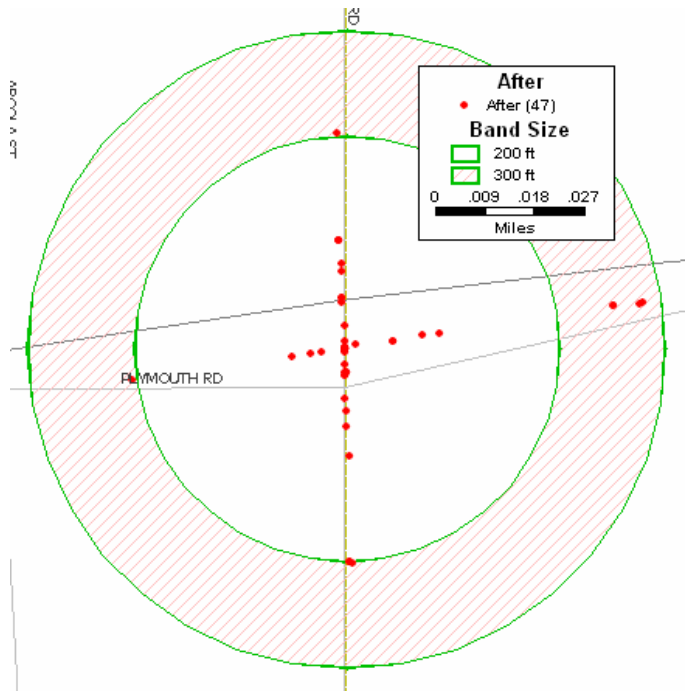
| Crash Type     | Before | %     | After | %     |
|----------------|--------|-------|-------|-------|
| Single vehicle | 1      | 4.2   | 1     | 16.7  |
| Head-on        | 3      | 12.5  | 0     | 0.0   |
| Angle          | 7      | 29.2  | 2     | 33.3  |
| Rear-end       | 9      | 37.5  | 3     | 50.0  |
| Sideswipe      | 0      | 0.0   | 0     | 0.0   |
| Other/unknown  | 4      | 16.7  | 0     | 0.0   |
| Total          | 24     | 100.0 | 6     | 100.0 |

### M14 (Plymouth Road) and Inkster

Date of Signal Optimization: May 1, 2004



1,217 days before



609 days after

| Injury Severity | Before | %     | After | %     |
|-----------------|--------|-------|-------|-------|
| Fatal           | 0      | 0.0   | 0     | 0.0   |
| A-Injury        | 1      | 1.0   | 0     | 0.0   |
| B-Injury        | 1      | 1.0   | 2     | 4.3   |
| C-Injury        | 14     | 14.1  | 12    | 25.5  |
| O-Injury        | 83     | 83.8  | 33    | 70.2  |
| Total           | 99     | 100.0 | 47    | 100.0 |

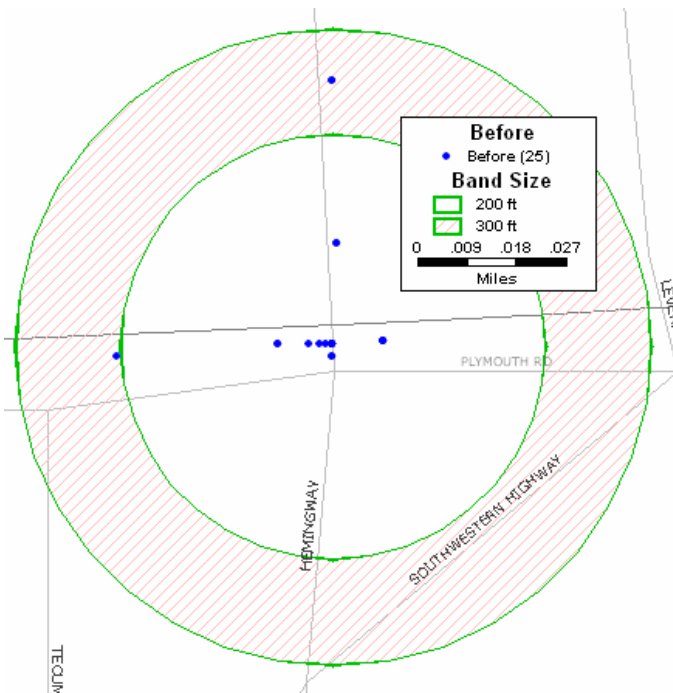
| Time of Day   | Before | %     | After | %     |
|---------------|--------|-------|-------|-------|
| 6am - 9:59am  | 14     | 14.1  | 7     | 14.9  |
| 10am - 3:59pm | 40     | 40.4  | 18    | 38.3  |
| 4pm - 7:59pm  | 27     | 27.3  | 15    | 31.9  |
| 8pm - 5:59am  | 10     | 10.1  | 7     | 14.9  |
| Unknown       | 8      | 8.1   | 0     | 0.0   |
| Total         | 99     | 100.0 | 47    | 100.0 |

| Day of Week | Before | %     | After | %     |
|-------------|--------|-------|-------|-------|
| Sunday      | 8      | 8.1   | 3     | 6.4   |
| Monday      | 16     | 16.2  | 7     | 14.9  |
| Tuesday     | 18     | 18.2  | 8     | 17.0  |
| Wednesday   | 20     | 20.2  | 7     | 14.9  |
| Thursday    | 8      | 8.1   | 5     | 10.6  |
| Friday      | 16     | 16.2  | 9     | 19.1  |
| Saturday    | 13     | 13.1  | 8     | 17.0  |
| Total       | 99     | 100.0 | 47    | 100.0 |

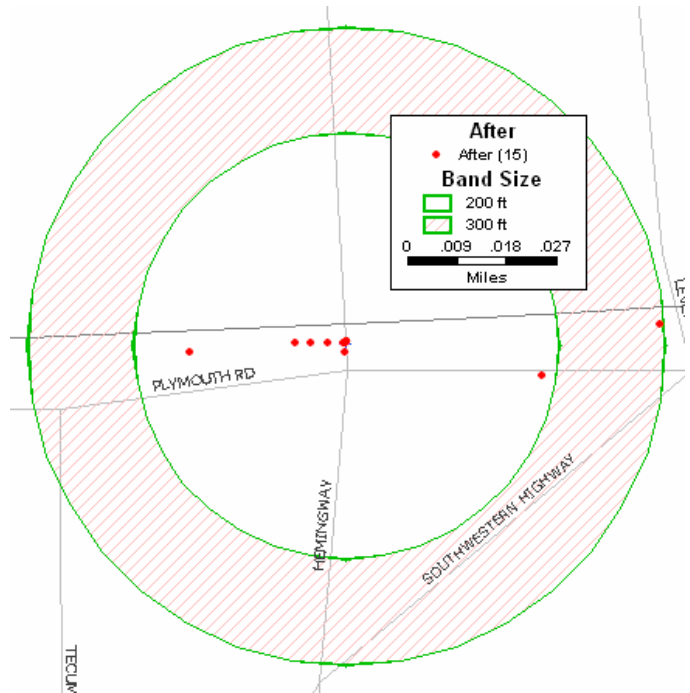
| Crash Type     | Before | %     | After | %     |
|----------------|--------|-------|-------|-------|
| Single vehicle | 1      | 1.0   | 0     | 0.0   |
| Head-on        | 7      | 7.1   | 3     | 6.4   |
| Angle          | 30     | 30.3  | 17    | 36.2  |
| Rear-end       | 48     | 48.5  | 18    | 38.3  |
| Sideswipe      | 9      | 9.1   | 5     | 10.6  |
| Other/unknown  | 4      | 4.0   | 4     | 8.5   |
| Total          | 99     | 100.0 | 47    | 100.0 |

**M14 (Plymouth Road) and Hemingway**

Date of Signal Optimization: May 1, 2004



1,217 days before



609 days after

| Injury Severity | Before | %     | After | %     |
|-----------------|--------|-------|-------|-------|
| Fatal           | 0      | 0.0   | 0     | 0.0   |
| A-Injury        | 0      | 0.0   | 2     | 13.3  |
| B-Injury        | 0      | 0.0   | 1     | 6.7   |
| C-Injury        | 5      | 20.0  | 2     | 13.3  |
| O-Injury        | 20     | 80.0  | 10    | 66.7  |
| Total           | 25     | 100.0 | 15    | 100.0 |

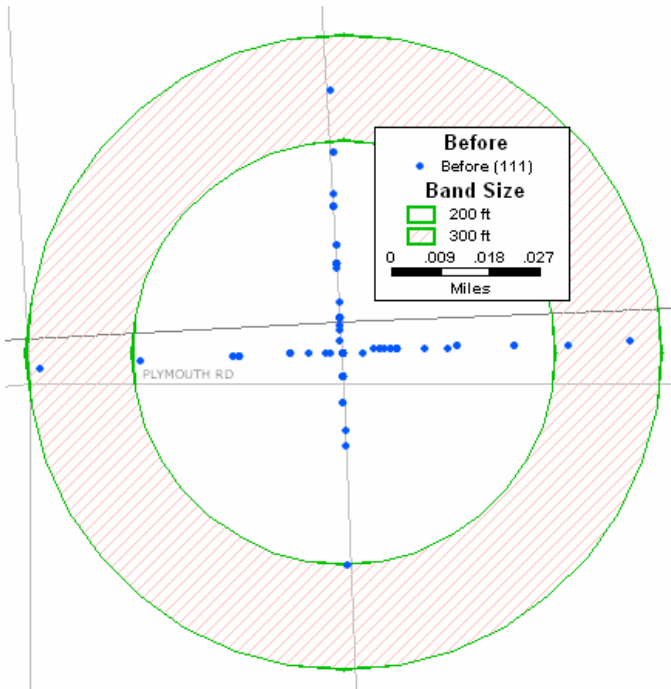
| Time of Day   | Before | %     | After | %     |
|---------------|--------|-------|-------|-------|
| 6am - 9:59am  | 3      | 12.0  | 0     | 0.0   |
| 10am - 3:59pm | 10     | 40.0  | 5     | 33.3  |
| 4pm - 7:59pm  | 7      | 28.0  | 6     | 40.0  |
| 8pm - 5:59am  | 2      | 8.0   | 2     | 13.3  |
| Unknown       | 3      | 12.0  | 2     | 13.3  |
| Total         | 25     | 100.0 | 15    | 100.0 |

| Day of Week | Before | %     | After | %     |
|-------------|--------|-------|-------|-------|
| Sunday      | 0      | 0.0   | 2     | 13.3  |
| Monday      | 6      | 24.0  | 2     | 13.3  |
| Tuesday     | 4      | 16.0  | 0     | 0.0   |
| Wednesday   | 6      | 24.0  | 4     | 26.7  |
| Thursday    | 1      | 4.0   | 1     | 6.7   |
| Friday      | 8      | 32.0  | 3     | 20.0  |
| Saturday    | 0      | 0.0   | 3     | 20.0  |
| Total       | 25     | 100.0 | 15    | 100.0 |

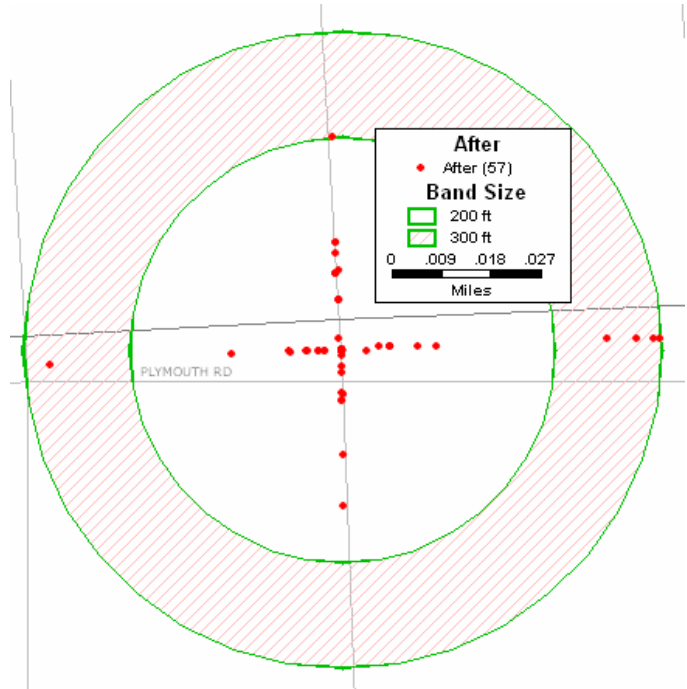
| Crash Type     | Before | %     | After | %     |
|----------------|--------|-------|-------|-------|
| Single vehicle | 0      | 0.0   | 2     | 13.3  |
| Head-on        | 1      | 4.0   | 0     | 0.0   |
| Angle          | 7      | 28.0  | 7     | 46.7  |
| Rear-end       | 11     | 44.0  | 5     | 33.3  |
| Sideswipe      | 5      | 20.0  | 0     | 0.0   |
| Other/unknown  | 1      | 4.0   | 1     | 6.7   |
| Total          | 25     | 100.0 | 15    | 100.0 |

**M14 (Plymouth Road) and Beech Daly**

Date of Signal Optimization: May 1, 2004



1,217 days before



609 days after

| Injury Severity | Before | %     | After | %     |
|-----------------|--------|-------|-------|-------|
| Fatal           | 0      | 0.0   | 0     | 0.0   |
| A-Injury        | 2      | 1.8   | 1     | 1.8   |
| B-Injury        | 9      | 8.1   | 0     | 0.0   |
| C-Injury        | 17     | 15.3  | 10    | 17.5  |
| O-Injury        | 83     | 74.8  | 46    | 80.7  |
| Total           | 111    | 100.0 | 57    | 100.0 |

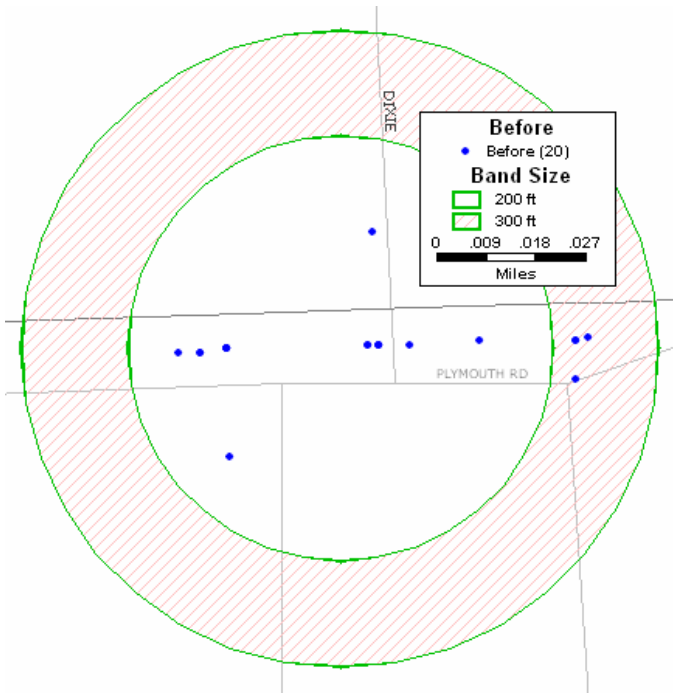
| Time of Day   | Before | %     | After | %     |
|---------------|--------|-------|-------|-------|
| 6am - 9:59am  | 11     | 9.9   | 16    | 28.1  |
| 10am - 3:59pm | 38     | 34.2  | 17    | 29.8  |
| 4pm - 7:59pm  | 42     | 37.8  | 16    | 28.1  |
| 8pm - 5:59am  | 11     | 9.9   | 8     | 14.0  |
| Unknown       | 9      | 8.1   | 0     | 0.0   |
| Total         | 111    | 100.0 | 57    | 100.0 |

| Day of Week | Before | %     | After | %     |
|-------------|--------|-------|-------|-------|
| Sunday      | 6      | 5.4   | 4     | 7.0   |
| Monday      | 28     | 25.2  | 6     | 10.5  |
| Tuesday     | 17     | 15.3  | 6     | 10.5  |
| Wednesday   | 24     | 21.6  | 14    | 24.6  |
| Thursday    | 10     | 9.0   | 10    | 17.5  |
| Friday      | 17     | 15.3  | 10    | 17.5  |
| Saturday    | 9      | 8.1   | 7     | 12.3  |
| Total       | 111    | 100.0 | 57    | 100.0 |

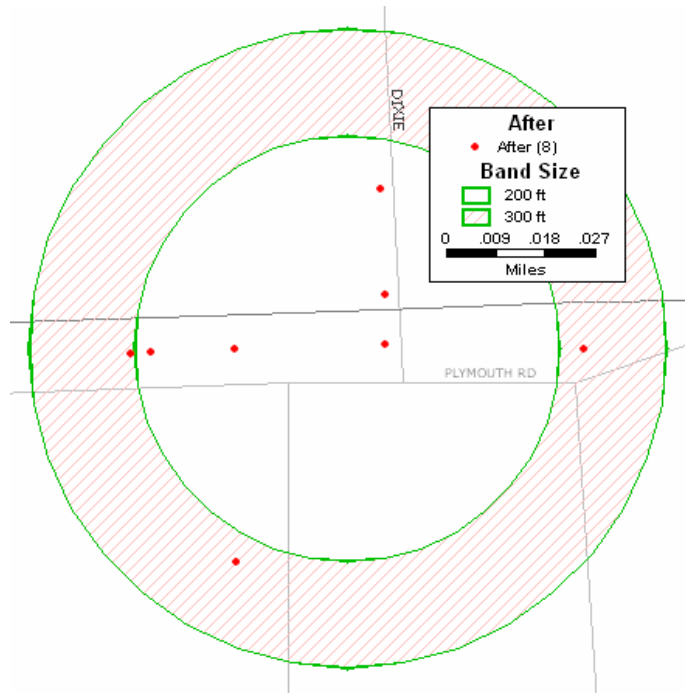
| Crash Type     | Before | %     | After | %     |
|----------------|--------|-------|-------|-------|
| Single vehicle | 2      | 1.8   | 0     | 0.0   |
| Head-on        | 4      | 3.6   | 5     | 8.8   |
| Angle          | 43     | 38.7  | 12    | 21.1  |
| Rear-end       | 50     | 45.0  | 36    | 63.2  |
| Sideswipe      | 7      | 6.3   | 4     | 7.0   |
| Other/unknown  | 5      | 4.5   | 0     | 0.0   |
| Total          | 111    | 100.0 | 57    | 100.0 |

### M14 (Plymouth Road) and Dixie

Date of Signal Optimization: May 1, 2004



1,217 days before



609 days after

| Injury Severity | Before | %     | After | %     |
|-----------------|--------|-------|-------|-------|
| Fatal           | 0      | 0.0   | 0     | 0.0   |
| A-Injury        | 0      | 0.0   | 0     | 0.0   |
| B-Injury        | 0      | 0.0   | 0     | 0.0   |
| C-Injury        | 2      | 10.0  | 0     | 0.0   |
| O-Injury        | 18     | 90.0  | 8     | 100.0 |
| Total           | 20     | 100.0 | 8     | 100.0 |

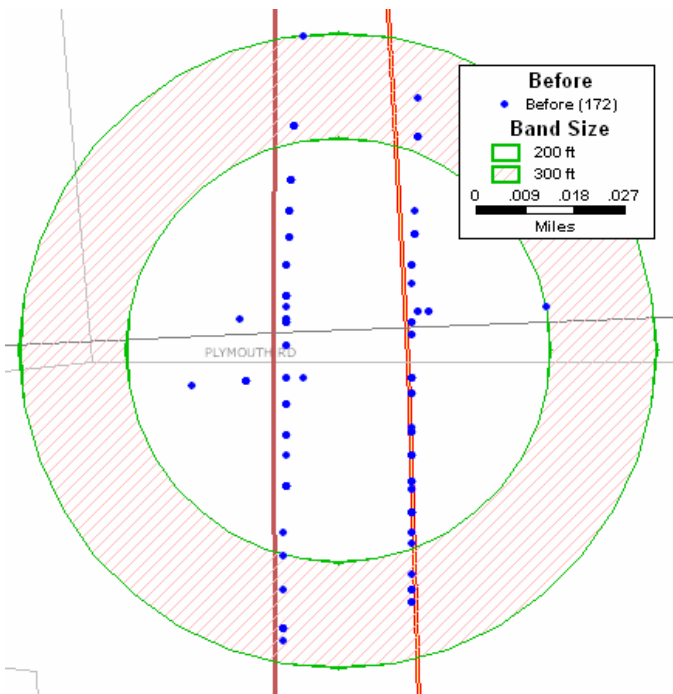
| Time of Day   | Before | %     | After | %     |
|---------------|--------|-------|-------|-------|
| 6am - 9:59am  | 4      | 20.0  | 1     | 12.5  |
| 10am - 3:59pm | 8      | 40.0  | 4     | 50.0  |
| 4pm - 7:59pm  | 3      | 15.0  | 2     | 25.0  |
| 8pm - 5:59am  | 4      | 20.0  | 0     | 0.0   |
| Unknown       | 1      | 5.0   | 1     | 12.5  |
| Total         | 20     | 100.0 | 8     | 100.0 |

| Day of Week | Before | %     | After | %     |
|-------------|--------|-------|-------|-------|
| Sunday      | 0      | 0.0   | 1     | 12.5  |
| Monday      | 4      | 20.0  | 0     | 0.0   |
| Tuesday     | 4      | 20.0  | 1     | 12.5  |
| Wednesday   | 2      | 10.0  | 0     | 0.0   |
| Thursday    | 1      | 5.0   | 2     | 25.0  |
| Friday      | 5      | 25.0  | 3     | 37.5  |
| Saturday    | 4      | 20.0  | 1     | 12.5  |
| Total       | 20     | 100.0 | 8     | 100.0 |

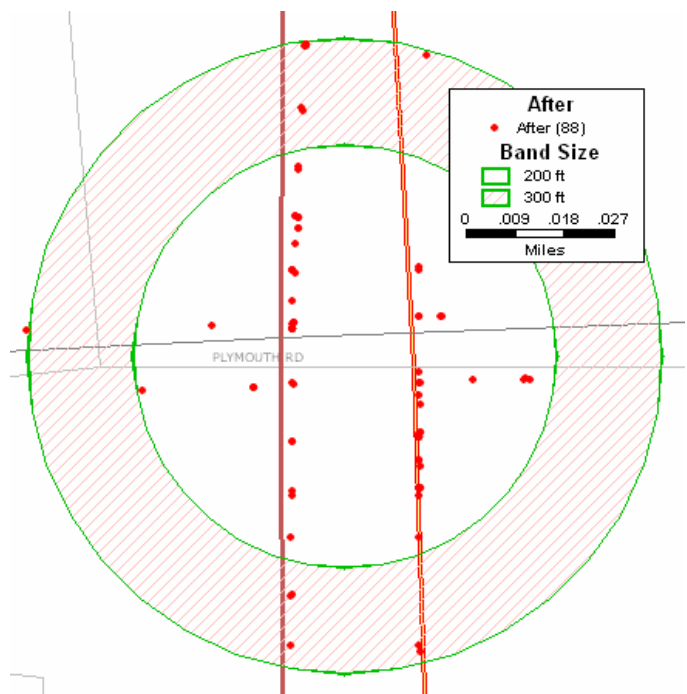
| Crash Type     | Before | %     | After | %     |
|----------------|--------|-------|-------|-------|
| Single vehicle | 1      | 5.0   | 0     | 0.0   |
| Head-on        | 1      | 5.0   | 0     | 0.0   |
| Angle          | 3      | 15.0  | 0     | 0.0   |
| Rear-end       | 7      | 35.0  | 2     | 25.0  |
| Sideswipe      | 5      | 25.0  | 4     | 50.0  |
| Other/unknown  | 3      | 15.0  | 2     | 25.0  |
| Total          | 20     | 100.0 | 8     | 100.0 |

### M14 (Plymouth Road) and Telegraph

Date of Signal Optimization: May 1, 2004



1,217 days before



609 days after

| Injury Severity | Before | %     | After | %     |
|-----------------|--------|-------|-------|-------|
| Fatal           | 0      | 0.0   | 0     | 0.0   |
| A-Injury        | 2      | 1.2   | 1     | 1.1   |
| B-Injury        | 1      | 0.6   | 2     | 2.3   |
| C-Injury        | 25     | 14.5  | 11    | 12.5  |
| O-Injury        | 144    | 83.7  | 74    | 84.1  |
| Total           | 172    | 100.0 | 88    | 100.0 |

| Time of Day   | Before | %     | After | %     |
|---------------|--------|-------|-------|-------|
| 6am - 9:59am  | 24     | 14.0  | 20    | 22.7  |
| 10am - 3:59pm | 72     | 41.9  | 33    | 37.5  |
| 4pm - 7:59pm  | 49     | 28.5  | 22    | 25.0  |
| 8pm - 5:59am  | 16     | 9.3   | 13    | 14.8  |
| Unknown       | 11     | 6.4   | 0     | 0.0   |
| Total         | 172    | 100.0 | 88    | 100.0 |

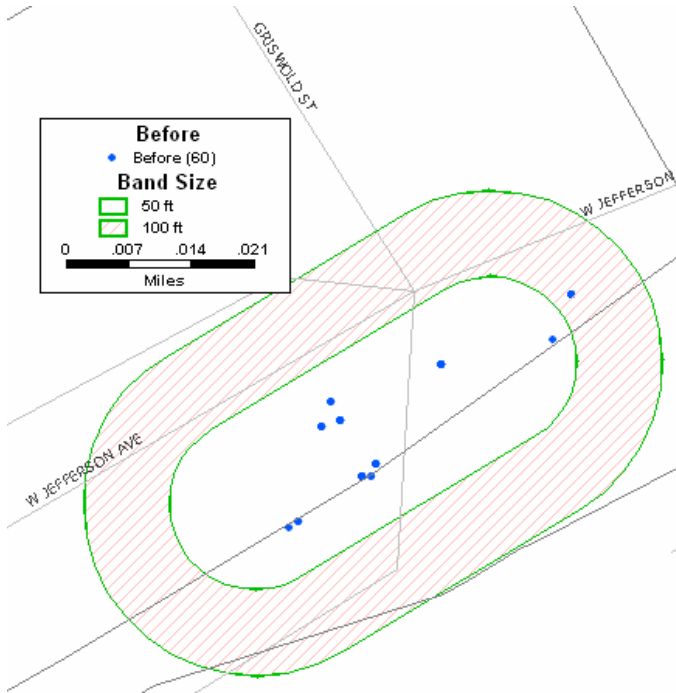
| Day of Week | Before | %     | After | %     |
|-------------|--------|-------|-------|-------|
| Sunday      | 15     | 8.7   | 6     | 6.8   |
| Monday      | 33     | 19.2  | 13    | 14.8  |
| Tuesday     | 23     | 13.4  | 11    | 12.5  |
| Wednesday   | 19     | 11.0  | 12    | 13.6  |
| Thursday    | 32     | 18.6  | 12    | 13.6  |
| Friday      | 24     | 14.0  | 16    | 18.2  |
| Saturday    | 26     | 15.1  | 18    | 20.5  |
| Total       | 172    | 100.0 | 88    | 100.0 |

| Crash Type     | Before | %     | After | %     |
|----------------|--------|-------|-------|-------|
| Single vehicle | 5      | 2.9   | 1     | 1.1   |
| Head-on        | 1      | 0.6   | 1     | 1.1   |
| Angle          | 18     | 10.5  | 17    | 19.3  |
| Rear-end       | 125    | 72.7  | 47    | 53.4  |
| Sideswipe      | 18     | 10.5  | 20    | 22.7  |
| Other/unknown  | 5      | 2.9   | 2     | 2.3   |
| Total          | 172    | 100.0 | 88    | 100.0 |

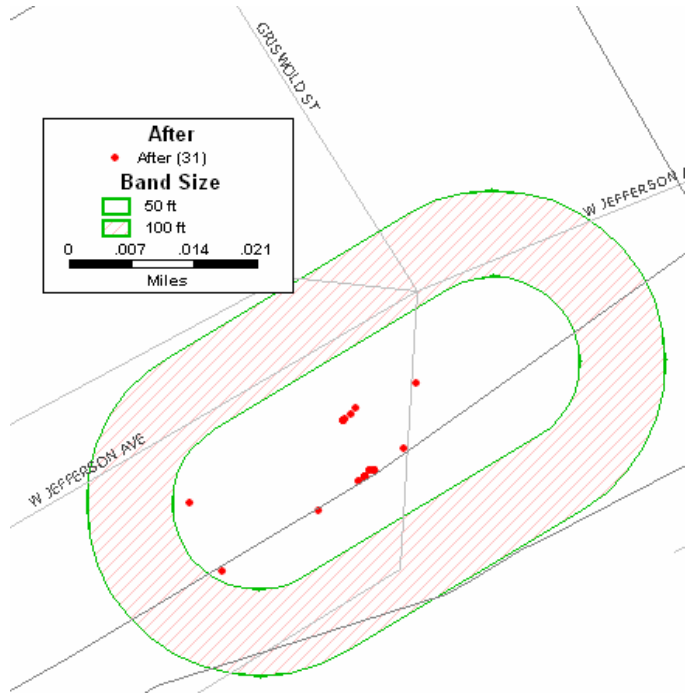
## **Jefferson Avenue**

**WB Jefferson Avenue and Griswold**

Date of Signal Optimization: February 5, 2004



1,131 days before



695 days after

| Injury Severity | Before | %     | After | %     |
|-----------------|--------|-------|-------|-------|
| Fatal           | 0      | 0.0   | 0     | 0.0   |
| A-Injury        | 0      | 0.0   | 0     | 0.0   |
| B-Injury        | 2      | 3.3   | 0     | 0.0   |
| C-Injury        | 12     | 20.0  | 5     | 16.1  |
| O-Injury        | 46     | 76.7  | 26    | 83.9  |
| Total           | 60     | 100.0 | 31    | 100.0 |

| Time of Day   | Before | %     | After | %     |
|---------------|--------|-------|-------|-------|
| 6am - 9:59am  | 5      | 8.3   | 2     | 6.5   |
| 10am - 3:59pm | 15     | 25.0  | 13    | 41.9  |
| 4pm - 7:59pm  | 16     | 26.7  | 11    | 35.5  |
| 8pm - 5:59am  | 17     | 28.3  | 5     | 16.1  |
| Unknown       | 7      | 11.7  | 0     | 0.0   |
| Total         | 60     | 100.0 | 31    | 100.0 |

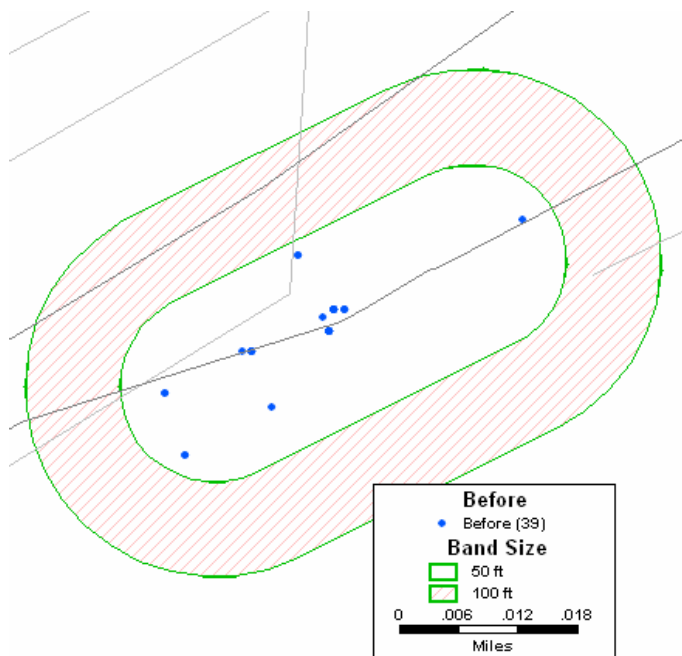
| Day of Week | Before | %     | After | %     |
|-------------|--------|-------|-------|-------|
| Sunday      | 17     | 28.3  | 3     | 9.7   |
| Monday      | 3      | 5.0   | 3     | 9.7   |
| Tuesday     | 9      | 15.0  | 5     | 16.1  |
| Wednesday   | 5      | 8.3   | 8     | 25.8  |
| Thursday    | 4      | 6.7   | 3     | 9.7   |
| Friday      | 11     | 18.3  | 6     | 19.4  |
| Saturday    | 11     | 18.3  | 3     | 9.7   |
| Total       | 60     | 100.0 | 31    | 100.0 |

| Crash Type     | Before | %     | After | %     |
|----------------|--------|-------|-------|-------|
| Single vehicle | 2      | 3.3   | 1     | 3.2   |
| Head-on        | 1      | 1.7   | 2     | 6.5   |
| Angle          | 4      | 6.7   | 4     | 12.9  |
| Rear-end       | 34     | 56.7  | 19    | 61.3  |
| Sideswipe      | 15     | 25.0  | 5     | 16.1  |
| Other/unknown  | 4      | 6.7   | 0     | 0.0   |
| Total          | 60     | 100.0 | 31    | 100.0 |

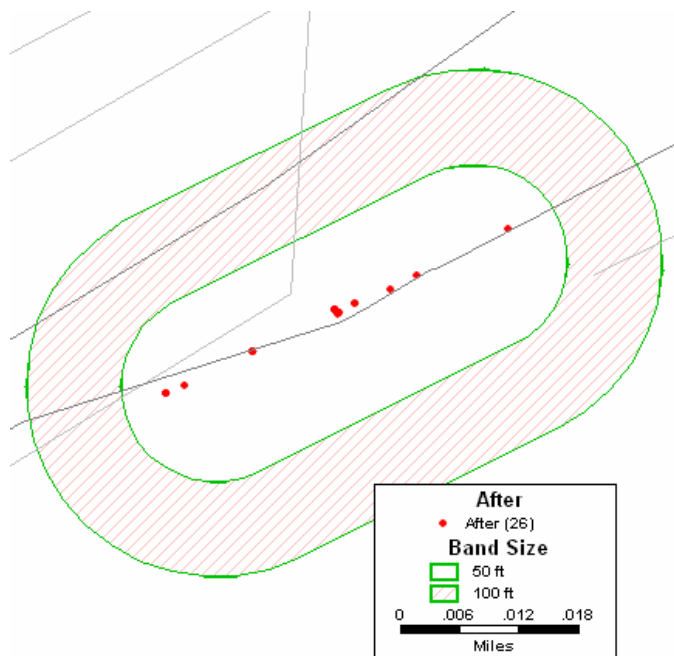


**EB Jefferson Avenue (M10) and Griswold**

Date of Signal Optimization: February 5, 2004



1,131 days before



695 days after

| Injury Severity | Before | %     | After | %     |
|-----------------|--------|-------|-------|-------|
| Fatal           | 1      | 2.6   | 0     | 0.0   |
| A-Injury        | 0      | 0.0   | 0     | 0.0   |
| B-Injury        | 2      | 5.1   | 0     | 0.0   |
| C-Injury        | 2      | 5.1   | 5     | 19.2  |
| O-Injury        | 34     | 87.2  | 21    | 80.8  |
| Total           | 39     | 100.0 | 26    | 100.0 |

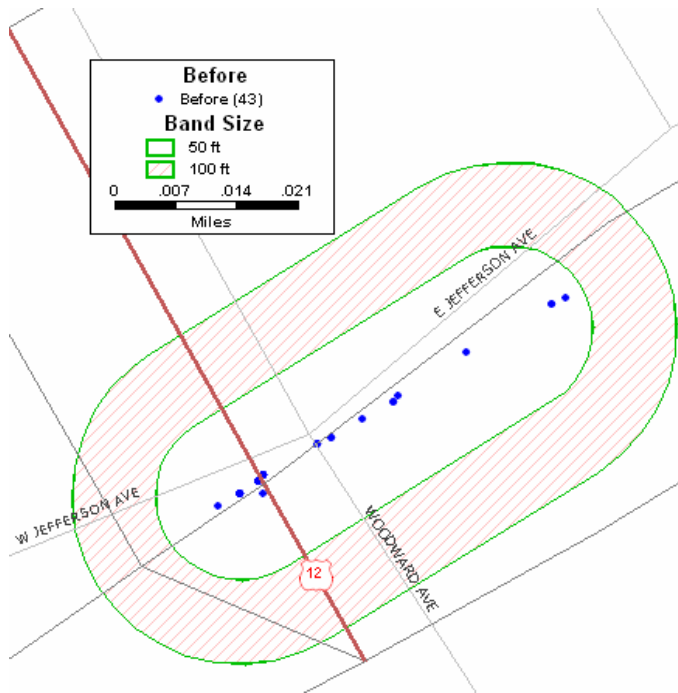
| Time of Day   | Before | %     | After | %     |
|---------------|--------|-------|-------|-------|
| 6am - 9:59am  | 7      | 17.9  | 4     | 15.4  |
| 10am - 3:59pm | 11     | 28.2  | 7     | 26.9  |
| 4pm - 7:59pm  | 12     | 30.8  | 8     | 30.8  |
| 8pm - 5:59am  | 8      | 20.5  | 7     | 26.9  |
| Unknown       | 1      | 2.6   | 0     | 0.0   |
| Total         | 39     | 100.0 | 26    | 100.0 |

| Day of Week | Before | %     | After | %     |
|-------------|--------|-------|-------|-------|
| Sunday      | 4      | 10.3  | 1     | 3.8   |
| Monday      | 2      | 5.1   | 2     | 7.7   |
| Tuesday     | 4      | 10.3  | 4     | 15.4  |
| Wednesday   | 5      | 12.8  | 7     | 26.9  |
| Thursday    | 9      | 23.1  | 3     | 11.5  |
| Friday      | 9      | 23.1  | 5     | 19.2  |
| Saturday    | 6      | 15.4  | 4     | 15.4  |
| Total       | 39     | 100.0 | 26    | 100.0 |

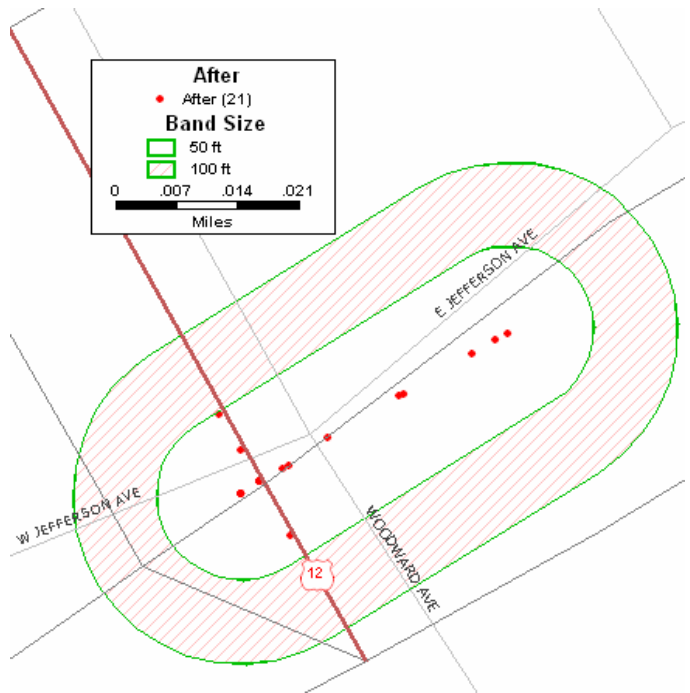
| Crash Type     | Before | %     | After | %     |
|----------------|--------|-------|-------|-------|
| Single vehicle | 2      | 5.1   | 0     | 0.0   |
| Head-on        | 0      | 0.0   | 0     | 0.0   |
| Angle          | 4      | 10.3  | 0     | 0.0   |
| Rear-end       | 24     | 61.5  | 18    | 69.2  |
| Sideswipe      | 7      | 17.9  | 8     | 30.8  |
| Other/unknown  | 2      | 5.1   | 0     | 0.0   |
| Total          | 39     | 100.0 | 26    | 100.0 |

### WB Jefferson Avenue and NB Woodward

Date of Signal Optimization: February 5, 2004



1,131 days before



695 days after

| Injury Severity | Before | %     | After | %     |
|-----------------|--------|-------|-------|-------|
| Fatal           | 0      | 0.0   | 0     | 0.0   |
| A-Injury        | 0      | 0.0   | 1     | 4.8   |
| B-Injury        | 0      | 0.0   | 0     | 0.0   |
| C-Injury        | 5      | 11.6  | 2     | 9.5   |
| O-Injury        | 38     | 88.4  | 18    | 85.7  |
| Total           | 43     | 100.0 | 21    | 100.0 |

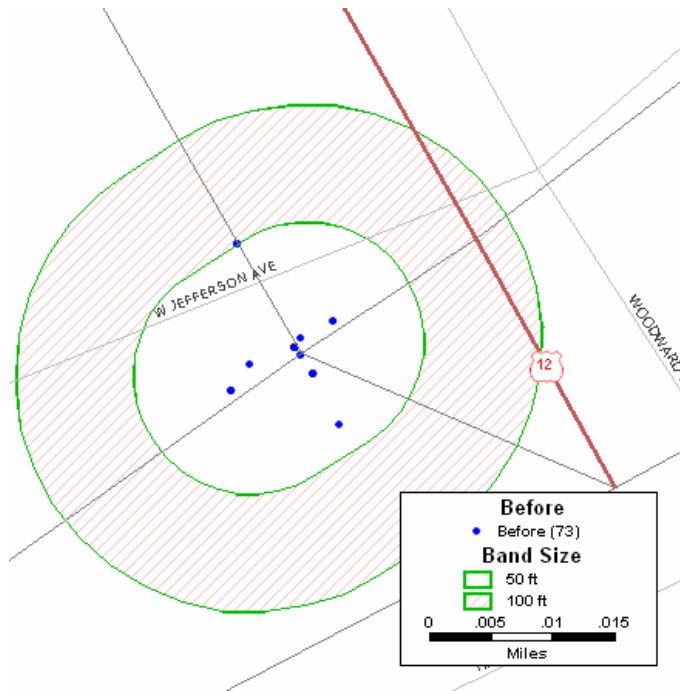
| Time of Day   | Before | %     | After | %     |
|---------------|--------|-------|-------|-------|
| 6am - 9:59am  | 6      | 14.0  | 5     | 23.8  |
| 10am - 3:59pm | 12     | 27.9  | 6     | 28.6  |
| 4pm - 7:59pm  | 11     | 25.6  | 6     | 28.6  |
| 8pm - 5:59am  | 11     | 25.6  | 4     | 19.0  |
| Unknown       | 3      | 7.0   | 0     | 0.0   |
| Total         | 43     | 100.0 | 21    | 100.0 |

| Day of Week | Before | %     | After | %     |
|-------------|--------|-------|-------|-------|
| Sunday      | 10     | 23.3  | 1     | 4.8   |
| Monday      | 5      | 11.6  | 3     | 14.3  |
| Tuesday     | 7      | 16.3  | 1     | 4.8   |
| Wednesday   | 6      | 14.0  | 3     | 14.3  |
| Thursday    | 4      | 9.3   | 3     | 14.3  |
| Friday      | 6      | 14.0  | 6     | 28.6  |
| Saturday    | 5      | 11.6  | 4     | 19.0  |
| Total       | 43     | 100.0 | 21    | 100.0 |

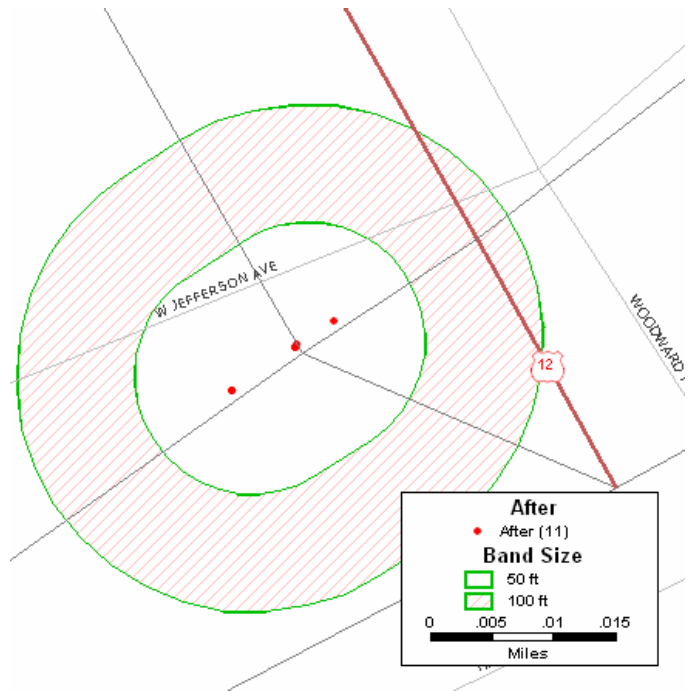
| Crash Type     | Before | %     | After | %     |
|----------------|--------|-------|-------|-------|
| Single vehicle | 2      | 4.7   | 1     | 4.8   |
| Head-on        | 1      | 2.3   | 0     | 0.0   |
| Angle          | 6      | 14.0  | 4     | 19.0  |
| Rear-end       | 18     | 41.9  | 4     | 19.0  |
| Sideswipe      | 12     | 27.9  | 11    | 52.4  |
| Other/unknown  | 4      | 9.3   | 1     | 4.8   |
| Total          | 43     | 100.0 | 21    | 100.0 |

**WB Jefferson Avenue and SB Woodward**

Date of Signal Optimization: February 5, 2004



1,131 days before



695 days after

| Injury Severity | Before | %     | After | %     |
|-----------------|--------|-------|-------|-------|
| Fatal           | 0      | 0.0   | 0     | 0.0   |
| A-Injury        | 1      | 1.4   | 1     | 9.1   |
| B-Injury        | 1      | 1.4   | 0     | 0.0   |
| C-Injury        | 10     | 13.7  | 1     | 9.1   |
| O-Injury        | 61     | 83.6  | 9     | 81.8  |
| Total           | 73     | 100.0 | 11    | 100.0 |

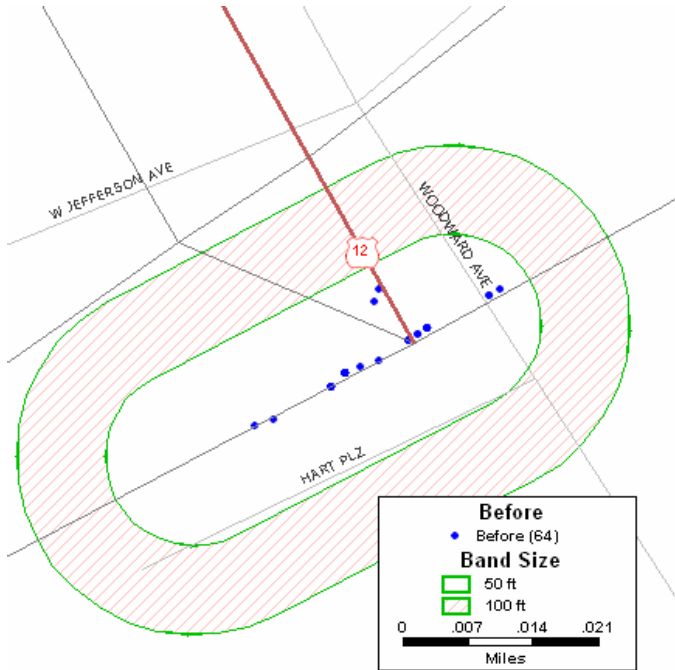
| Time of Day   | Before | %     | After | %     |
|---------------|--------|-------|-------|-------|
| 6am - 9:59am  | 7      | 9.6   | 0     | 0.0   |
| 10am - 3:59pm | 26     | 35.6  | 4     | 36.4  |
| 4pm - 7:59pm  | 18     | 24.7  | 3     | 27.3  |
| 8pm - 5:59am  | 16     | 21.9  | 3     | 27.3  |
| Unknown       | 6      | 8.2   | 1     | 9.1   |
| Total         | 73     | 100.0 | 11    | 100.0 |

| Day of Week | Before | %     | After | %     |
|-------------|--------|-------|-------|-------|
| Sunday      | 10     | 13.7  | 1     | 9.1   |
| Monday      | 13     | 17.8  | 0     | 0.0   |
| Tuesday     | 7      | 9.6   | 3     | 27.3  |
| Wednesday   | 11     | 15.1  | 1     | 9.1   |
| Thursday    | 8      | 11.0  | 1     | 9.1   |
| Friday      | 17     | 23.3  | 3     | 27.3  |
| Saturday    | 7      | 9.6   | 2     | 18.2  |
| Total       | 73     | 100.0 | 11    | 100.0 |

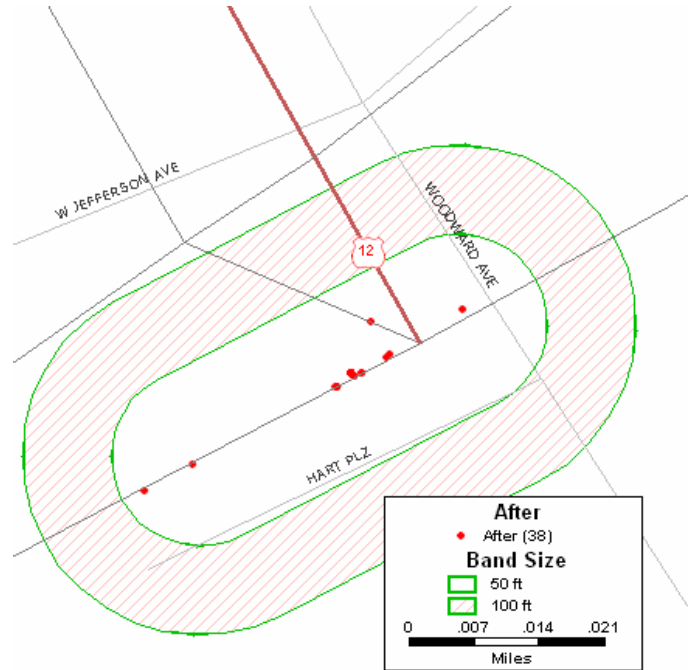
| Crash Type     | Before | %     | After | %     |
|----------------|--------|-------|-------|-------|
| Single vehicle | 2      | 2.7   | 0     | 0.0   |
| Head-on        | 3      | 4.1   | 0     | 0.0   |
| Angle          | 9      | 12.3  | 2     | 18.2  |
| Rear-end       | 27     | 37.0  | 4     | 36.4  |
| Sideswipe      | 20     | 27.4  | 3     | 27.3  |
| Other/unknown  | 12     | 16.4  | 2     | 18.2  |
| Total          | 73     | 100.0 | 11    | 100.0 |

**EB Jefferson Avenue and Woodward**

Date of Signal Optimization: February 5, 2004



1,131 days before



695 days after

| Injury Severity | Before | %     | After | %     |
|-----------------|--------|-------|-------|-------|
| Fatal           | 0      | 0.0   | 0     | 0.0   |
| A-Injury        | 2      | 3.1   | 0     | 0.0   |
| B-Injury        | 3      | 4.7   | 0     | 0.0   |
| C-Injury        | 6      | 9.4   | 3     | 7.9   |
| O-Injury        | 53     | 82.8  | 35    | 92.1  |
| Total           | 64     | 100.0 | 38    | 100.0 |

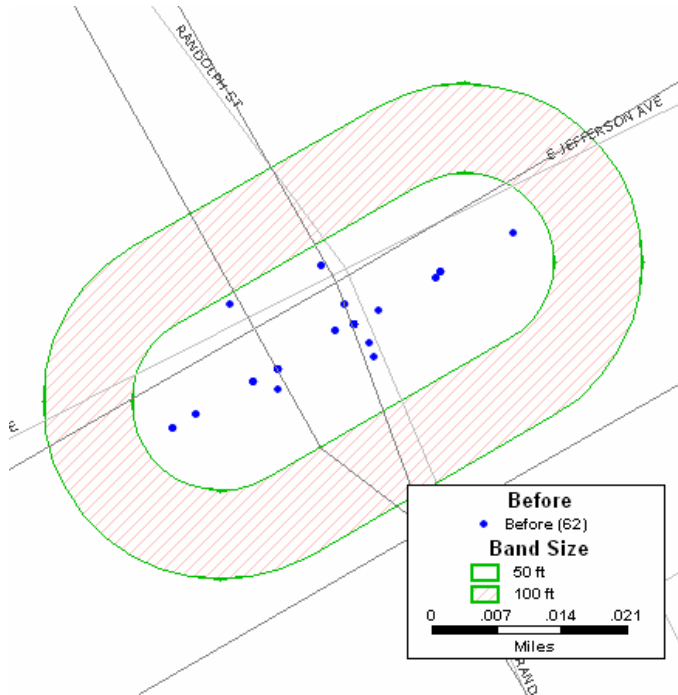
| Time of Day   | Before | %     | After | %     |
|---------------|--------|-------|-------|-------|
| 6am - 9:59am  | 11     | 17.2  | 11    | 28.9  |
| 10am - 3:59pm | 24     | 37.5  | 5     | 13.2  |
| 4pm - 7:59pm  | 13     | 20.3  | 7     | 18.4  |
| 8pm - 5:59am  | 14     | 21.9  | 14    | 36.8  |
| Unknown       | 2      | 3.1   | 1     | 2.6   |
| Total         | 64     | 100.0 | 38    | 100.0 |

| Day of Week | Before | %     | After | %     |
|-------------|--------|-------|-------|-------|
| Sunday      | 5      | 7.8   | 6     | 15.8  |
| Monday      | 7      | 10.9  | 5     | 13.2  |
| Tuesday     | 8      | 12.5  | 3     | 7.9   |
| Wednesday   | 14     | 21.9  | 5     | 13.2  |
| Thursday    | 10     | 15.6  | 5     | 13.2  |
| Friday      | 12     | 18.8  | 5     | 13.2  |
| Saturday    | 8      | 12.5  | 9     | 23.7  |
| Total       | 64     | 100.0 | 38    | 100.0 |

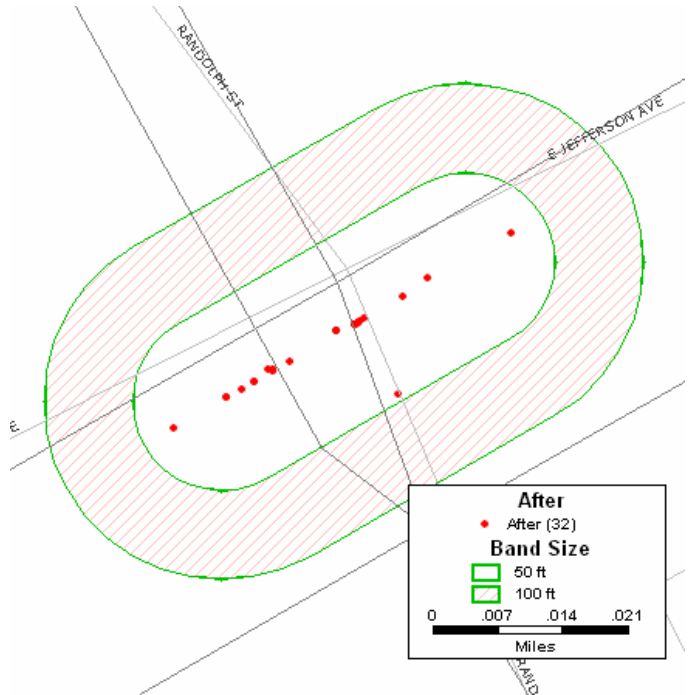
| Crash Type     | Before | %     | After | %     |
|----------------|--------|-------|-------|-------|
| Single vehicle | 2      | 3.1   | 1     | 2.6   |
| Head-on        | 0      | 0.0   | 1     | 2.6   |
| Angle          | 8      | 12.5  | 5     | 13.2  |
| Rear-end       | 25     | 39.1  | 17    | 44.7  |
| Sideswipe      | 20     | 31.3  | 11    | 28.9  |
| Other/unknown  | 9      | 14.1  | 3     | 7.9   |
| Total          | 64     | 100.0 | 38    | 100.0 |

**WB Jefferson Avenue and Randolph**

Date of Signal Optimization: February 5, 2004



1,131 days before



695 days after

| Injury Severity | Before | %     | After | %     |
|-----------------|--------|-------|-------|-------|
| Fatal           | 0      | 0.0   | 0     | 0.0   |
| A-Injury        | 0      | 0.0   | 0     | 0.0   |
| B-Injury        | 2      | 3.2   | 2     | 6.3   |
| C-Injury        | 4      | 6.5   | 1     | 3.1   |
| O-Injury        | 56     | 90.3  | 29    | 90.6  |
| Total           | 62     | 100.0 | 32    | 100.0 |

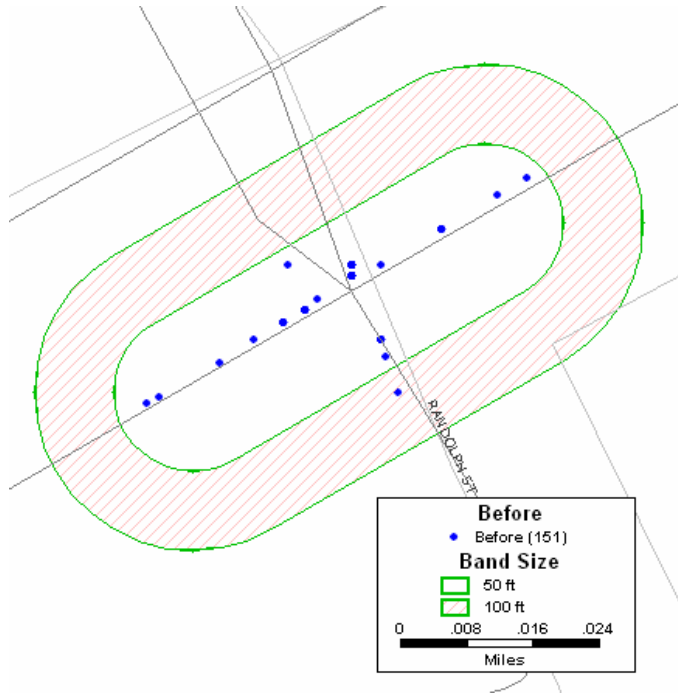
| Time of Day   | Before | %     | After | %     |
|---------------|--------|-------|-------|-------|
| 6am - 9:59am  | 5      | 8.1   | 11    | 34.4  |
| 10am - 3:59pm | 28     | 45.2  | 7     | 21.9  |
| 4pm - 7:59pm  | 15     | 24.2  | 8     | 25.0  |
| 8pm - 5:59am  | 11     | 17.7  | 5     | 15.6  |
| Unknown       | 3      | 4.8   | 1     | 3.1   |
| Total         | 62     | 100.0 | 32    | 100.0 |

| Day of Week | Before | %     | After | %     |
|-------------|--------|-------|-------|-------|
| Sunday      | 4      | 6.5   | 1     | 3.1   |
| Monday      | 13     | 21.0  | 3     | 9.4   |
| Tuesday     | 5      | 8.1   | 6     | 18.8  |
| Wednesday   | 9      | 14.5  | 8     | 25.0  |
| Thursday    | 7      | 11.3  | 3     | 9.4   |
| Friday      | 12     | 19.4  | 4     | 12.5  |
| Saturday    | 12     | 19.4  | 7     | 21.9  |
| Total       | 62     | 100.0 | 32    | 100.0 |

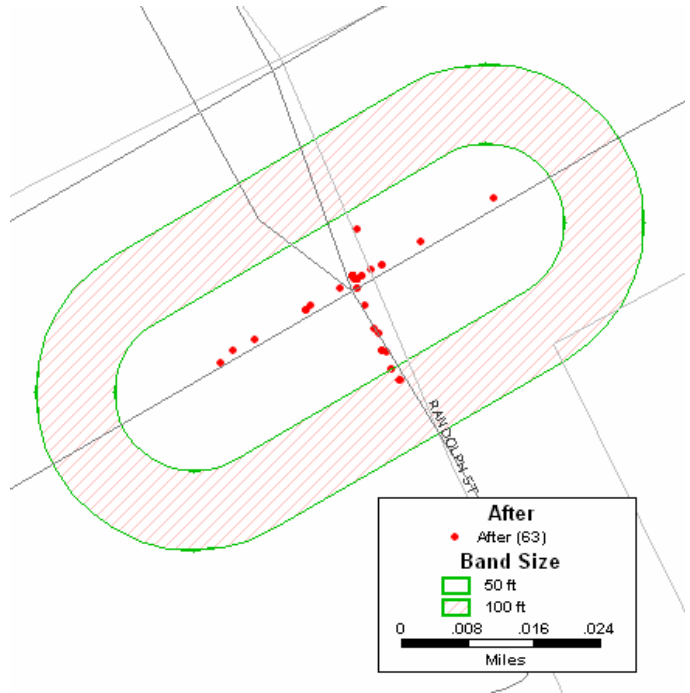
| Crash Type     | Before | %     | After | %     |
|----------------|--------|-------|-------|-------|
| Single vehicle | 3      | 4.8   | 1     | 3.1   |
| Head-on        | 1      | 1.6   | 0     | 0.0   |
| Angle          | 14     | 22.6  | 8     | 25.0  |
| Rear-end       | 16     | 25.8  | 8     | 25.0  |
| Sideswipe      | 23     | 37.1  | 15    | 46.9  |
| Other/unknown  | 5      | 8.1   | 0     | 0.0   |
| Total          | 62     | 100.0 | 32    | 100.0 |

**EB Jefferson Avenue and Randolph**

Date of Signal Optimization: February 5, 2004



1,131 days before



695 days after

| Injury Severity | Before | %     | After | %     |
|-----------------|--------|-------|-------|-------|
| Fatal           | 0      | 0.0   | 0     | 0.0   |
| A-Injury        | 0      | 0.0   | 0     | 0.0   |
| B-Injury        | 1      | 0.7   | 1     | 1.6   |
| C-Injury        | 15     | 9.9   | 6     | 9.5   |
| O-Injury        | 135    | 89.4  | 56    | 88.9  |
| Total           | 151    | 100.0 | 63    | 100.0 |

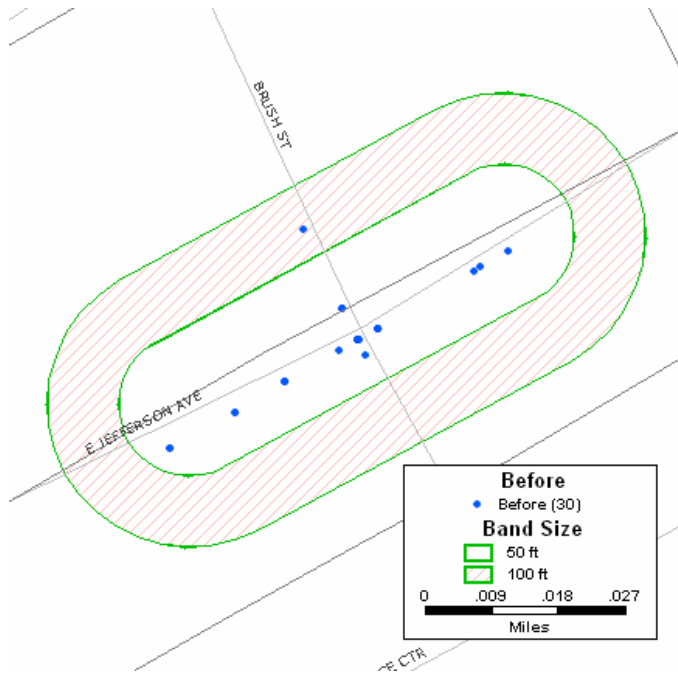
| Time of Day   | Before | %     | After | %     |
|---------------|--------|-------|-------|-------|
| 6am - 9:59am  | 17     | 11.3  | 7     | 11.1  |
| 10am - 3:59pm | 50     | 33.1  | 18    | 28.6  |
| 4pm - 7:59pm  | 30     | 19.9  | 23    | 36.5  |
| 8pm - 5:59am  | 43     | 28.5  | 14    | 22.2  |
| Unknown       | 11     | 7.3   | 1     | 1.6   |
| Total         | 151    | 100.0 | 63    | 100.0 |

| Day of Week | Before | %     | After | %     |
|-------------|--------|-------|-------|-------|
| Sunday      | 14     | 9.3   | 6     | 9.5   |
| Monday      | 22     | 14.6  | 10    | 15.9  |
| Tuesday     | 14     | 9.3   | 12    | 19.0  |
| Wednesday   | 16     | 10.6  | 7     | 11.1  |
| Thursday    | 21     | 13.9  | 7     | 11.1  |
| Friday      | 35     | 23.2  | 16    | 25.4  |
| Saturday    | 29     | 19.2  | 5     | 7.9   |
| Total       | 151    | 100.0 | 63    | 100.0 |

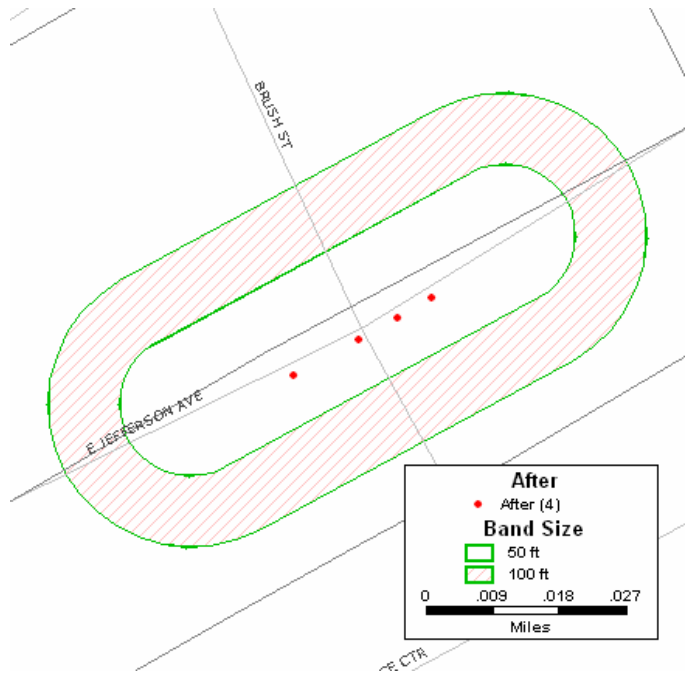
| Crash Type     | Before | %     | After | %     |
|----------------|--------|-------|-------|-------|
| Single vehicle | 7      | 4.6   | 2     | 3.2   |
| Head-on        | 2      | 1.3   | 2     | 3.2   |
| Angle          | 27     | 17.9  | 10    | 15.9  |
| Rear-end       | 39     | 25.8  | 19    | 30.2  |
| Sideswipe      | 62     | 41.1  | 26    | 41.3  |
| Other/unknown  | 14     | 9.3   | 4     | 6.3   |
| Total          | 151    | 100.0 | 63    | 100.0 |

**WB Jefferson Avenue and Brush**

Date of Signal Optimization: February 5, 2004



1,131 days before



695 days after

| Injury Severity | Before | %     | After | %     |
|-----------------|--------|-------|-------|-------|
| Fatal           | 0      | 0.0   | 0     | 0.0   |
| A-Injury        | 1      | 3.3   | 0     | 0.0   |
| B-Injury        | 0      | 0.0   | 1     | 25.0  |
| C-Injury        | 5      | 16.7  | 0     | 0.0   |
| O-Injury        | 24     | 80.0  | 3     | 75.0  |
| Total           | 30     | 100.0 | 4     | 100.0 |

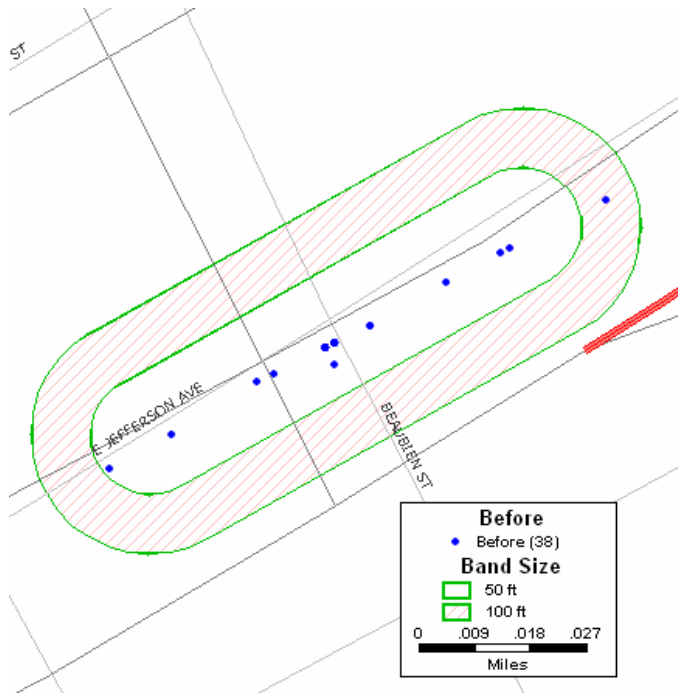
| Time of Day   | Before | %     | After | %     |
|---------------|--------|-------|-------|-------|
| 6am - 9:59am  | 7      | 23.3  | 0     | 0.0   |
| 10am - 3:59pm | 10     | 33.3  | 2     | 50.0  |
| 4pm - 7:59pm  | 5      | 16.7  | 1     | 25.0  |
| 8pm - 5:59am  | 7      | 23.3  | 1     | 25.0  |
| Unknown       | 1      | 3.3   | 0     | 0.0   |
| Total         | 30     | 100.0 | 4     | 100.0 |

| Day of Week | Before | %     | After | %     |
|-------------|--------|-------|-------|-------|
| Sunday      | 3      | 10.0  | 1     | 25.0  |
| Monday      | 3      | 10.0  | 0     | 0.0   |
| Tuesday     | 4      | 13.3  | 2     | 50.0  |
| Wednesday   | 9      | 30.0  | 0     | 0.0   |
| Thursday    | 4      | 13.3  | 0     | 0.0   |
| Friday      | 4      | 13.3  | 1     | 25.0  |
| Saturday    | 3      | 10.0  | 0     | 0.0   |
| Total       | 30     | 100.0 | 4     | 100.0 |

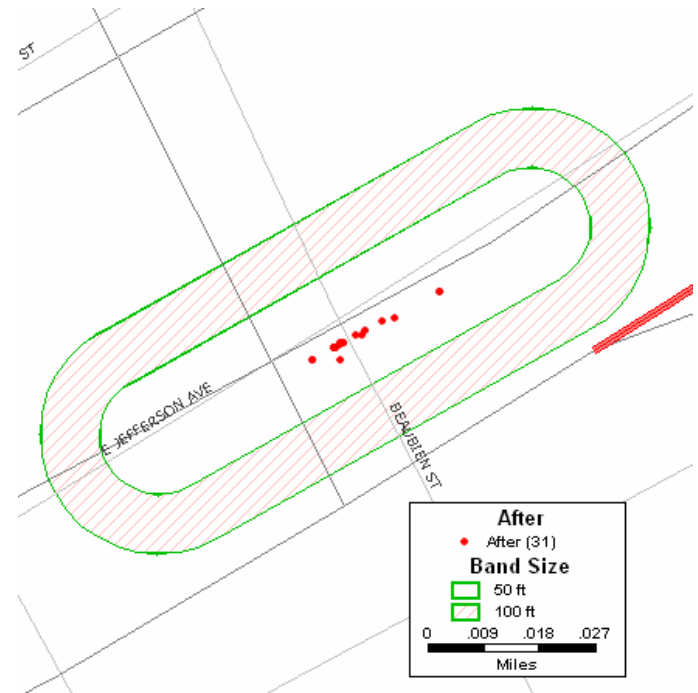
| Crash Type     | Before | %     | After | %     |
|----------------|--------|-------|-------|-------|
| Single vehicle | 2      | 6.7   | 1     | 25.0  |
| Head-on        | 0      | 0.0   | 0     | 0.0   |
| Angle          | 3      | 10.0  | 3     | 75.0  |
| Rear-end       | 9      | 30.0  | 0     | 0.0   |
| Sideswipe      | 13     | 43.3  | 0     | 0.0   |
| Other/unknown  | 3      | 10.0  | 0     | 0.0   |
| Total          | 30     | 100.0 | 4     | 100.0 |

**WB Jefferson Avenue and Beaubien**

Date of Signal Optimization: February 5, 2004



1,131 days before



695 days after

| Injury Severity | Before | %     | After | %     |
|-----------------|--------|-------|-------|-------|
| Fatal           | 0      | 0.0   | 0     | 0.0   |
| A-Injury        | 0      | 0.0   | 0     | 0.0   |
| B-Injury        | 2      | 5.3   | 0     | 0.0   |
| C-Injury        | 8      | 21.1  | 2     | 6.5   |
| O-Injury        | 28     | 73.7  | 29    | 93.5  |
| Total           | 38     | 100.0 | 31    | 100.0 |

| Time of Day   | Before | %     | After | %     |
|---------------|--------|-------|-------|-------|
| 6am - 9:59am  | 4      | 10.5  | 7     | 22.6  |
| 10am - 3:59pm | 11     | 28.9  | 11    | 35.5  |
| 4pm - 7:59pm  | 8      | 21.1  | 6     | 19.4  |
| 8pm - 5:59am  | 9      | 23.7  | 6     | 19.4  |
| Unknown       | 6      | 15.8  | 1     | 3.2   |
| Total         | 38     | 100.0 | 31    | 100.0 |

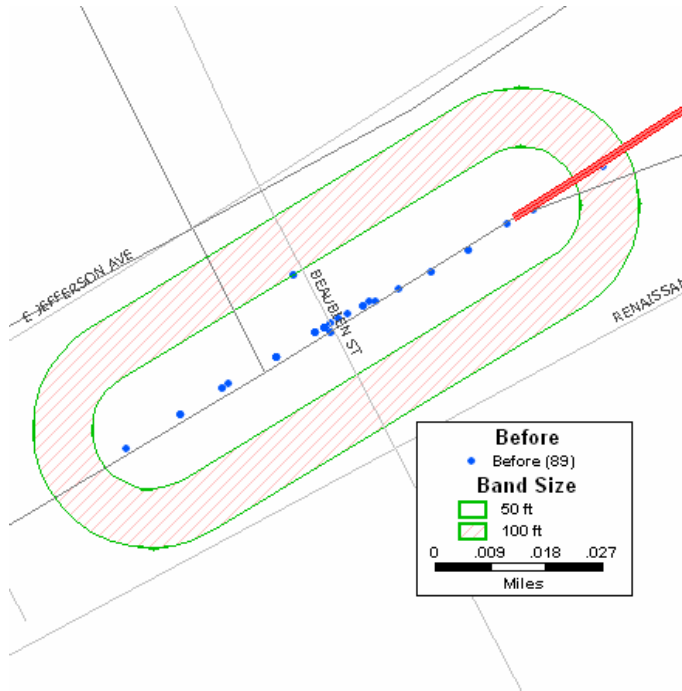
| Day of Week | Before | %     | After | %     |
|-------------|--------|-------|-------|-------|
| Sunday      | 3      | 7.9   | 1     | 3.2   |
| Monday      | 4      | 10.5  | 6     | 19.4  |
| Tuesday     | 14     | 36.8  | 9     | 29.0  |
| Wednesday   | 4      | 10.5  | 6     | 19.4  |
| Thursday    | 4      | 10.5  | 1     | 3.2   |
| Friday      | 4      | 10.5  | 5     | 16.1  |
| Saturday    | 5      | 13.2  | 3     | 9.7   |
| Total       | 38     | 100.0 | 31    | 100.0 |

| Crash Type     | Before | %     | After | %     |
|----------------|--------|-------|-------|-------|
| Single vehicle | 2      | 5.3   | 0     | 0.0   |
| Head-on        | 1      | 2.6   | 1     | 3.2   |
| Angle          | 9      | 23.7  | 5     | 16.1  |
| Rear-end       | 9      | 23.7  | 11    | 35.5  |
| Sideswipe      | 12     | 31.6  | 14    | 45.2  |
| Other/unknown  | 5      | 13.2  | 0     | 0.0   |
| Total          | 38     | 100.0 | 31    | 100.0 |

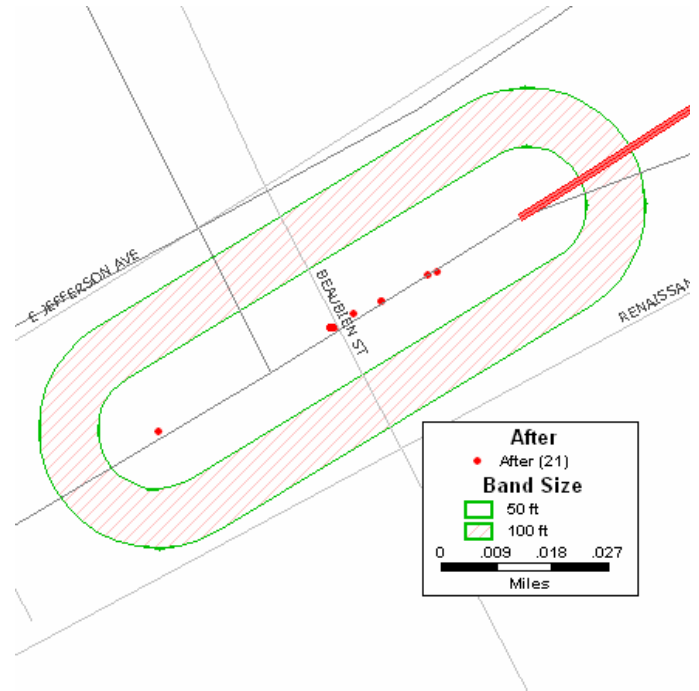


**EB Jefferson Avenue and Beaubien**

Date of Signal Optimization: February 5, 2004



1,131 days before



695 days after

| Injury Severity | Before | %     | After | %     |
|-----------------|--------|-------|-------|-------|
| Fatal           | 0      | 0.0   | 0     | 0.0   |
| A-Injury        | 1      | 1.1   | 1     | 4.8   |
| B-Injury        | 2      | 2.2   | 0     | 0.0   |
| C-Injury        | 13     | 14.6  | 1     | 4.8   |
| O-Injury        | 73     | 82.0  | 19    | 90.5  |
| Total           | 89     | 100.0 | 21    | 100.0 |

| Time of Day   | Before | %     | After | %     |
|---------------|--------|-------|-------|-------|
| 6am - 9:59am  | 20     | 22.5  | 2     | 9.5   |
| 10am - 3:59pm | 21     | 23.6  | 3     | 14.3  |
| 4pm - 7:59pm  | 25     | 28.1  | 9     | 42.9  |
| 8pm - 5:59am  | 21     | 23.6  | 6     | 28.6  |
| Unknown       | 2      | 2.2   | 1     | 4.8   |
| Total         | 89     | 100.0 | 21    | 100.0 |

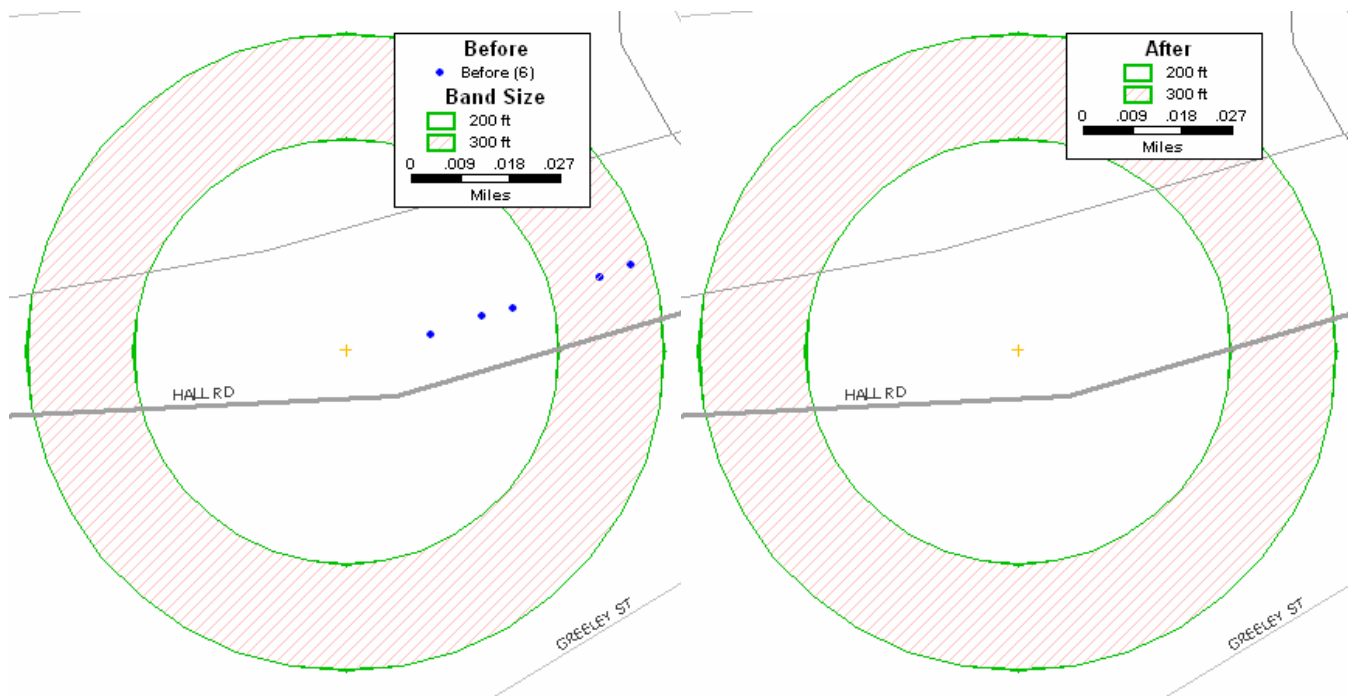
| Day of Week | Before | %     | After | %     |
|-------------|--------|-------|-------|-------|
| Sunday      | 9      | 10.1  | 5     | 23.8  |
| Monday      | 11     | 12.4  | 5     | 23.8  |
| Tuesday     | 15     | 16.9  | 2     | 9.5   |
| Wednesday   | 12     | 13.5  | 2     | 9.5   |
| Thursday    | 19     | 21.3  | 2     | 9.5   |
| Friday      | 14     | 15.7  | 1     | 4.8   |
| Saturday    | 9      | 10.1  | 4     | 19.0  |
| Total       | 89     | 100.0 | 21    | 100.0 |

| Crash Type     | Before | %     | After | %     |
|----------------|--------|-------|-------|-------|
| Single vehicle | 7      | 7.9   | 3     | 14.3  |
| Head-on        | 0      | 0.0   | 0     | 0.0   |
| Angle          | 19     | 21.3  | 0     | 0.0   |
| Rear-end       | 30     | 33.7  | 6     | 28.6  |
| Sideswipe      | 23     | 25.8  | 12    | 57.1  |
| Other/unknown  | 10     | 11.2  | 0     | 0.0   |
| Total          | 89     | 100.0 | 21    | 100.0 |

## **Hall Road (M59)**

### M59 (Hall Road) and Eastbound Crossover West of Van Dyke

Date of Signal Optimization: May 17, 2004



1,233 days before

593 days after

| Injury Severity | Before | %     | After | %   |
|-----------------|--------|-------|-------|-----|
| Fatal           | 0      | 0.0   | 0     | 0.0 |
| A-Injury        | 0      | 0.0   | 0     | 0.0 |
| B-Injury        | 0      | 0.0   | 0     | 0.0 |
| C-Injury        | 0      | 0.0   | 0     | 0.0 |
| O-Injury        | 6      | 100.0 | 0     | 0.0 |
| Total           | 6      | 100.0 | 0     | 0.0 |

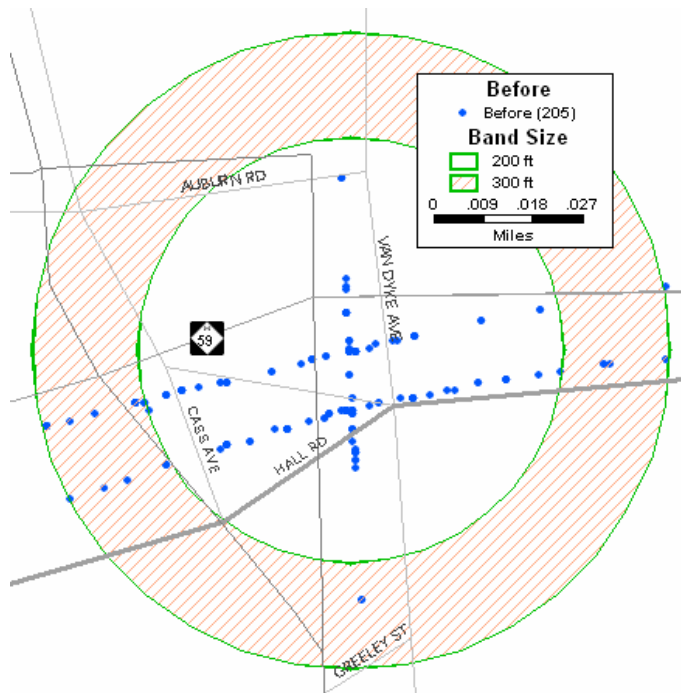
| Time of Day   | Before | %     | After | %   |
|---------------|--------|-------|-------|-----|
| 6am - 9:59am  | 1      | 16.7  | 0     | 0.0 |
| 10am - 3:59pm | 2      | 33.3  | 0     | 0.0 |
| 4pm - 7:59pm  | 3      | 50.0  | 0     | 0.0 |
| 8pm - 5:59am  | 0      | 0.0   | 0     | 0.0 |
| Unknown       | 0      | 0.0   | 0     | 0.0 |
| Total         | 6      | 100.0 | 0     | 0.0 |

| Day of Week | Before | %     | After | %   |
|-------------|--------|-------|-------|-----|
| Sunday      | 0      | 0.0   | 0     | 0.0 |
| Monday      | 1      | 16.7  | 0     | 0.0 |
| Tuesday     | 2      | 33.3  | 0     | 0.0 |
| Wednesday   | 0      | 0.0   | 0     | 0.0 |
| Thursday    | 1      | 16.7  | 0     | 0.0 |
| Friday      | 1      | 16.7  | 0     | 0.0 |
| Saturday    | 1      | 16.7  | 0     | 0.0 |
| Total       | 6      | 100.0 | 0     | 0.0 |

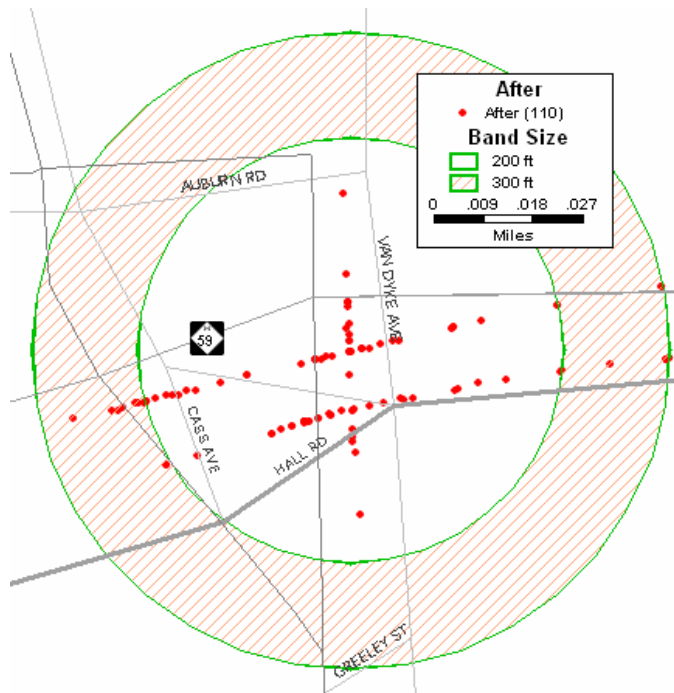
| Crash Type     | Before | %     | After | %   |
|----------------|--------|-------|-------|-----|
| Single vehicle | 0      | 0.0   | 0     | 0.0 |
| Head-on        | 0      | 0.0   | 0     | 0.0 |
| Angle          | 0      | 0.0   | 0     | 0.0 |
| Rear-end       | 3      | 50.0  | 0     | 0.0 |
| Sideswipe      | 3      | 50.0  | 0     | 0.0 |
| Other/unknown  | 0      | 0.0   | 0     | 0.0 |
| Total          | 6      | 100.0 | 0     | 0.0 |

### M59 (Hall Road) and Van Dyke Avenue

Date of Signal Optimization: May 17, 2004



1,233 days before



593 days after

| Injury Severity | Before | %     | After | %     |
|-----------------|--------|-------|-------|-------|
| Fatal           | 1      | 0.5   | 0     | 0.0   |
| A-Injury        | 1      | 0.5   | 0     | 0.0   |
| B-Injury        | 2      | 1.0   | 3     | 2.7   |
| C-Injury        | 30     | 14.6  | 20    | 18.2  |
| O-Injury        | 171    | 83.4  | 87    | 79.1  |
| Total           | 205    | 100.0 | 110   | 100.0 |

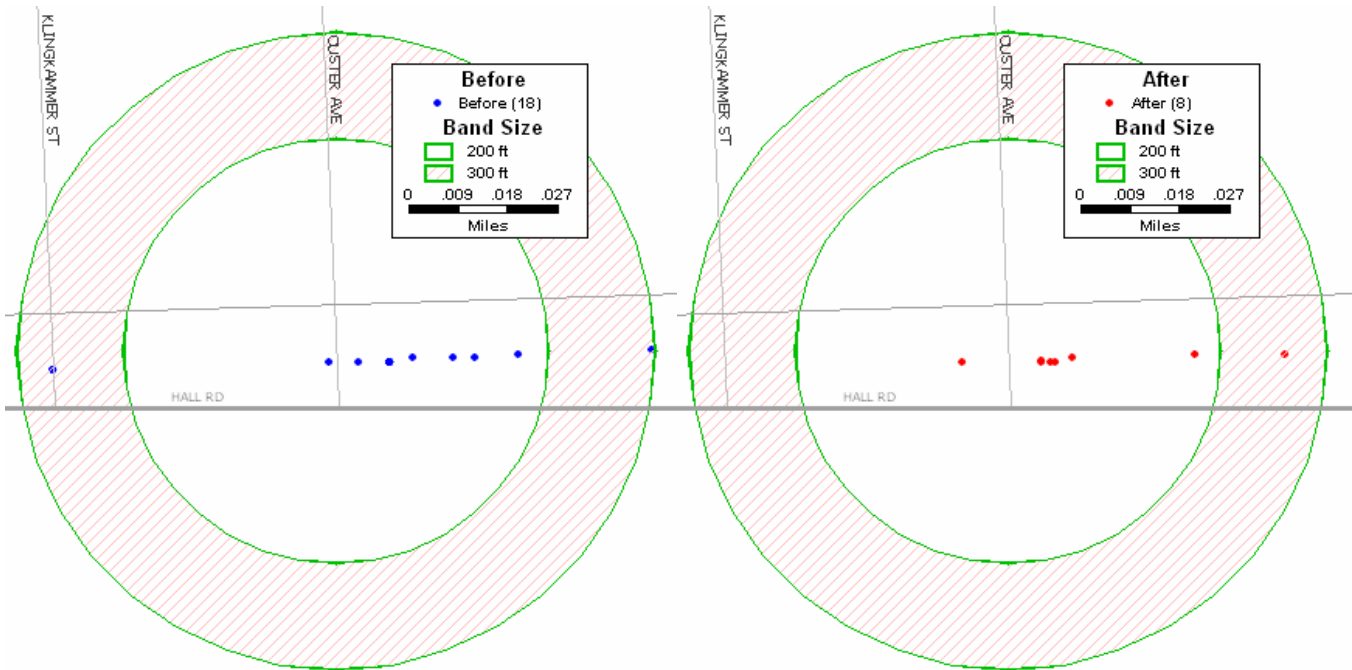
| Time of Day   | Before | %     | After | %     |
|---------------|--------|-------|-------|-------|
| 6am - 9:59am  | 42     | 20.5  | 19    | 17.3  |
| 10am - 3:59pm | 87     | 42.4  | 50    | 45.5  |
| 4pm - 7:59pm  | 38     | 18.5  | 29    | 26.4  |
| 8pm - 5:59am  | 37     | 18.0  | 12    | 10.9  |
| Unknown       | 1      | 0.5   | 0     | 0.0   |
| Total         | 205    | 100.0 | 110   | 100.0 |

| Day of Week | Before | %     | After | %     |
|-------------|--------|-------|-------|-------|
| Sunday      | 19     | 9.3   | 12    | 10.9  |
| Monday      | 31     | 15.1  | 18    | 16.4  |
| Tuesday     | 28     | 13.7  | 15    | 13.6  |
| Wednesday   | 31     | 15.1  | 16    | 14.5  |
| Thursday    | 27     | 13.2  | 16    | 14.5  |
| Friday      | 40     | 19.5  | 22    | 20.0  |
| Saturday    | 29     | 14.1  | 11    | 10.0  |
| Total       | 205    | 100.0 | 110   | 100.0 |

| Crash Type     | Before | %     | After | %     |
|----------------|--------|-------|-------|-------|
| Single vehicle | 1      | 0.5   | 3     | 2.7   |
| Head-on        | 1      | 0.5   | 1     | 0.9   |
| Angle          | 30     | 14.6  | 18    | 16.4  |
| Rear-end       | 125    | 61.0  | 71    | 64.5  |
| Sideswipe      | 44     | 21.5  | 15    | 13.6  |
| Other/unknown  | 4      | 2.0   | 2     | 1.8   |
| Total          | 205    | 100.0 | 110   | 100.0 |

### M59 (Hall Road) and Westbound Crossover at Custer Avenue

Date of Signal Optimization: May 17, 2004



1,233 days before

593 days after

| Injury Severity | Before | %     | After | %     |
|-----------------|--------|-------|-------|-------|
| Fatal           | 0      | 0.0   | 0     | 0.0   |
| A-Injury        | 0      | 0.0   | 0     | 0.0   |
| B-Injury        | 0      | 0.0   | 0     | 0.0   |
| C-Injury        | 4      | 22.2  | 0     | 0.0   |
| O-Injury        | 14     | 77.8  | 8     | 100.0 |
| Total           | 18     | 100.0 | 8     | 100.0 |

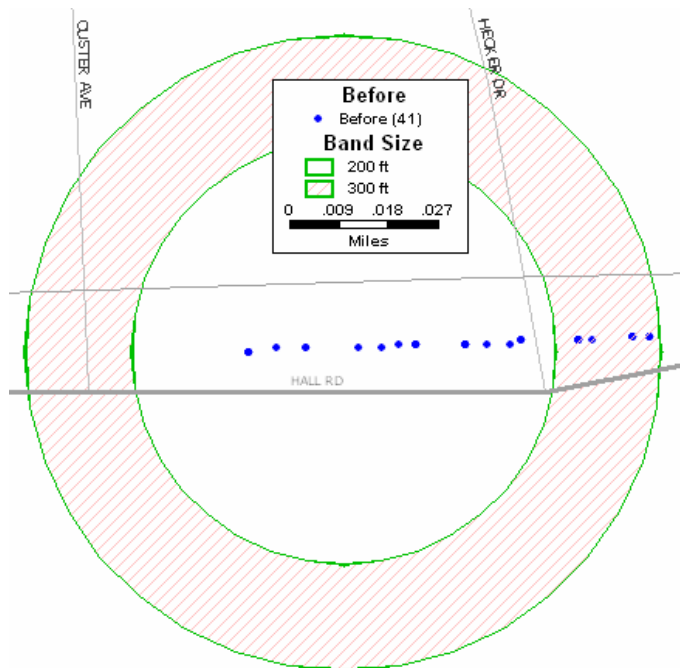
| Time of Day   | Before | %     | After | %     |
|---------------|--------|-------|-------|-------|
| 6am - 9:59am  | 4      | 22.2  | 4     | 50.0  |
| 10am - 3:59pm | 6      | 33.3  | 2     | 25.0  |
| 4pm - 7:59pm  | 6      | 33.3  | 2     | 25.0  |
| 8pm - 5:59am  | 2      | 11.1  | 0     | 0.0   |
| Unknown       | 0      | 0.0   | 0     | 0.0   |
| Total         | 18     | 100.0 | 8     | 100.0 |

| Day of Week | Before | %     | After | %     |
|-------------|--------|-------|-------|-------|
| Sunday      | 3      | 16.7  | 1     | 12.5  |
| Monday      | 2      | 11.1  | 4     | 50.0  |
| Tuesday     | 3      | 16.7  | 1     | 12.5  |
| Wednesday   | 3      | 16.7  | 1     | 12.5  |
| Thursday    | 1      | 5.6   | 0     | 0.0   |
| Friday      | 1      | 5.6   | 1     | 12.5  |
| Saturday    | 5      | 27.8  | 0     | 0.0   |
| Total       | 18     | 100.0 | 8     | 100.0 |

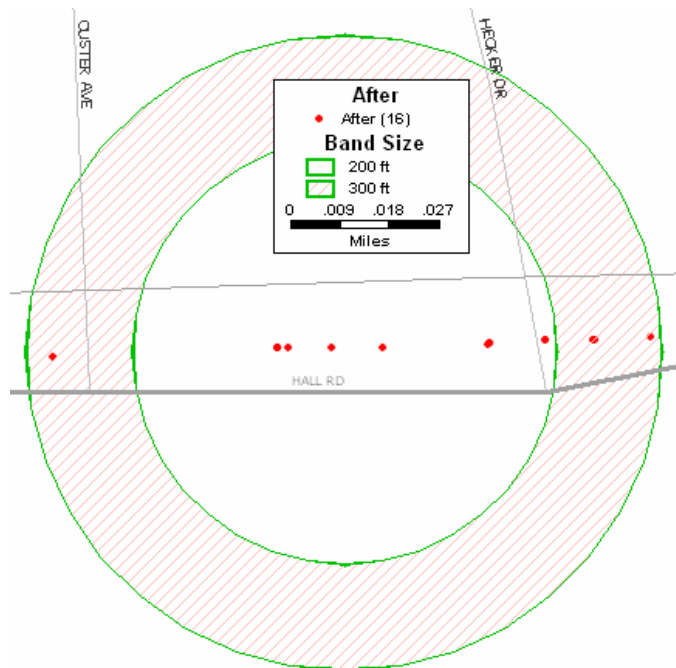
| Crash Type     | Before | %     | After | %     |
|----------------|--------|-------|-------|-------|
| Single vehicle | 0      | 0.0   | 0     | 0.0   |
| Head-on        | 0      | 0.0   | 0     | 0.0   |
| Angle          | 1      | 5.6   | 2     | 25.0  |
| Rear-end       | 13     | 72.2  | 3     | 37.5  |
| Sideswipe      | 4      | 22.2  | 2     | 25.0  |
| Other/unknown  | 0      | 0.0   | 1     | 12.5  |
| Total          | 18     | 100.0 | 8     | 100.0 |

**M59 (Hall Road) and Eastbound Crossover West of Sterritt Street**

Date of Signal Optimization: May 17, 2004



1,233 days before



593 days after

| Injury Severity | Before | %     | After | %     |
|-----------------|--------|-------|-------|-------|
| Fatal           | 0      | 0.0   | 0     | 0.0   |
| A-Injury        | 1      | 2.4   | 0     | 0.0   |
| B-Injury        | 1      | 2.4   | 1     | 6.3   |
| C-Injury        | 4      | 9.8   | 2     | 12.5  |
| O-Injury        | 35     | 85.4  | 13    | 81.3  |
| Total           | 41     | 100.0 | 16    | 100.0 |

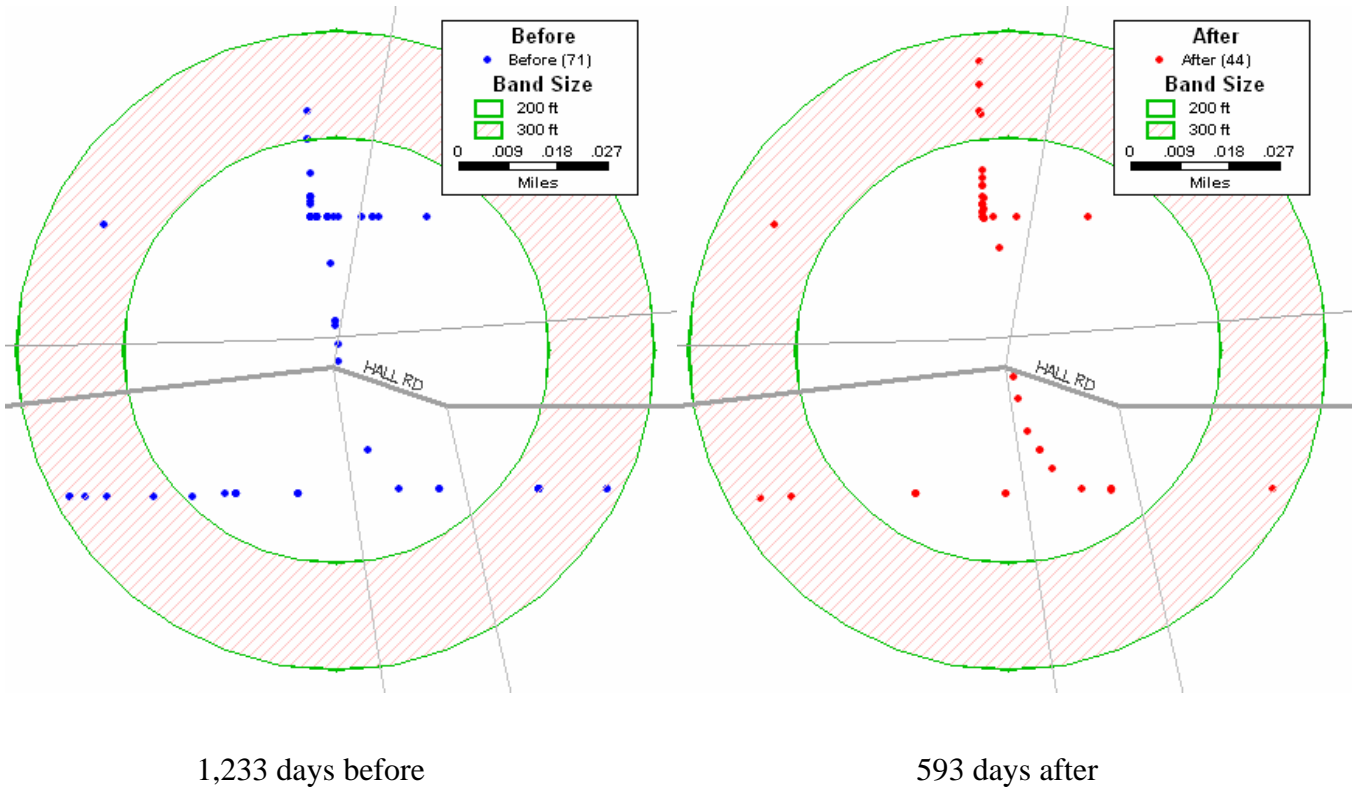
| Time of Day   | Before | %     | After | %     |
|---------------|--------|-------|-------|-------|
| 6am - 9:59am  | 4      | 9.8   | 4     | 25.0  |
| 10am - 3:59pm | 12     | 29.3  | 4     | 25.0  |
| 4pm - 7:59pm  | 19     | 46.3  | 7     | 43.8  |
| 8pm - 5:59am  | 3      | 7.3   | 1     | 6.3   |
| Unknown       | 3      | 7.3   | 0     | 0.0   |
| Total         | 41     | 100.0 | 16    | 100.0 |

| Day of Week | Before | %     | After | %     |
|-------------|--------|-------|-------|-------|
| Sunday      | 4      | 9.8   | 3     | 18.8  |
| Monday      | 6      | 14.6  | 1     | 6.3   |
| Tuesday     | 10     | 24.4  | 2     | 12.5  |
| Wednesday   | 8      | 19.5  | 2     | 12.5  |
| Thursday    | 1      | 2.4   | 3     | 18.8  |
| Friday      | 8      | 19.5  | 1     | 6.3   |
| Saturday    | 4      | 9.8   | 4     | 25.0  |
| Total       | 41     | 100.0 | 16    | 100.0 |

| Crash Type     | Before | %     | After | %     |
|----------------|--------|-------|-------|-------|
| Single vehicle | 1      | 2.4   | 0     | 0.0   |
| Head-on        | 0      | 0.0   | 0     | 0.0   |
| Angle          | 6      | 14.6  | 3     | 18.8  |
| Rear-end       | 32     | 78.0  | 9     | 56.3  |
| Sideswipe      | 2      | 4.9   | 4     | 25.0  |
| Other/unknown  | 0      | 0.0   | 0     | 0.0   |
| Total          | 41     | 100.0 | 16    | 100.0 |

### M59 (Hall Road) Westbound and M53 Southbound off Ramp

Date of Signal Optimization: May 17, 2004



| Injury Severity | Before | %     | After | %     |
|-----------------|--------|-------|-------|-------|
| Fatal           | 0      | 0.0   | 0     | 0.0   |
| A-Injury        | 1      | 1.4   | 1     | 2.3   |
| B-Injury        | 4      | 5.6   | 3     | 6.8   |
| C-Injury        | 14     | 19.7  | 5     | 11.4  |
| O-Injury        | 52     | 73.2  | 35    | 79.5  |
| Total           | 71     | 100.0 | 44    | 100.0 |

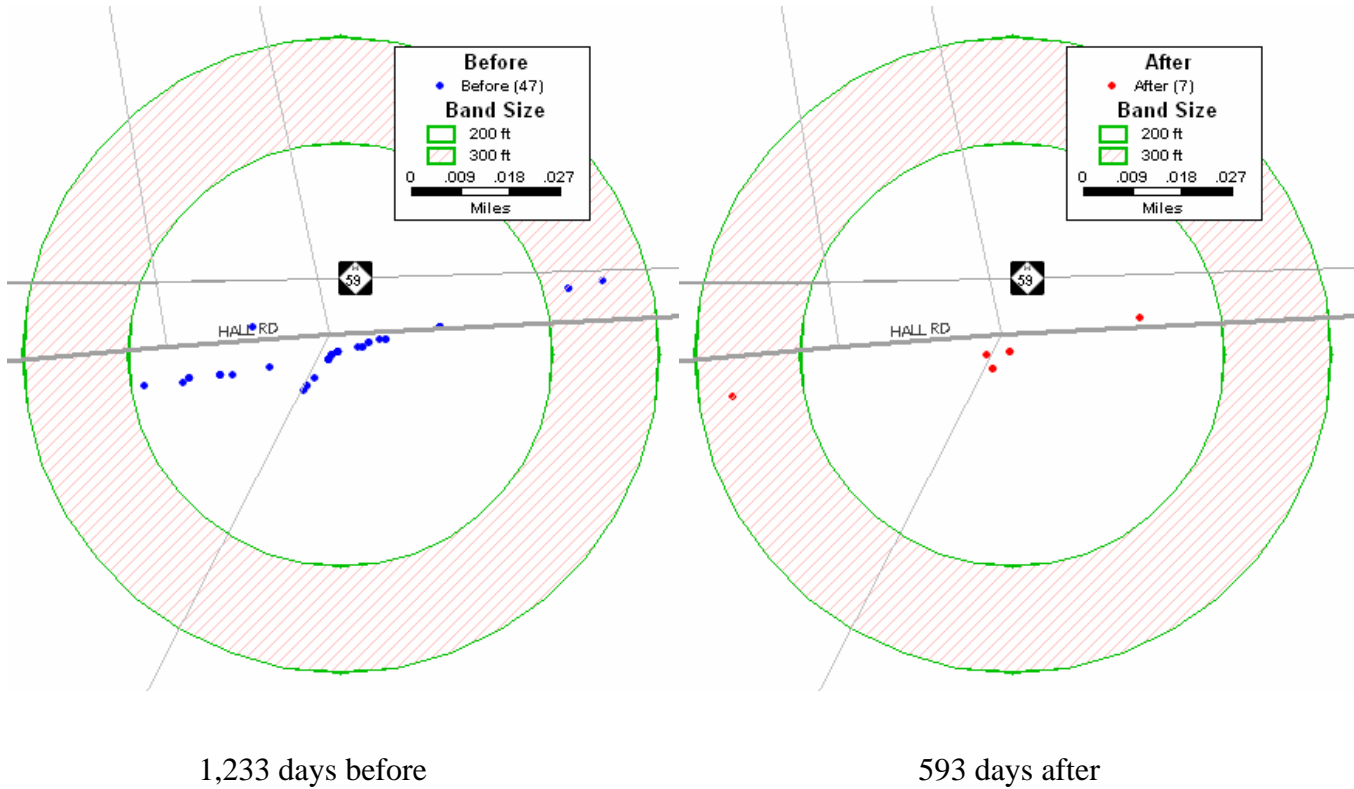
| Time of Day   | Before | %     | After | %     |
|---------------|--------|-------|-------|-------|
| 6am - 9:59am  | 15     | 21.1  | 6     | 13.6  |
| 10am - 3:59pm | 34     | 47.9  | 17    | 38.6  |
| 4pm - 7:59pm  | 10     | 14.1  | 11    | 25.0  |
| 8pm - 5:59am  | 11     | 15.5  | 10    | 22.7  |
| Unknown       | 1      | 1.4   | 0     | 0.0   |
| Total         | 71     | 100.0 | 44    | 100.0 |

| Day of Week | Before | %     | After | %     |
|-------------|--------|-------|-------|-------|
| Sunday      | 6      | 8.5   | 5     | 11.4  |
| Monday      | 11     | 15.5  | 8     | 18.2  |
| Tuesday     | 7      | 9.9   | 5     | 11.4  |
| Wednesday   | 15     | 21.1  | 7     | 15.9  |
| Thursday    | 9      | 12.7  | 6     | 13.6  |
| Friday      | 17     | 23.9  | 8     | 18.2  |
| Saturday    | 6      | 8.5   | 5     | 11.4  |
| Total       | 71     | 100.0 | 44    | 100.0 |

| Crash Type     | Before | %     | After | %     |
|----------------|--------|-------|-------|-------|
| Single vehicle | 4      | 5.6   | 4     | 9.1   |
| Head-on        | 0      | 0.0   | 0     | 0.0   |
| Angle          | 11     | 15.5  | 6     | 13.6  |
| Rear-end       | 48     | 67.6  | 28    | 63.6  |
| Sideswipe      | 6      | 8.5   | 4     | 9.1   |
| Other/unknown  | 2      | 2.8   | 2     | 4.5   |
| Total          | 71     | 100.0 | 44    | 100.0 |

**M59 (Hall Road) Eastbound and M53 Northbound off Ramp**

Date of Signal Optimization: May 17, 2004



| Injury Severity | Before | %     | After | %     |
|-----------------|--------|-------|-------|-------|
| Fatal           | 0      | 0.0   | 0     | 0.0   |
| A-Injury        | 1      | 2.1   | 0     | 0.0   |
| B-Injury        | 1      | 2.1   | 0     | 0.0   |
| C-Injury        | 3      | 6.4   | 3     | 42.9  |
| O-Injury        | 42     | 89.4  | 4     | 57.1  |
| Total           | 47     | 100.0 | 7     | 100.0 |

| Time of Day   | Before | %     | After | %     |
|---------------|--------|-------|-------|-------|
| 6am - 9:59am  | 9      | 19.1  | 1     | 14.3  |
| 10am - 3:59pm | 19     | 40.4  | 6     | 85.7  |
| 4pm - 7:59pm  | 9      | 19.1  | 0     | 0.0   |
| 8pm - 5:59am  | 9      | 19.1  | 0     | 0.0   |
| Unknown       | 1      | 2.1   | 0     | 0.0   |
| Total         | 47     | 100.0 | 7     | 100.0 |

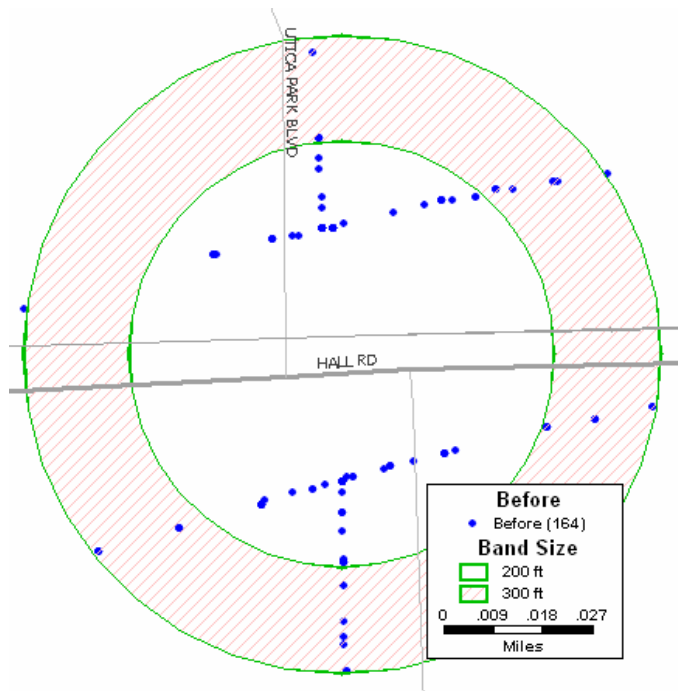
| Day of Week | Before | %     | After | %     |
|-------------|--------|-------|-------|-------|
| Sunday      | 4      | 8.5   | 0     | 0.0   |
| Monday      | 7      | 14.9  | 1     | 14.3  |
| Tuesday     | 6      | 12.8  | 0     | 0.0   |
| Wednesday   | 5      | 10.6  | 2     | 28.6  |
| Thursday    | 11     | 23.4  | 3     | 42.9  |
| Friday      | 9      | 19.1  | 1     | 14.3  |
| Saturday    | 5      | 10.6  | 0     | 0.0   |
| Total       | 47     | 100.0 | 7     | 100.0 |

| Crash Type     | Before | %     | After | %     |
|----------------|--------|-------|-------|-------|
| Single vehicle | 2      | 4.3   | 0     | 0.0   |
| Head-on        | 0      | 0.0   | 0     | 0.0   |
| Angle          | 11     | 23.4  | 2     | 28.6  |
| Rear-end       | 22     | 46.8  | 5     | 71.4  |
| Sideswipe      | 11     | 23.4  | 0     | 0.0   |
| Other/unknown  | 1      | 2.1   | 0     | 0.0   |
| Total          | 47     | 100.0 | 7     | 100.0 |

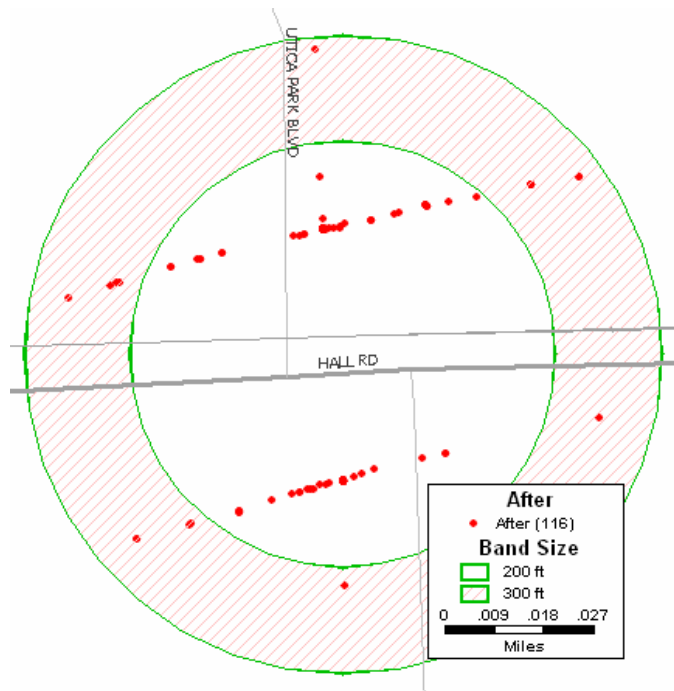


### M59 (Hall Road) and Delco Blvd

Date of Signal Optimization: May 17, 2004



1,233 days before



593 days after

| Injury Severity | Before | %     | After | %     |
|-----------------|--------|-------|-------|-------|
| Fatal           | 0      | 0.0   | 0     | 0.0   |
| A-Injury        | 1      | 0.6   | 0     | 0.0   |
| B-Injury        | 10     | 6.1   | 3     | 2.6   |
| C-Injury        | 20     | 12.2  | 20    | 17.2  |
| O-Injury        | 133    | 81.1  | 93    | 80.2  |
| Total           | 164    | 100.0 | 116   | 100.0 |

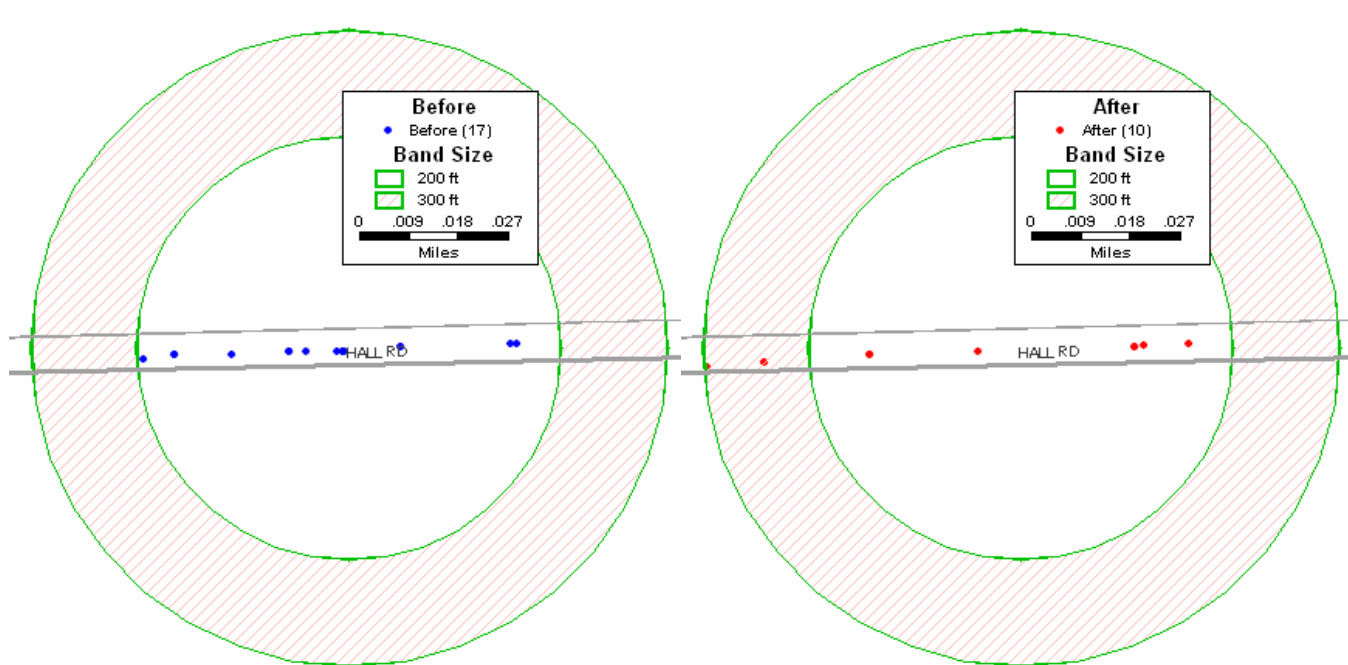
| Time of Day   | Before | %     | After | %     |
|---------------|--------|-------|-------|-------|
| 6am - 9:59am  | 11     | 6.7   | 22    | 19.0  |
| 10am - 3:59pm | 57     | 34.8  | 41    | 35.3  |
| 4pm - 7:59pm  | 56     | 34.1  | 34    | 29.3  |
| 8pm - 5:59am  | 25     | 15.2  | 19    | 16.4  |
| Unknown       | 15     | 9.1   | 0     | 0.0   |
| Total         | 164    | 100.0 | 116   | 100.0 |

| Day of Week | Before | %     | After | %     |
|-------------|--------|-------|-------|-------|
| Sunday      | 20     | 12.2  | 12    | 10.3  |
| Monday      | 20     | 12.2  | 15    | 12.9  |
| Tuesday     | 17     | 10.4  | 21    | 18.1  |
| Wednesday   | 25     | 15.2  | 16    | 13.8  |
| Thursday    | 18     | 11.0  | 21    | 18.1  |
| Friday      | 35     | 21.3  | 13    | 11.2  |
| Saturday    | 29     | 17.7  | 18    | 15.5  |
| Total       | 164    | 100.0 | 116   | 100.0 |

| Crash Type     | Before | %     | After | %     |
|----------------|--------|-------|-------|-------|
| Single vehicle | 4      | 2.4   | 0     | 0.0   |
| Head-on        | 0      | 0.0   | 1     | 0.9   |
| Angle          | 40     | 24.4  | 33    | 28.4  |
| Rear-end       | 79     | 48.2  | 65    | 56.0  |
| Sideswipe      | 34     | 20.7  | 16    | 13.8  |
| Other/unknown  | 7      | 4.3   | 1     | 0.9   |
| Total          | 164    | 100.0 | 116   | 100.0 |

**M59 (Hall Road) Westbound and Crossover East of Delco Blvd**

Date of Signal Optimization: May 17, 2004



1,233 days before

593 days after

| Injury Severity | Before | %     | After | %     |
|-----------------|--------|-------|-------|-------|
| Fatal           | 0      | 0.0   | 0     | 0.0   |
| A-Injury        | 0      | 0.0   | 0     | 0.0   |
| B-Injury        | 0      | 0.0   | 1     | 10.0  |
| C-Injury        | 4      | 23.5  | 1     | 10.0  |
| O-Injury        | 13     | 76.5  | 8     | 80.0  |
| Total           | 17     | 100.0 | 10    | 100.0 |

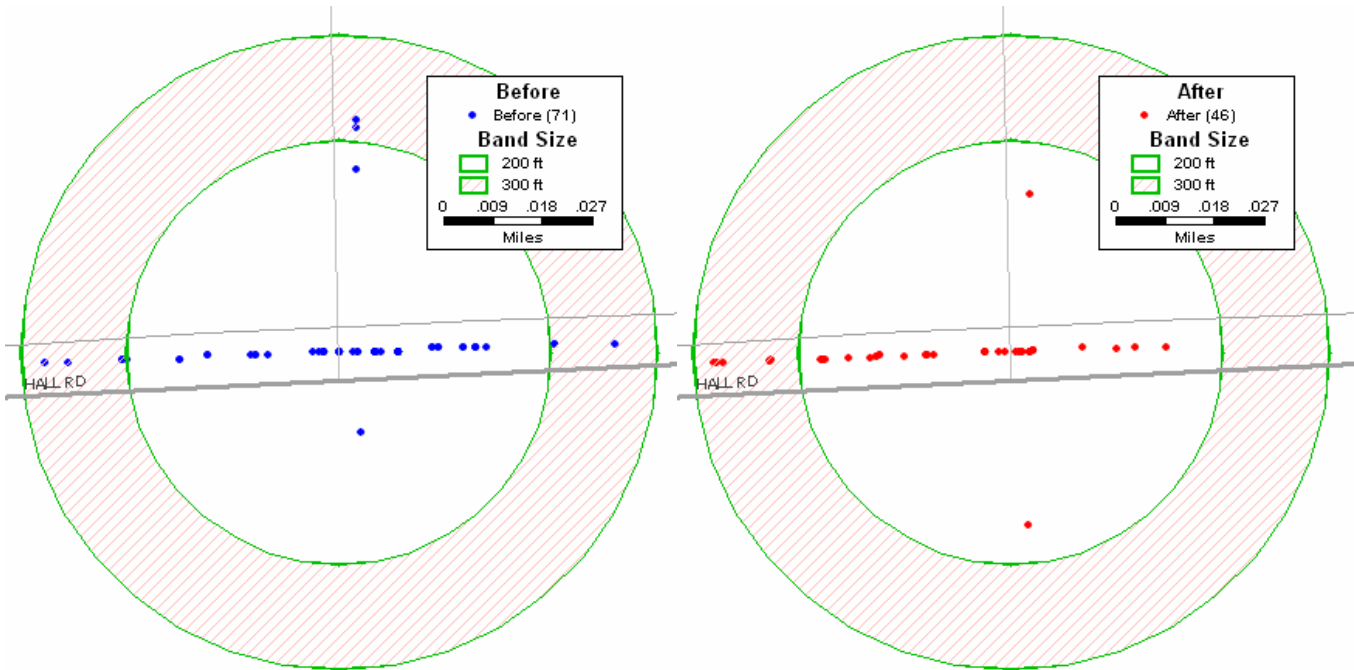
| Time of Day   | Before | %     | After | %     |
|---------------|--------|-------|-------|-------|
| 6am - 9:59am  | 2      | 11.8  | 1     | 10.0  |
| 10am - 3:59pm | 8      | 47.1  | 3     | 30.0  |
| 4pm - 7:59pm  | 2      | 11.8  | 5     | 50.0  |
| 8pm - 5:59am  | 4      | 23.5  | 1     | 10.0  |
| Unknown       | 1      | 5.9   | 0     | 0.0   |
| Total         | 17     | 100.0 | 10    | 100.0 |

| Day of Week | Before | %     | After | %     |
|-------------|--------|-------|-------|-------|
| Sunday      | 1      | 5.9   | 0     | 0.0   |
| Monday      | 5      | 29.4  | 4     | 40.0  |
| Tuesday     | 2      | 11.8  | 2     | 20.0  |
| Wednesday   | 1      | 5.9   | 3     | 30.0  |
| Thursday    | 4      | 23.5  | 0     | 0.0   |
| Friday      | 3      | 17.6  | 1     | 10.0  |
| Saturday    | 1      | 5.9   | 0     | 0.0   |
| Total       | 17     | 100.0 | 10    | 100.0 |

| Crash Type     | Before | %     | After | %     |
|----------------|--------|-------|-------|-------|
| Single vehicle | 1      | 5.9   | 1     | 10.0  |
| Head-on        | 0      | 0.0   | 0     | 0.0   |
| Angle          | 2      | 11.8  | 0     | 0.0   |
| Rear-end       | 9      | 52.9  | 9     | 90.0  |
| Sideswipe      | 5      | 29.4  | 0     | 0.0   |
| Other/unknown  | 0      | 0.0   | 0     | 0.0   |
| Total          | 17     | 100.0 | 10    | 100.0 |

### M59 (Hall Road) Westbound and Crossover at Northpointe Blvd

Date of Signal Optimization: May 17, 2004



1,233 days before

593 days after

| Injury Severity | Before | %     | After | %     |
|-----------------|--------|-------|-------|-------|
| Fatal           | 0      | 0.0   | 0     | 0.0   |
| A-Injury        | 0      | 0.0   | 1     | 2.2   |
| B-Injury        | 2      | 2.8   | 0     | 0.0   |
| C-Injury        | 12     | 16.9  | 9     | 19.6  |
| O-Injury        | 57     | 80.3  | 36    | 78.3  |
| Total           | 71     | 100.0 | 46    | 100.0 |

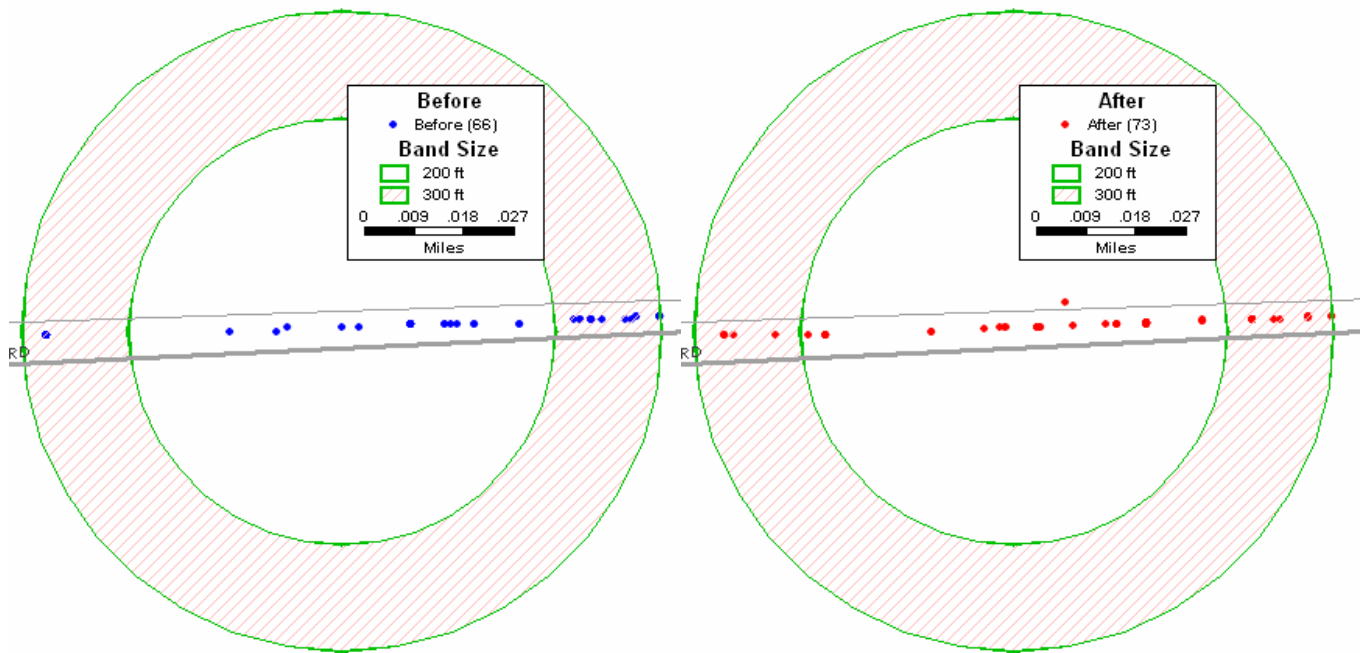
| Time of Day   | Before | %     | After | %     |
|---------------|--------|-------|-------|-------|
| 6am - 9:59am  | 6      | 8.5   | 4     | 8.7   |
| 10am - 3:59pm | 35     | 49.3  | 27    | 58.7  |
| 4pm - 7:59pm  | 15     | 21.1  | 11    | 23.9  |
| 8pm - 5:59am  | 11     | 15.5  | 4     | 8.7   |
| Unknown       | 4      | 5.6   | 0     | 0.0   |
| Total         | 71     | 100.0 | 46    | 100.0 |

| Day of Week | Before | %     | After | %     |
|-------------|--------|-------|-------|-------|
| Sunday      | 8      | 11.3  | 4     | 8.7   |
| Monday      | 9      | 12.7  | 5     | 10.9  |
| Tuesday     | 10     | 14.1  | 3     | 6.5   |
| Wednesday   | 6      | 8.5   | 10    | 21.7  |
| Thursday    | 11     | 15.5  | 6     | 13.0  |
| Friday      | 11     | 15.5  | 10    | 21.7  |
| Saturday    | 16     | 22.5  | 8     | 17.4  |
| Total       | 71     | 100.0 | 46    | 100.0 |

| Crash Type     | Before | %     | After | %     |
|----------------|--------|-------|-------|-------|
| Single vehicle | 1      | 1.4   | 0     | 0.0   |
| Head-on        | 0      | 0.0   | 0     | 0.0   |
| Angle          | 13     | 18.3  | 6     | 13.0  |
| Rear-end       | 44     | 62.0  | 33    | 71.7  |
| Sideswipe      | 12     | 16.9  | 6     | 13.0  |
| Other/unknown  | 1      | 1.4   | 1     | 2.2   |
| Total          | 71     | 100.0 | 46    | 100.0 |

**M59 (Hall Road) Eastbound and Crossover West of Schoenherr Road**

Date of Signal Optimization: May 17, 2004



1,233 days before

593 days after

| Injury Severity | Before | %     | After | %     |
|-----------------|--------|-------|-------|-------|
| Fatal           | 0      | 0.0   | 0     | 0.0   |
| A-Injury        | 1      | 1.5   | 0     | 0.0   |
| B-Injury        | 1      | 1.5   | 1     | 1.4   |
| C-Injury        | 15     | 22.7  | 15    | 20.5  |
| O-Injury        | 49     | 74.2  | 57    | 78.1  |
| Total           | 66     | 100.0 | 73    | 100.0 |

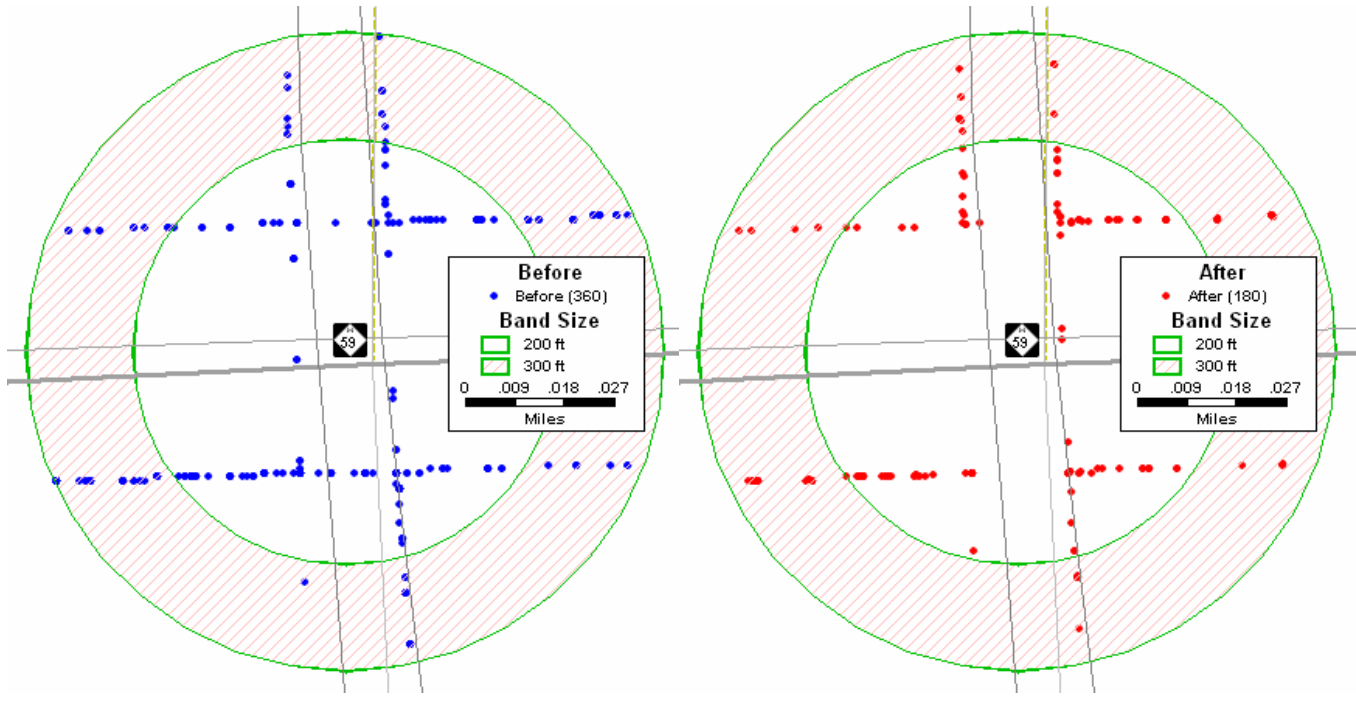
| Time of Day   | Before | %     | After | %     |
|---------------|--------|-------|-------|-------|
| 6am - 9:59am  | 4      | 6.1   | 6     | 8.2   |
| 10am - 3:59pm | 36     | 54.5  | 37    | 50.7  |
| 4pm - 7:59pm  | 11     | 16.7  | 26    | 35.6  |
| 8pm - 5:59am  | 6      | 9.1   | 4     | 5.5   |
| Unknown       | 9      | 13.6  | 0     | 0.0   |
| Total         | 66     | 100.0 | 73    | 100.0 |

| Day of Week | Before | %     | After | %     |
|-------------|--------|-------|-------|-------|
| Sunday      | 5      | 7.6   | 7     | 9.6   |
| Monday      | 10     | 15.2  | 12    | 16.4  |
| Tuesday     | 11     | 16.7  | 6     | 8.2   |
| Wednesday   | 8      | 12.1  | 13    | 17.8  |
| Thursday    | 11     | 16.7  | 10    | 13.7  |
| Friday      | 6      | 9.1   | 9     | 12.3  |
| Saturday    | 15     | 22.7  | 16    | 21.9  |
| Total       | 66     | 100.0 | 73    | 100.0 |

| Crash Type     | Before | %     | After | %     |
|----------------|--------|-------|-------|-------|
| Single vehicle | 0      | 0.0   | 0     | 0.0   |
| Head-on        | 0      | 0.0   | 0     | 0.0   |
| Angle          | 7      | 10.6  | 6     | 8.2   |
| Rear-end       | 52     | 78.8  | 61    | 83.6  |
| Sideswipe      | 7      | 10.6  | 6     | 8.2   |
| Other/unknown  | 0      | 0.0   | 0     | 0.0   |
| Total          | 66     | 100.0 | 73    | 100.0 |

### M59 (Hall Road) and Schoenherr Road

Date of Signal Optimization: May 17, 2004



1,233 days before

593 days after

| Injury Severity | Before | %     | After | %     |
|-----------------|--------|-------|-------|-------|
| Fatal           | 1      | 0.3   | 0     | 0.0   |
| A-Injury        | 1      | 0.3   | 1     | 0.6   |
| B-Injury        | 8      | 2.2   | 4     | 2.2   |
| C-Injury        | 60     | 16.7  | 22    | 12.2  |
| O-Injury        | 290    | 80.6  | 153   | 85.0  |
| Total           | 360    | 100.0 | 180   | 100.0 |

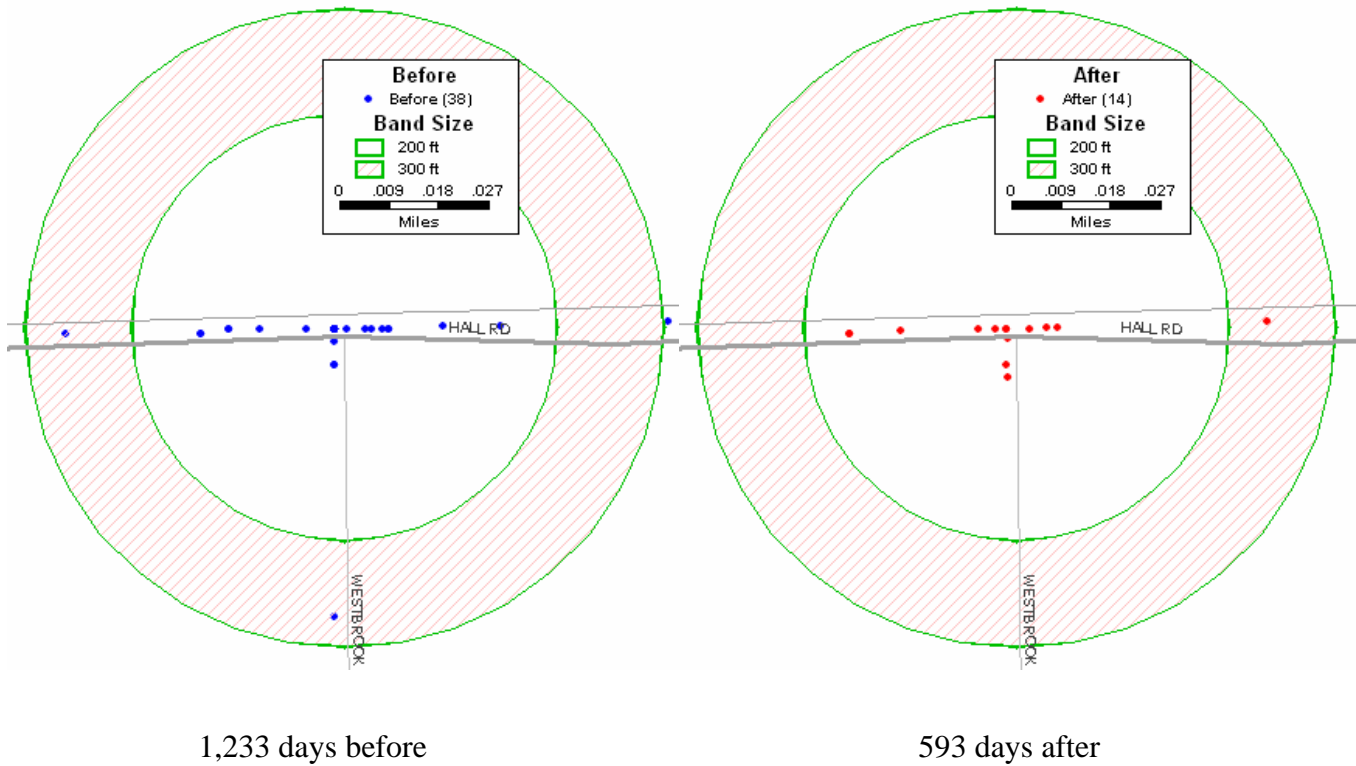
| Time of Day   | Before | %     | After | %     |
|---------------|--------|-------|-------|-------|
| 6am - 9:59am  | 16     | 4.4   | 13    | 7.2   |
| 10am - 3:59pm | 146    | 40.6  | 91    | 50.6  |
| 4pm - 7:59pm  | 113    | 31.4  | 48    | 26.7  |
| 8pm - 5:59am  | 51     | 14.2  | 26    | 14.4  |
| Unknown       | 34     | 9.4   | 2     | 1.1   |
| Total         | 360    | 100.0 | 180   | 100.0 |

| Day of Week | Before | %     | After | %     |
|-------------|--------|-------|-------|-------|
| Sunday      | 47     | 13.1  | 23    | 12.8  |
| Monday      | 49     | 13.6  | 25    | 13.9  |
| Tuesday     | 48     | 13.3  | 23    | 12.8  |
| Wednesday   | 40     | 11.1  | 30    | 16.7  |
| Thursday    | 37     | 10.3  | 22    | 12.2  |
| Friday      | 65     | 18.1  | 28    | 15.6  |
| Saturday    | 74     | 20.6  | 29    | 16.1  |
| Total       | 360    | 100.0 | 180   | 100.0 |

| Crash Type     | Before | %     | After | %     |
|----------------|--------|-------|-------|-------|
| Single vehicle | 6      | 1.7   | 3     | 1.7   |
| Head-on        | 1      | 0.3   | 0     | 0.0   |
| Angle          | 52     | 14.4  | 21    | 11.7  |
| Rear-end       | 232    | 64.4  | 117   | 65.0  |
| Sideswipe      | 54     | 15.0  | 35    | 19.4  |
| Other/unknown  | 15     | 4.2   | 4     | 2.2   |
| Total          | 360    | 100.0 | 180   | 100.0 |

**M59 (Hall Road) Eastbound and Westbrook Drive**

Date of Signal Optimization: May 17, 2004



| Injury Severity | Before | %     | After | %     |
|-----------------|--------|-------|-------|-------|
| Fatal           | 0      | 0.0   | 0     | 0.0   |
| A-Injury        | 0      | 0.0   | 0     | 0.0   |
| B-Injury        | 0      | 0.0   | 0     | 0.0   |
| C-Injury        | 2      | 5.3   | 0     | 0.0   |
| O-Injury        | 36     | 94.7  | 14    | 100.0 |
| Total           | 38     | 100.0 | 14    | 100.0 |

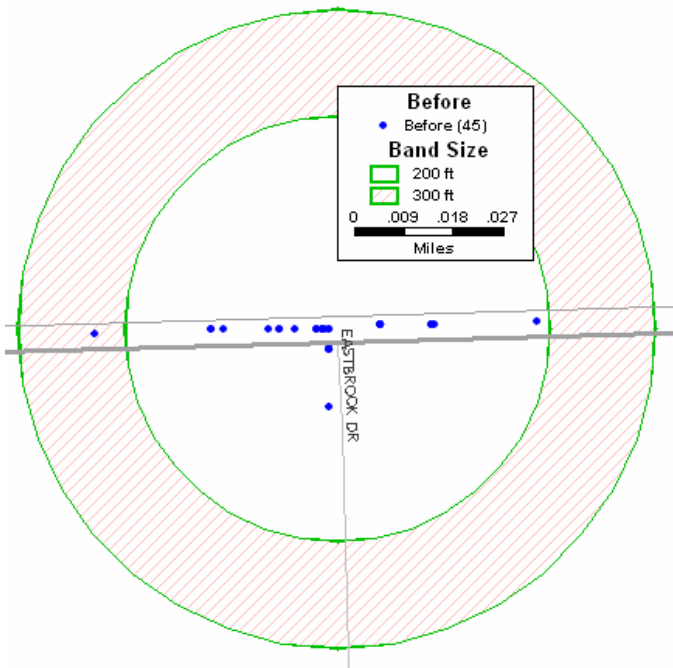
| Time of Day   | Before | %     | After | %     |
|---------------|--------|-------|-------|-------|
| 6am - 9:59am  | 1      | 2.6   | 1     | 7.1   |
| 10am - 3:59pm | 12     | 31.6  | 5     | 35.7  |
| 4pm - 7:59pm  | 11     | 28.9  | 4     | 28.6  |
| 8pm - 5:59am  | 9      | 23.7  | 4     | 28.6  |
| Unknown       | 5      | 13.2  | 0     | 0.0   |
| Total         | 38     | 100.0 | 14    | 100.0 |

| Day of Week | Before | %     | After | %     |
|-------------|--------|-------|-------|-------|
| Sunday      | 4      | 10.5  | 0     | 0.0   |
| Monday      | 1      | 2.6   | 4     | 28.6  |
| Tuesday     | 2      | 5.3   | 3     | 21.4  |
| Wednesday   | 8      | 21.1  | 2     | 14.3  |
| Thursday    | 6      | 15.8  | 1     | 7.1   |
| Friday      | 10     | 26.3  | 1     | 7.1   |
| Saturday    | 7      | 18.4  | 3     | 21.4  |
| Total       | 38     | 100.0 | 14    | 100.0 |

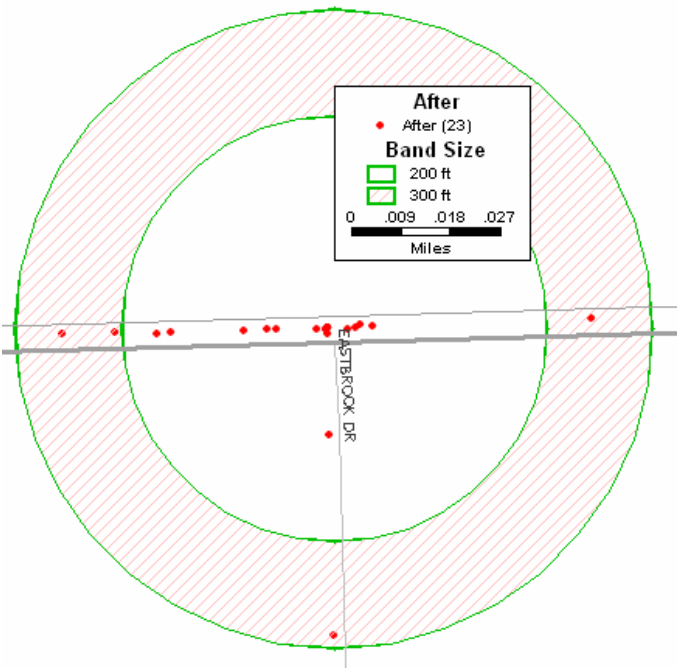
| Crash Type     | Before | %     | After | %     |
|----------------|--------|-------|-------|-------|
| Single vehicle | 2      | 5.3   | 1     | 7.1   |
| Head-on        | 0      | 0.0   | 0     | 0.0   |
| Angle          | 9      | 23.7  | 3     | 21.4  |
| Rear-end       | 18     | 47.4  | 7     | 50.0  |
| Sideswipe      | 8      | 21.1  | 3     | 21.4  |
| Other/unknown  | 1      | 2.6   | 0     | 0.0   |
| Total          | 38     | 100.0 | 14    | 100.0 |

**M59 (Hall Road) Eastbound and Crossover at Eastbrook Drive**

Date of Signal Optimization: May 17, 2004



1,233 days before



593 days after

| Injury Severity | Before | %     | After | %     |
|-----------------|--------|-------|-------|-------|
| Fatal           | 0      | 0.0   | 0     | 0.0   |
| A-Injury        | 1      | 2.2   | 1     | 4.3   |
| B-Injury        | 1      | 2.2   | 2     | 8.7   |
| C-Injury        | 7      | 15.6  | 2     | 8.7   |
| O-Injury        | 36     | 80.0  | 18    | 78.3  |
| Total           | 45     | 100.0 | 23    | 100.0 |

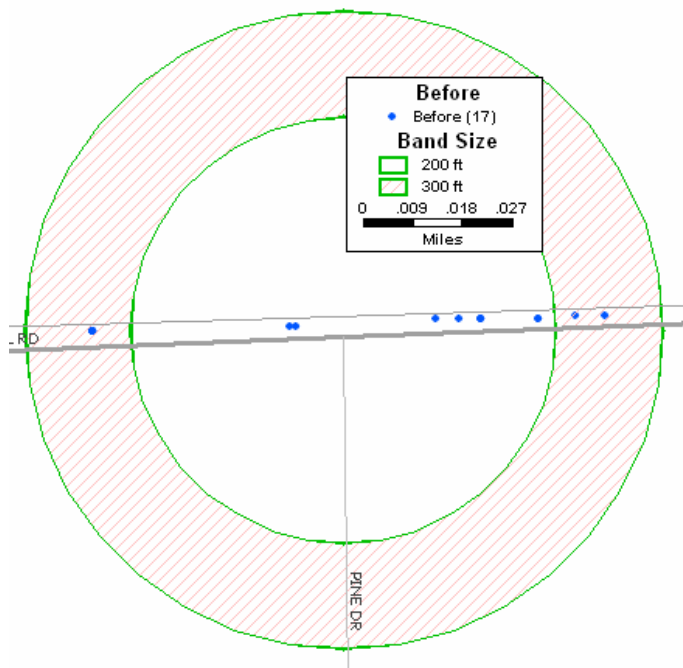
| Time of Day   | Before | %     | After | %     |
|---------------|--------|-------|-------|-------|
| 6am - 9:59am  | 1      | 2.2   | 4     | 17.4  |
| 10am - 3:59pm | 19     | 42.2  | 11    | 47.8  |
| 4pm - 7:59pm  | 14     | 31.1  | 6     | 26.1  |
| 8pm - 5:59am  | 9      | 20.0  | 2     | 8.7   |
| Unknown       | 2      | 4.4   | 0     | 0.0   |
| Total         | 45     | 100.0 | 23    | 100.0 |

| Day of Week | Before | %     | After | %     |
|-------------|--------|-------|-------|-------|
| Sunday      | 7      | 15.6  | 1     | 4.3   |
| Monday      | 6      | 13.3  | 6     | 26.1  |
| Tuesday     | 7      | 15.6  | 1     | 4.3   |
| Wednesday   | 6      | 13.3  | 2     | 8.7   |
| Thursday    | 7      | 15.6  | 1     | 4.3   |
| Friday      | 7      | 15.6  | 9     | 39.1  |
| Saturday    | 5      | 11.1  | 3     | 13.0  |
| Total       | 45     | 100.0 | 23    | 100.0 |

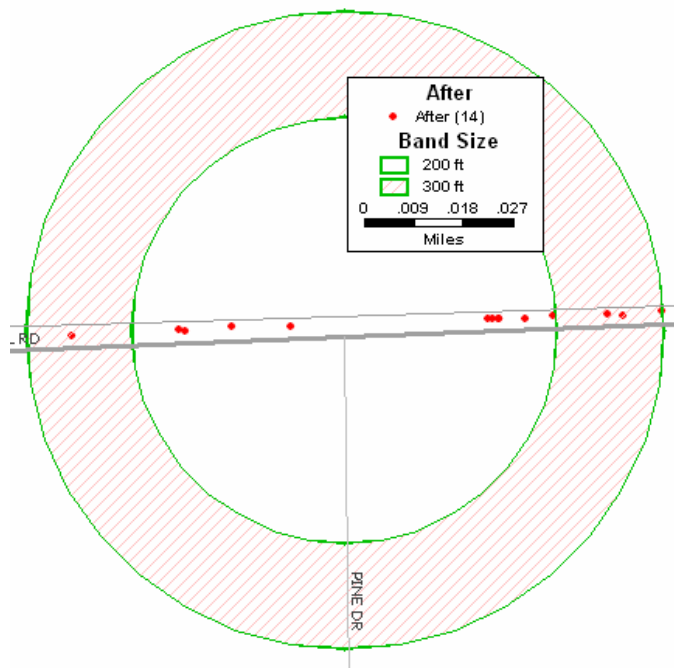
| Crash Type     | Before | %     | After | %     |
|----------------|--------|-------|-------|-------|
| Single vehicle | 0      | 0.0   | 0     | 0.0   |
| Head-on        | 0      | 0.0   | 0     | 0.0   |
| Angle          | 9      | 20.0  | 6     | 26.1  |
| Rear-end       | 26     | 57.8  | 10    | 43.5  |
| Sideswipe      | 9      | 20.0  | 7     | 30.4  |
| Other/unknown  | 1      | 2.2   | 0     | 0.0   |
| Total          | 45     | 100.0 | 23    | 100.0 |

### M59 (Hall Road) Eastbound and Crossover West of Hayes Road

Date of Signal Optimization: May 17, 2004



1,233 days before



593 days after

| Injury Severity | Before | %     | After | %     |
|-----------------|--------|-------|-------|-------|
| Fatal           | 0      | 0.0   | 0     | 0.0   |
| A-Injury        | 0      | 0.0   | 0     | 0.0   |
| B-Injury        | 1      | 5.9   | 1     | 7.1   |
| C-Injury        | 3      | 17.6  | 2     | 14.3  |
| O-Injury        | 13     | 76.5  | 11    | 78.6  |
| Total           | 17     | 100.0 | 14    | 100.0 |

| Time of Day   | Before | %     | After | %     |
|---------------|--------|-------|-------|-------|
| 6am - 9:59am  | 1      | 5.9   | 0     | 0.0   |
| 10am - 3:59pm | 4      | 23.5  | 2     | 14.3  |
| 4pm - 7:59pm  | 4      | 23.5  | 7     | 50.0  |
| 8pm - 5:59am  | 6      | 35.3  | 5     | 35.7  |
| Unknown       | 2      | 11.8  | 0     | 0.0   |
| Total         | 17     | 100.0 | 14    | 100.0 |

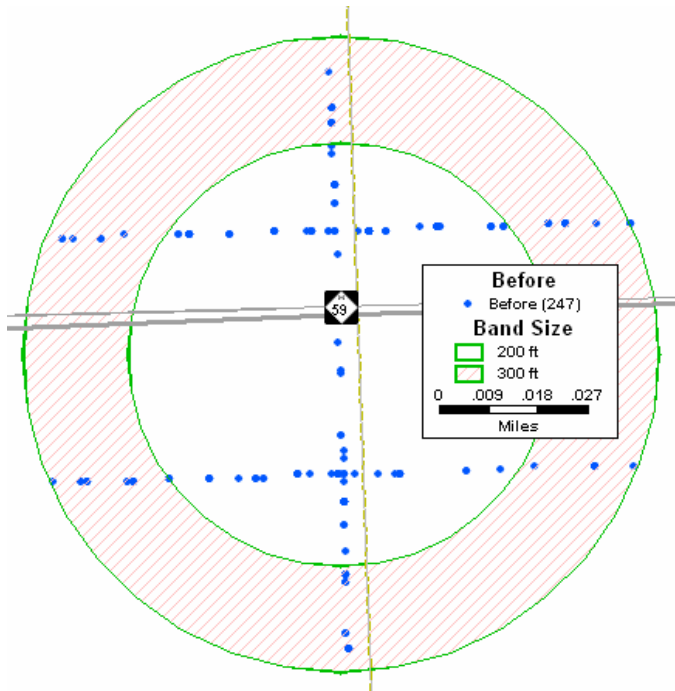
| Day of Week | Before | %     | After | %     |
|-------------|--------|-------|-------|-------|
| Sunday      | 3      | 17.6  | 2     | 14.3  |
| Monday      | 4      | 23.5  | 1     | 7.1   |
| Tuesday     | 3      | 17.6  | 6     | 42.9  |
| Wednesday   | 2      | 11.8  | 4     | 28.6  |
| Thursday    | 1      | 5.9   | 0     | 0.0   |
| Friday      | 4      | 23.5  | 0     | 0.0   |
| Saturday    | 0      | 0.0   | 1     | 7.1   |
| Total       | 17     | 100.0 | 14    | 100.0 |

| Crash Type     | Before | %     | After | %     |
|----------------|--------|-------|-------|-------|
| Single vehicle | 0      | 0.0   | 0     | 0.0   |
| Head-on        | 0      | 0.0   | 0     | 0.0   |
| Angle          | 4      | 23.5  | 2     | 14.3  |
| Rear-end       | 10     | 58.8  | 12    | 85.7  |
| Sideswipe      | 3      | 17.6  | 0     | 0.0   |
| Other/unknown  | 0      | 0.0   | 0     | 0.0   |
| Total          | 17     | 100.0 | 14    | 100.0 |

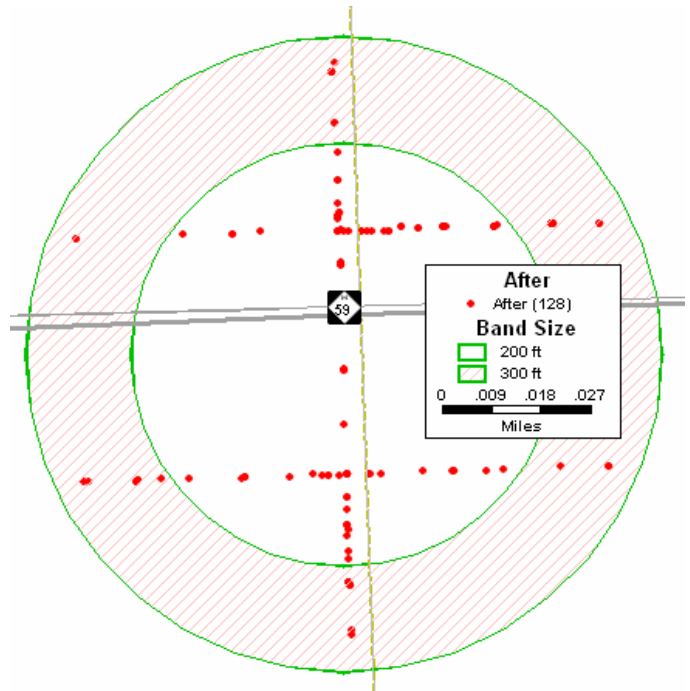


**M59 (Hall Road) and Hayes Road**

Date of Signal Optimization: May 17, 2004



1,233 days before



593 days after

| Injury Severity | Before | %     | After | %     |
|-----------------|--------|-------|-------|-------|
| Fatal           | 0      | 0.0   | 0     | 0.0   |
| A-Injury        | 2      | 0.8   | 2     | 1.6   |
| B-Injury        | 7      | 2.8   | 6     | 4.7   |
| C-Injury        | 43     | 17.4  | 24    | 18.8  |
| O-Injury        | 195    | 78.9  | 96    | 75.0  |
| Total           | 247    | 100.0 | 128   | 100.0 |

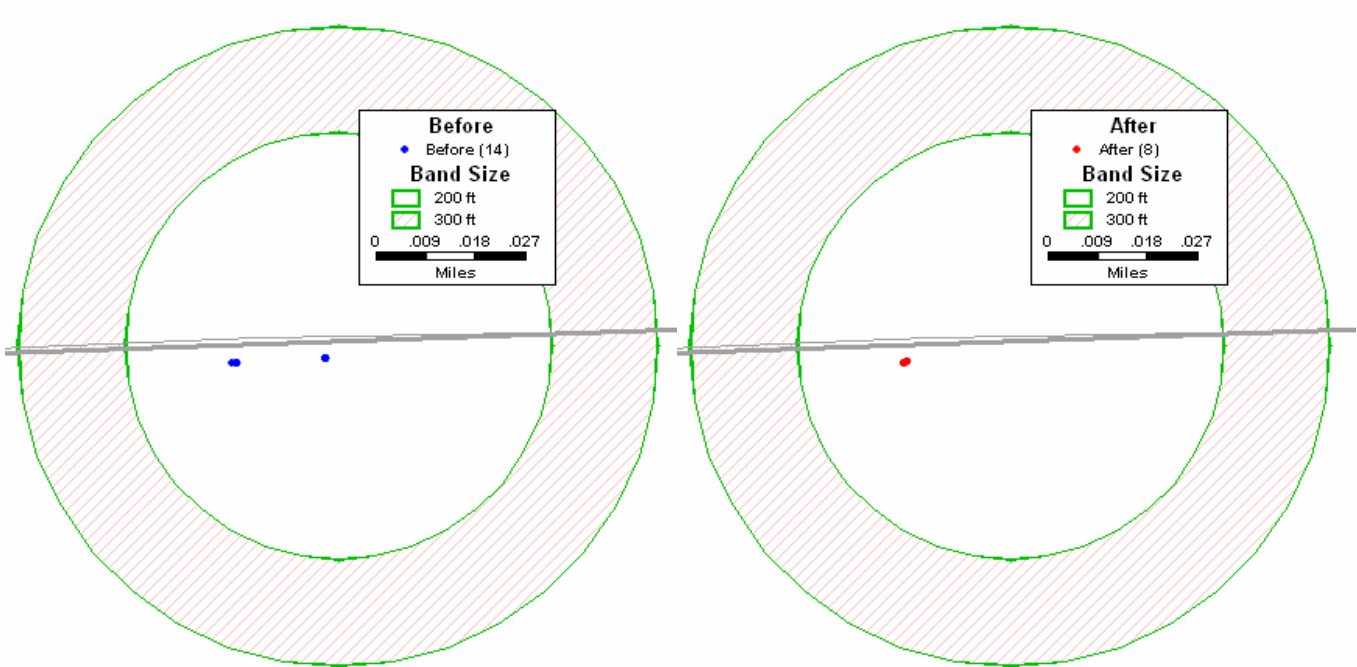
| Time of Day   | Before | %     | After | %     |
|---------------|--------|-------|-------|-------|
| 6am - 9:59am  | 19     | 7.7   | 18    | 14.1  |
| 10am - 3:59pm | 117    | 47.4  | 62    | 48.4  |
| 4pm - 7:59pm  | 54     | 21.9  | 32    | 25.0  |
| 8pm - 5:59am  | 37     | 15.0  | 16    | 12.5  |
| Unknown       | 20     | 8.1   | 0     | 0.0   |
| Total         | 247    | 100.0 | 128   | 100.0 |

| Day of Week | Before | %     | After | %     |
|-------------|--------|-------|-------|-------|
| Sunday      | 34     | 13.8  | 8     | 6.3   |
| Monday      | 40     | 16.2  | 17    | 13.3  |
| Tuesday     | 26     | 10.5  | 17    | 13.3  |
| Wednesday   | 29     | 11.7  | 18    | 14.1  |
| Thursday    | 33     | 13.4  | 21    | 16.4  |
| Friday      | 42     | 17.0  | 25    | 19.5  |
| Saturday    | 43     | 17.4  | 22    | 17.2  |
| Total       | 247    | 100.0 | 128   | 100.0 |

| Crash Type     | Before | %     | After | %     |
|----------------|--------|-------|-------|-------|
| Single vehicle | 2      | 0.8   | 3     | 2.3   |
| Head-on        | 0      | 0.0   | 0     | 0.0   |
| Angle          | 50     | 20.2  | 26    | 20.3  |
| Rear-end       | 145    | 58.7  | 85    | 66.4  |
| Sideswipe      | 38     | 15.4  | 10    | 7.8   |
| Other/unknown  | 12     | 4.9   | 4     | 3.1   |
| Total          | 247    | 100.0 | 128   | 100.0 |

**M59 (Hall Road) Eastbound and Crossover West of Tilch Road**

Date of Signal Optimization: May 17, 2004



1,233 days before

593 days after

| Injury Severity | Before | %     | After | %     |
|-----------------|--------|-------|-------|-------|
| Fatal           | 0      | 0.0   | 0     | 0.0   |
| A-Injury        | 0      | 0.0   | 0     | 0.0   |
| B-Injury        | 0      | 0.0   | 0     | 0.0   |
| C-Injury        | 5      | 35.7  | 2     | 25.0  |
| O-Injury        | 9      | 64.3  | 6     | 75.0  |
| Total           | 14     | 100.0 | 8     | 100.0 |

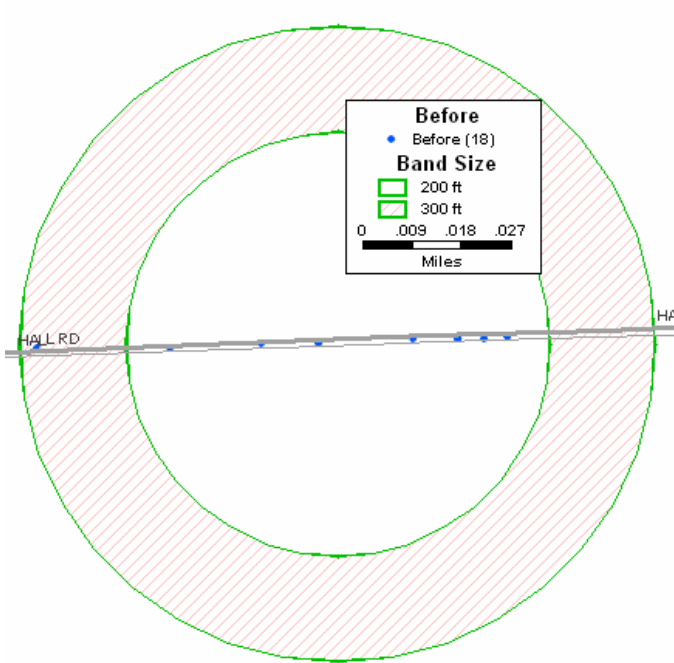
| Time of Day   | Before | %     | After | %     |
|---------------|--------|-------|-------|-------|
| 6am - 9:59am  | 3      | 21.4  | 1     | 12.5  |
| 10am - 3:59pm | 5      | 35.7  | 3     | 37.5  |
| 4pm - 7:59pm  | 4      | 28.6  | 4     | 50.0  |
| 8pm - 5:59am  | 1      | 7.1   | 0     | 0.0   |
| Unknown       | 1      | 7.1   | 0     | 0.0   |
| Total         | 14     | 100.0 | 8     | 100.0 |

| Day of Week | Before | %     | After | %     |
|-------------|--------|-------|-------|-------|
| Sunday      | 0      | 0.0   | 0     | 0.0   |
| Monday      | 4      | 28.6  | 2     | 25.0  |
| Tuesday     | 2      | 14.3  | 0     | 0.0   |
| Wednesday   | 2      | 14.3  | 2     | 25.0  |
| Thursday    | 1      | 7.1   | 1     | 12.5  |
| Friday      | 0      | 0.0   | 2     | 25.0  |
| Saturday    | 5      | 35.7  | 1     | 12.5  |
| Total       | 14     | 100.0 | 8     | 100.0 |

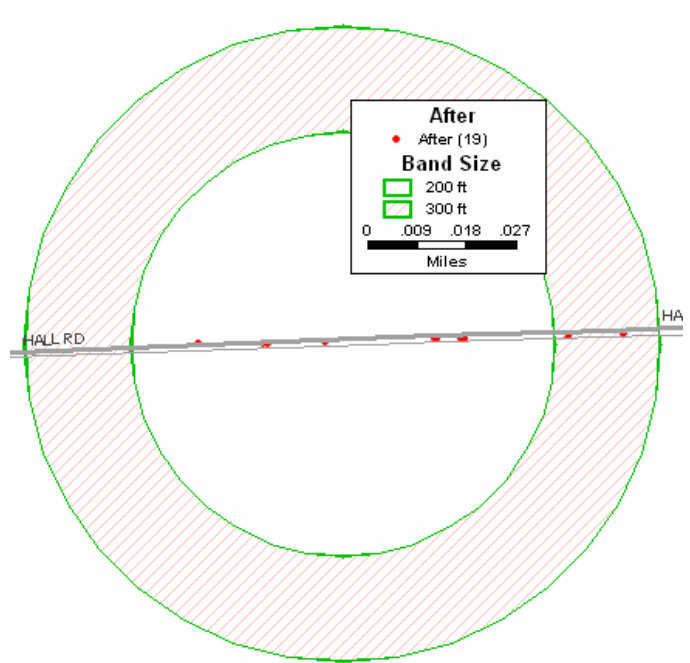
| Crash Type     | Before | %     | After | %     |
|----------------|--------|-------|-------|-------|
| Single vehicle | 0      | 0.0   | 0     | 0.0   |
| Head-on        | 0      | 0.0   | 0     | 0.0   |
| Angle          | 2      | 14.3  | 0     | 0.0   |
| Rear-end       | 10     | 71.4  | 4     | 50.0  |
| Sideswipe      | 0      | 0.0   | 4     | 50.0  |
| Other/unknown  | 2      | 14.3  | 0     | 0.0   |
| Total          | 14     | 100.0 | 8     | 100.0 |

**M59 (Hall Road) Eastbound and Crossover West of Garfield Road**

Date of Signal Optimization: May 17, 2004



1,233 days before



593 days after

| Injury Severity | Before | %     | After | %     |
|-----------------|--------|-------|-------|-------|
| Fatal           | 0      | 0.0   | 0     | 0.0   |
| A-Injury        | 0      | 0.0   | 0     | 0.0   |
| B-Injury        | 1      | 5.6   | 0     | 0.0   |
| C-Injury        | 3      | 16.7  | 6     | 31.6  |
| O-Injury        | 14     | 77.8  | 13    | 68.4  |
| Total           | 18     | 100.0 | 19    | 100.0 |

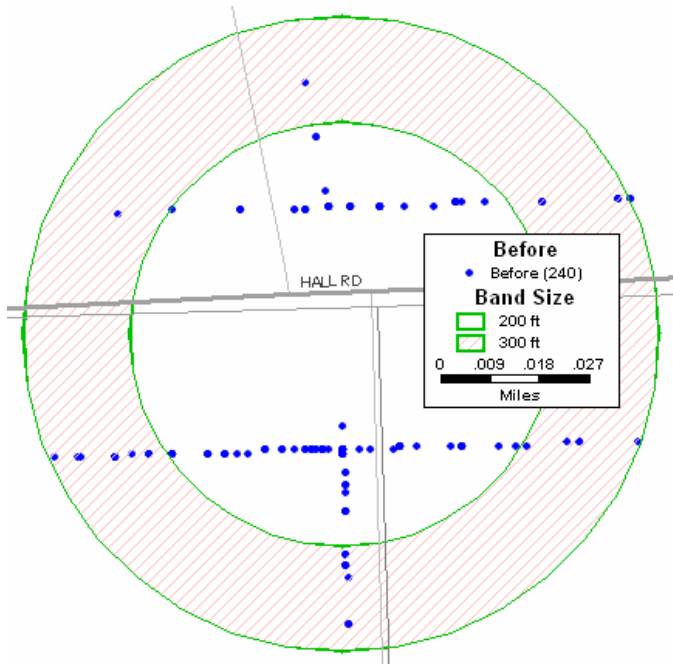
| Time of Day   | Before | %     | After | %     |
|---------------|--------|-------|-------|-------|
| 6am - 9:59am  | 0      | 0.0   | 4     | 21.1  |
| 10am - 3:59pm | 9      | 50.0  | 7     | 36.8  |
| 4pm - 7:59pm  | 5      | 27.8  | 7     | 36.8  |
| 8pm - 5:59am  | 3      | 16.7  | 1     | 5.3   |
| Unknown       | 1      | 5.6   | 0     | 0.0   |
| Total         | 18     | 100.0 | 19    | 100.0 |

| Day of Week | Before | %     | After | %     |
|-------------|--------|-------|-------|-------|
| Sunday      | 3      | 16.7  | 2     | 10.5  |
| Monday      | 2      | 11.1  | 2     | 10.5  |
| Tuesday     | 1      | 5.6   | 2     | 10.5  |
| Wednesday   | 2      | 11.1  | 5     | 26.3  |
| Thursday    | 7      | 38.9  | 3     | 15.8  |
| Friday      | 2      | 11.1  | 3     | 15.8  |
| Saturday    | 1      | 5.6   | 2     | 10.5  |
| Total       | 18     | 100.0 | 19    | 100.0 |

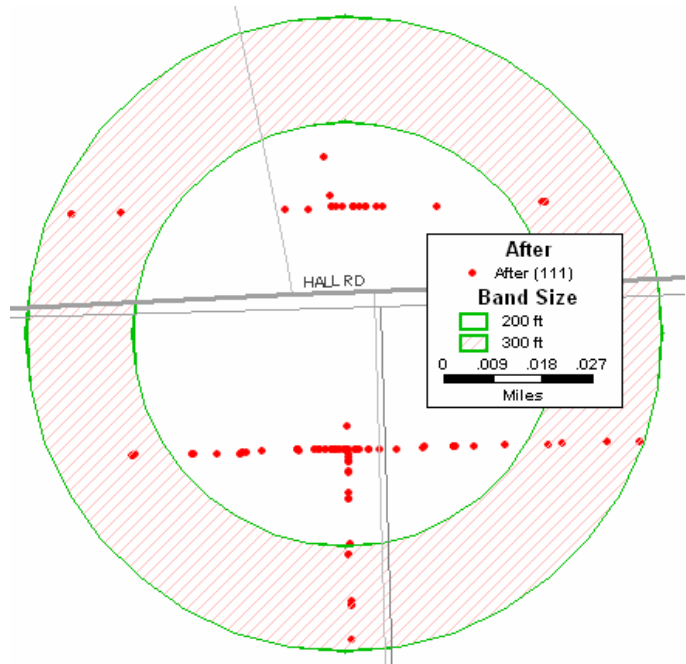
| Crash Type     | Before | %     | After | %     |
|----------------|--------|-------|-------|-------|
| Single vehicle | 1      | 5.6   | 1     | 5.3   |
| Head-on        | 0      | 0.0   | 1     | 5.3   |
| Angle          | 3      | 16.7  | 3     | 15.8  |
| Rear-end       | 10     | 55.6  | 13    | 68.4  |
| Sideswipe      | 4      | 22.2  | 0     | 0.0   |
| Other/unknown  | 0      | 0.0   | 1     | 5.3   |
| Total          | 18     | 100.0 | 19    | 100.0 |

### M59 (Hall Road) and Garfield Road

Date of Signal Optimization: May 17, 2004



1,233 days before



593 days after

| Injury Severity | Before | %     | After | %     |
|-----------------|--------|-------|-------|-------|
| Fatal           | 0      | 0.0   | 0     | 0.0   |
| A-Injury        | 7      | 2.9   | 1     | 0.9   |
| B-Injury        | 10     | 4.2   | 4     | 3.6   |
| C-Injury        | 46     | 19.2  | 16    | 14.4  |
| O-Injury        | 177    | 73.8  | 90    | 81.1  |
| Total           | 240    | 100.0 | 111   | 100.0 |

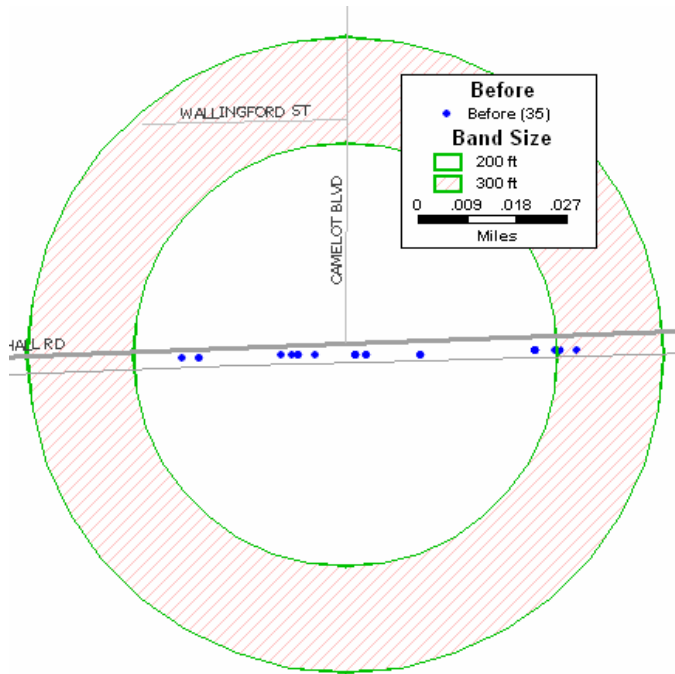
| Time of Day   | Before | %     | After | %     |
|---------------|--------|-------|-------|-------|
| 6am - 9:59am  | 32     | 13.3  | 9     | 8.1   |
| 10am - 3:59pm | 88     | 36.7  | 54    | 48.6  |
| 4pm - 7:59pm  | 65     | 27.1  | 35    | 31.5  |
| 8pm - 5:59am  | 35     | 14.6  | 13    | 11.7  |
| Unknown       | 20     | 8.3   | 0     | 0.0   |
| Total         | 240    | 100.0 | 111   | 100.0 |

| Day of Week | Before | %     | After | %     |
|-------------|--------|-------|-------|-------|
| Sunday      | 15     | 6.3   | 7     | 6.3   |
| Monday      | 43     | 17.9  | 14    | 12.6  |
| Tuesday     | 44     | 18.3  | 17    | 15.3  |
| Wednesday   | 32     | 13.3  | 27    | 24.3  |
| Thursday    | 34     | 14.2  | 11    | 9.9   |
| Friday      | 42     | 17.5  | 21    | 18.9  |
| Saturday    | 30     | 12.5  | 14    | 12.6  |
| Total       | 240    | 100.0 | 111   | 100.0 |

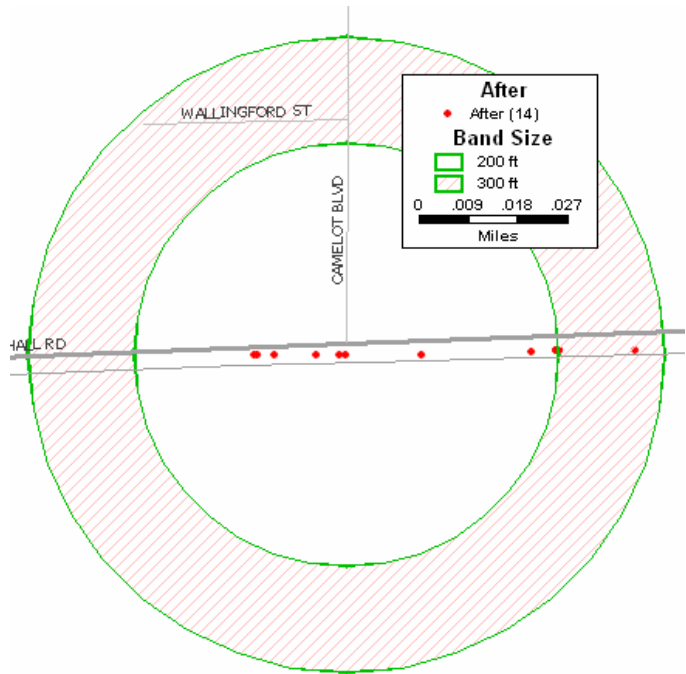
| Crash Type     | Before | %     | After | %     |
|----------------|--------|-------|-------|-------|
| Single vehicle | 9      | 3.8   | 3     | 2.7   |
| Head-on        | 0      | 0.0   | 1     | 0.9   |
| Angle          | 35     | 14.6  | 17    | 15.3  |
| Rear-end       | 159    | 66.3  | 74    | 66.7  |
| Sideswipe      | 31     | 12.9  | 14    | 12.6  |
| Other/unknown  | 6      | 2.5   | 2     | 1.8   |
| Total          | 240    | 100.0 | 111   | 100.0 |

### M59 (Hall Road) Westbound and Crossover East of Garfield Road

Date of Signal Optimization: May 17, 2004



1,233 days before



593 days after

| Injury Severity | Before | %     | After | %     |
|-----------------|--------|-------|-------|-------|
| Fatal           | 0      | 0.0   | 0     | 0.0   |
| A-Injury        | 0      | 0.0   | 2     | 14.3  |
| B-Injury        | 3      | 8.6   | 0     | 0.0   |
| C-Injury        | 9      | 25.7  | 2     | 14.3  |
| O-Injury        | 23     | 65.7  | 10    | 71.4  |
| Total           | 35     | 100.0 | 14    | 100.0 |

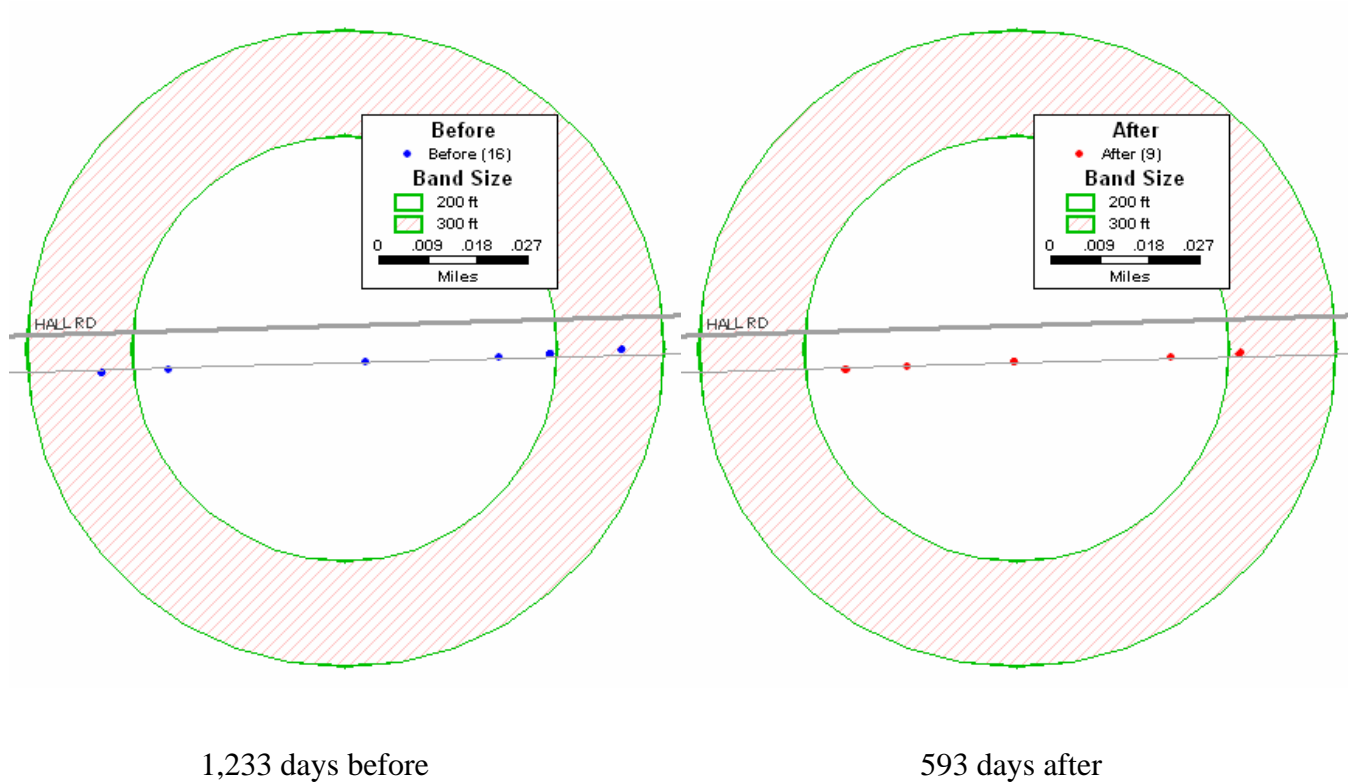
| Time of Day   | Before | %     | After | %     |
|---------------|--------|-------|-------|-------|
| 6am - 9:59am  | 6      | 17.1  | 3     | 21.4  |
| 10am - 3:59pm | 18     | 51.4  | 6     | 42.9  |
| 4pm - 7:59pm  | 7      | 20.0  | 4     | 28.6  |
| 8pm - 5:59am  | 2      | 5.7   | 1     | 7.1   |
| Unknown       | 2      | 5.7   | 0     | 0.0   |
| Total         | 35     | 100.0 | 14    | 100.0 |

| Day of Week | Before | %     | After | %     |
|-------------|--------|-------|-------|-------|
| Sunday      | 2      | 5.7   | 3     | 21.4  |
| Monday      | 3      | 8.6   | 1     | 7.1   |
| Tuesday     | 6      | 17.1  | 1     | 7.1   |
| Wednesday   | 6      | 17.1  | 5     | 35.7  |
| Thursday    | 6      | 17.1  | 2     | 14.3  |
| Friday      | 9      | 25.7  | 1     | 7.1   |
| Saturday    | 3      | 8.6   | 1     | 7.1   |
| Total       | 35     | 100.0 | 14    | 100.0 |

| Crash Type     | Before | %     | After | %     |
|----------------|--------|-------|-------|-------|
| Single vehicle | 1      | 2.9   | 0     | 0.0   |
| Head-on        | 1      | 2.9   | 0     | 0.0   |
| Angle          | 2      | 5.7   | 1     | 7.1   |
| Rear-end       | 28     | 80.0  | 12    | 85.7  |
| Sideswipe      | 3      | 8.6   | 0     | 0.0   |
| Other/unknown  | 0      | 0.0   | 1     | 7.1   |
| Total          | 35     | 100.0 | 14    | 100.0 |

### M59 (Hall Road) Eastbound and Crossover West of Romeo Plank Road

Date of Signal Optimization: May 17, 2004



1,233 days before

593 days after

| Injury Severity | Before | %     | After | %     |
|-----------------|--------|-------|-------|-------|
| Fatal           | 0      | 0.0   | 0     | 0.0   |
| A-Injury        | 0      | 0.0   | 0     | 0.0   |
| B-Injury        | 2      | 12.5  | 0     | 0.0   |
| C-Injury        | 1      | 6.3   | 4     | 44.4  |
| O-Injury        | 13     | 81.3  | 5     | 55.6  |
| Total           | 16     | 100.0 | 9     | 100.0 |

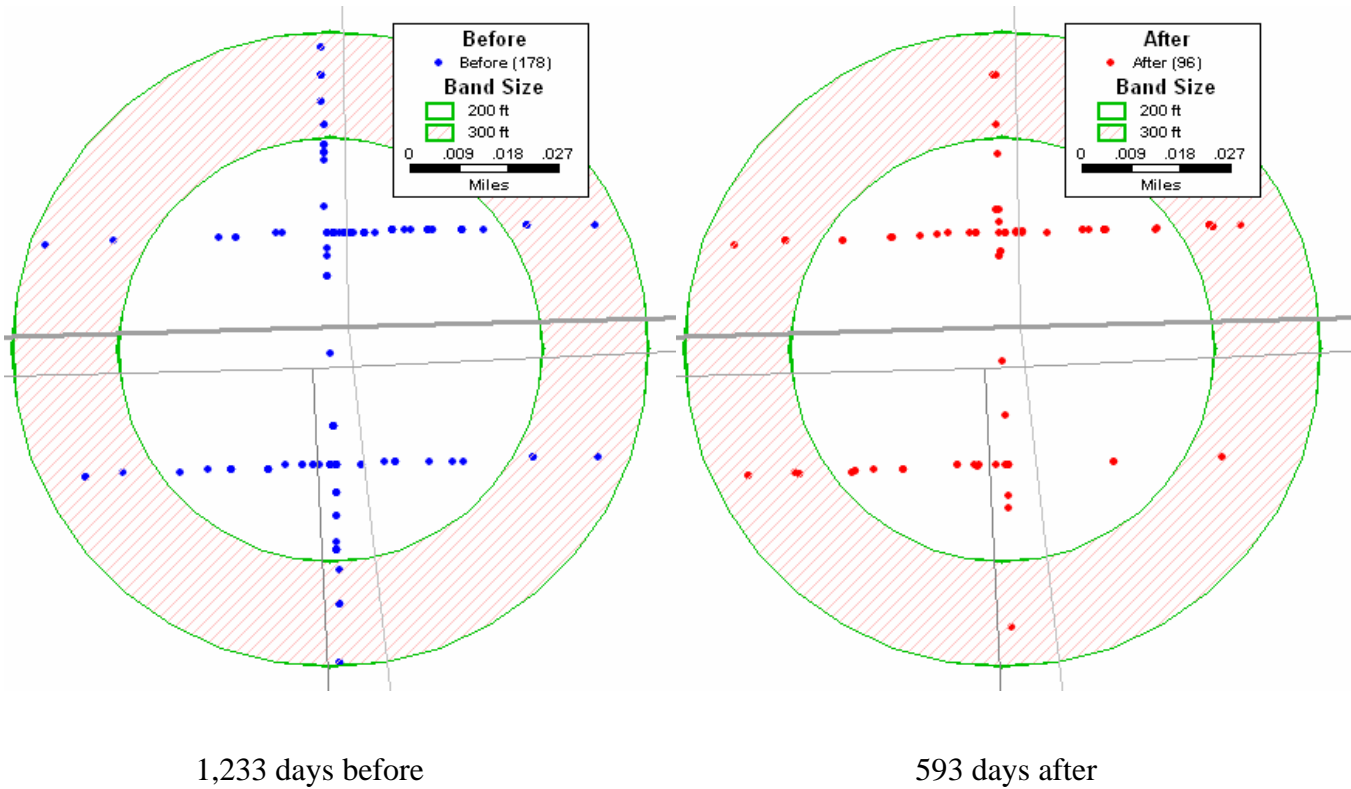
| Time of Day   | Before | %     | After | %     |
|---------------|--------|-------|-------|-------|
| 6am - 9:59am  | 3      | 18.8  | 0     | 0.0   |
| 10am - 3:59pm | 7      | 43.8  | 6     | 66.7  |
| 4pm - 7:59pm  | 3      | 18.8  | 3     | 33.3  |
| 8pm - 5:59am  | 3      | 18.8  | 0     | 0.0   |
| Unknown       | 0      | 0.0   | 0     | 0.0   |
| Total         | 16     | 100.0 | 9     | 100.0 |

| Day of Week | Before | %     | After | %     |
|-------------|--------|-------|-------|-------|
| Sunday      | 1      | 6.3   | 1     | 11.1  |
| Monday      | 1      | 6.3   | 0     | 0.0   |
| Tuesday     | 4      | 25.0  | 1     | 11.1  |
| Wednesday   | 4      | 25.0  | 3     | 33.3  |
| Thursday    | 0      | 0.0   | 1     | 11.1  |
| Friday      | 3      | 18.8  | 1     | 11.1  |
| Saturday    | 3      | 18.8  | 2     | 22.2  |
| Total       | 16     | 100.0 | 9     | 100.0 |

| Crash Type     | Before | %     | After | %     |
|----------------|--------|-------|-------|-------|
| Single vehicle | 0      | 0.0   | 0     | 0.0   |
| Head-on        | 0      | 0.0   | 0     | 0.0   |
| Angle          | 1      | 6.3   | 1     | 11.1  |
| Rear-end       | 13     | 81.3  | 8     | 88.9  |
| Sideswipe      | 2      | 12.5  | 0     | 0.0   |
| Other/unknown  | 0      | 0.0   | 0     | 0.0   |
| Total          | 16     | 100.0 | 9     | 100.0 |

### M59 (Hall Road) Romeo Plank Road

Date of Signal Optimization: May 17, 2004



| Injury Severity | Before | %     | After | %     |
|-----------------|--------|-------|-------|-------|
| Fatal           | 0      | 0.0   | 0     | 0.0   |
| A-Injury        | 1      | 0.6   | 0     | 0.0   |
| B-Injury        | 7      | 3.9   | 3     | 3.1   |
| C-Injury        | 25     | 14.0  | 15    | 15.6  |
| O-Injury        | 145    | 81.5  | 78    | 81.3  |
| Total           | 178    | 100.0 | 96    | 100.0 |

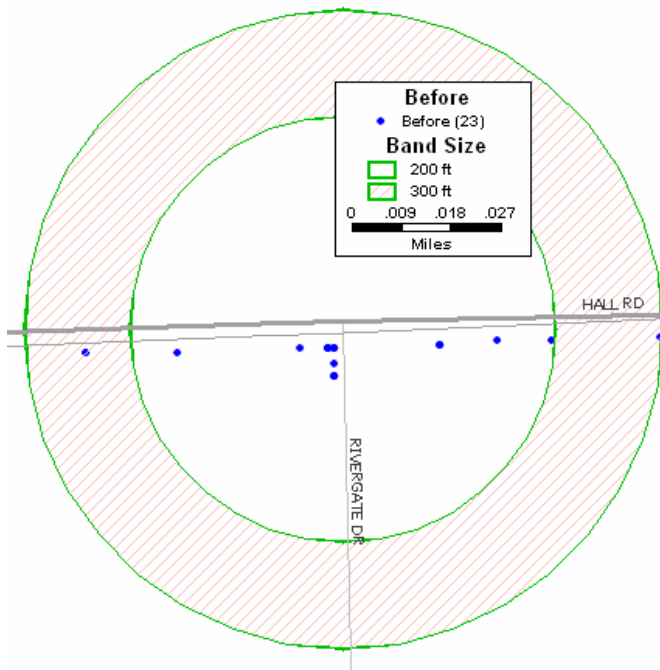
| Time of Day   | Before | %     | After | %     |
|---------------|--------|-------|-------|-------|
| 6am - 9:59am  | 27     | 15.2  | 23    | 24.0  |
| 10am - 3:59pm | 63     | 35.4  | 40    | 41.7  |
| 4pm - 7:59pm  | 49     | 27.5  | 25    | 26.0  |
| 8pm - 5:59am  | 27     | 15.2  | 8     | 8.3   |
| Unknown       | 12     | 6.7   | 0     | 0.0   |
| Total         | 178    | 100.0 | 96    | 100.0 |

| Day of Week | Before | %     | After | %     |
|-------------|--------|-------|-------|-------|
| Sunday      | 19     | 10.7  | 9     | 9.4   |
| Monday      | 22     | 12.4  | 21    | 21.9  |
| Tuesday     | 37     | 20.8  | 11    | 11.5  |
| Wednesday   | 22     | 12.4  | 15    | 15.6  |
| Thursday    | 21     | 11.8  | 14    | 14.6  |
| Friday      | 32     | 18.0  | 13    | 13.5  |
| Saturday    | 25     | 14.0  | 13    | 13.5  |
| Total       | 178    | 100.0 | 96    | 100.0 |

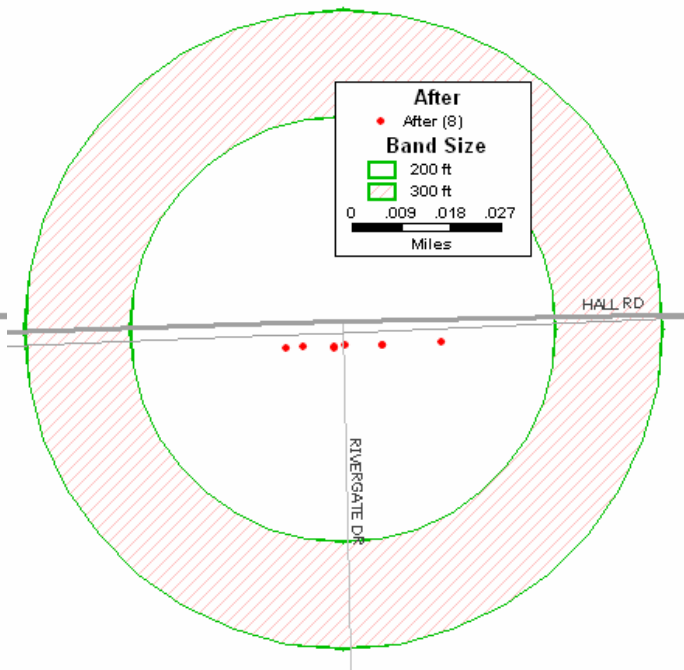
| Crash Type     | Before | %     | After | %     |
|----------------|--------|-------|-------|-------|
| Single vehicle | 7      | 3.9   | 3     | 3.1   |
| Head-on        | 5      | 2.8   | 1     | 1.0   |
| Angle          | 36     | 20.2  | 17    | 17.7  |
| Rear-end       | 102    | 57.3  | 69    | 71.9  |
| Sideswipe      | 20     | 11.2  | 6     | 6.3   |
| Other/unknown  | 8      | 4.5   | 0     | 0.0   |
| Total          | 178    | 100.0 | 96    | 100.0 |

**M59 (Hall Road) Eastbound and Rivergate Drive**

Date of Signal Optimization: May 17, 2004



1,233 days before



593 days after

| Injury Severity | Before | %     | After | %     |
|-----------------|--------|-------|-------|-------|
| Fatal           | 0      | 0.0   | 0     | 0.0   |
| A-Injury        | 0      | 0.0   | 0     | 0.0   |
| B-Injury        | 0      | 0.0   | 0     | 0.0   |
| C-Injury        | 2      | 8.7   | 0     | 0.0   |
| O-Injury        | 21     | 91.3  | 8     | 100.0 |
| Total           | 23     | 100.0 | 8     | 100.0 |

| Time of Day   | Before | %     | After | %     |
|---------------|--------|-------|-------|-------|
| 6am - 9:59am  | 8      | 34.8  | 2     | 25.0  |
| 10am - 3:59pm | 6      | 26.1  | 2     | 25.0  |
| 4pm - 7:59pm  | 2      | 8.7   | 1     | 12.5  |
| 8pm - 5:59am  | 5      | 21.7  | 2     | 25.0  |
| Unknown       | 2      | 8.7   | 1     | 12.5  |
| Total         | 23     | 100.0 | 8     | 100.0 |

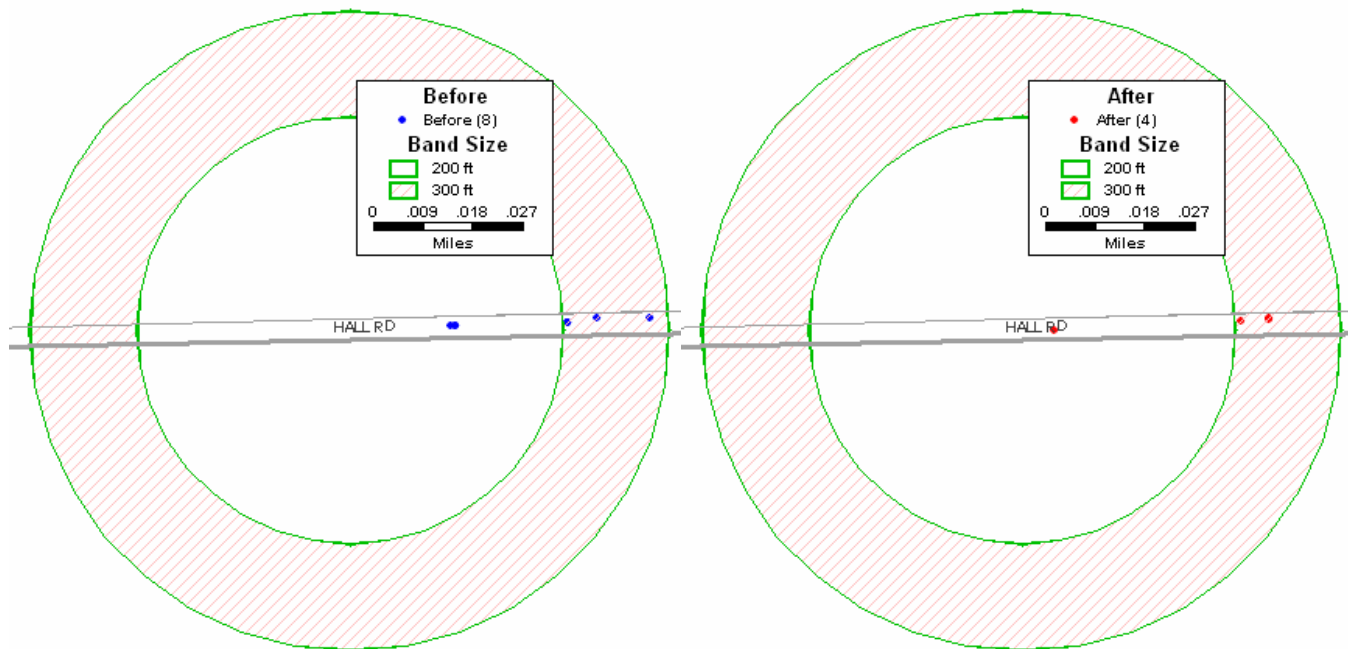
| Day of Week | Before | %     | After | %     |
|-------------|--------|-------|-------|-------|
| Sunday      | 1      | 4.3   | 0     | 0.0   |
| Monday      | 1      | 4.3   | 2     | 25.0  |
| Tuesday     | 7      | 30.4  | 0     | 0.0   |
| Wednesday   | 3      | 13.0  | 3     | 37.5  |
| Thursday    | 3      | 13.0  | 2     | 25.0  |
| Friday      | 4      | 17.4  | 0     | 0.0   |
| Saturday    | 4      | 17.4  | 1     | 12.5  |
| Total       | 23     | 100.0 | 8     | 100.0 |

| Crash Type     | Before | %     | After | %     |
|----------------|--------|-------|-------|-------|
| Single vehicle | 3      | 13.0  | 1     | 12.5  |
| Head-on        | 0      | 0.0   | 0     | 0.0   |
| Angle          | 3      | 13.0  | 1     | 12.5  |
| Rear-end       | 15     | 65.2  | 3     | 37.5  |
| Sideswipe      | 2      | 8.7   | 3     | 37.5  |
| Other/unknown  | 0      | 0.0   | 0     | 0.0   |
| Total          | 23     | 100.0 | 8     | 100.0 |



**M59 (Hall Road) Eastbound and Crossover West of Heydenrich Road**

Date of Signal Optimization: May 17, 2004



1,233 days before

593 days after

| Injury Severity | Before | %     | After | %     |
|-----------------|--------|-------|-------|-------|
| Fatal           | 0      | 0.0   | 0     | 0.0   |
| A-Injury        | 0      | 0.0   | 0     | 0.0   |
| B-Injury        | 0      | 0.0   | 1     | 25.0  |
| C-Injury        | 3      | 37.5  | 0     | 0.0   |
| O-Injury        | 5      | 62.5  | 3     | 75.0  |
| Total           | 8      | 100.0 | 4     | 100.0 |

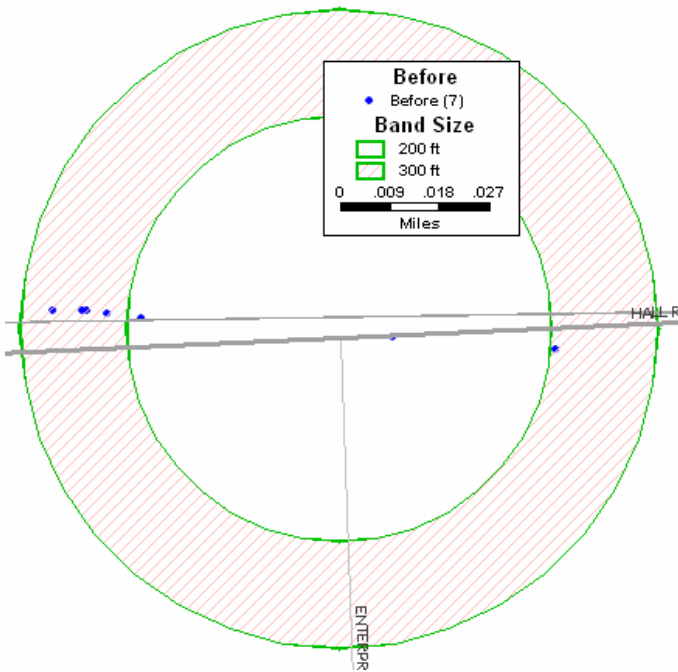
| Time of Day   | Before | %     | After | %     |
|---------------|--------|-------|-------|-------|
| 6am - 9:59am  | 1      | 12.5  | 2     | 50.0  |
| 10am - 3:59pm | 4      | 50.0  | 2     | 50.0  |
| 4pm - 7:59pm  | 2      | 25.0  | 0     | 0.0   |
| 8pm - 5:59am  | 0      | 0.0   | 0     | 0.0   |
| Unknown       | 1      | 12.5  | 0     | 0.0   |
| Total         | 8      | 100.0 | 4     | 100.0 |

| Day of Week | Before | %     | After | %     |
|-------------|--------|-------|-------|-------|
| Sunday      | 0      | 0.0   | 0     | 0.0   |
| Monday      | 2      | 25.0  | 1     | 25.0  |
| Tuesday     | 5      | 62.5  | 0     | 0.0   |
| Wednesday   | 0      | 0.0   | 1     | 25.0  |
| Thursday    | 1      | 12.5  | 0     | 0.0   |
| Friday      | 0      | 0.0   | 2     | 50.0  |
| Saturday    | 0      | 0.0   | 0     | 0.0   |
| Total       | 8      | 100.0 | 4     | 100.0 |

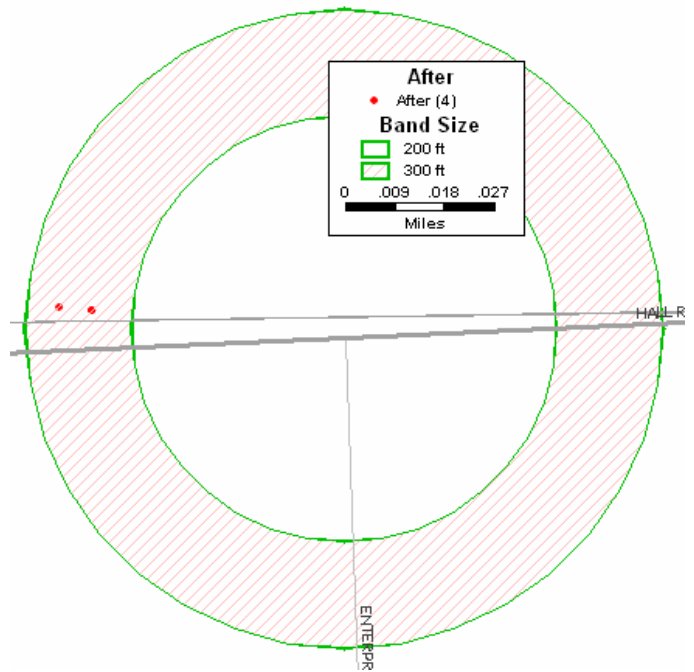
| Crash Type     | Before | %     | After | %     |
|----------------|--------|-------|-------|-------|
| Single vehicle | 0      | 0.0   | 2     | 50.0  |
| Head-on        | 0      | 0.0   | 0     | 0.0   |
| Angle          | 0      | 0.0   | 0     | 0.0   |
| Rear-end       | 5      | 62.5  | 1     | 25.0  |
| Sideswipe      | 3      | 37.5  | 1     | 25.0  |
| Other/unknown  | 0      | 0.0   | 0     | 0.0   |
| Total          | 8      | 100.0 | 4     | 100.0 |

**M59 (Hall Road) Eastbound and Crossover West of Chateau Thierry Blvd**

Date of Signal Optimization: May 17, 2004



1,233 days before



593 days after

| Injury Severity | Before | %     | After | %     |
|-----------------|--------|-------|-------|-------|
| Fatal           | 0      | 0.0   | 0     | 0.0   |
| A-Injury        | 0      | 0.0   | 0     | 0.0   |
| B-Injury        | 0      | 0.0   | 0     | 0.0   |
| C-Injury        | 0      | 0.0   | 0     | 0.0   |
| O-Injury        | 7      | 100.0 | 4     | 100.0 |
| Total           | 7      | 100.0 | 4     | 100.0 |

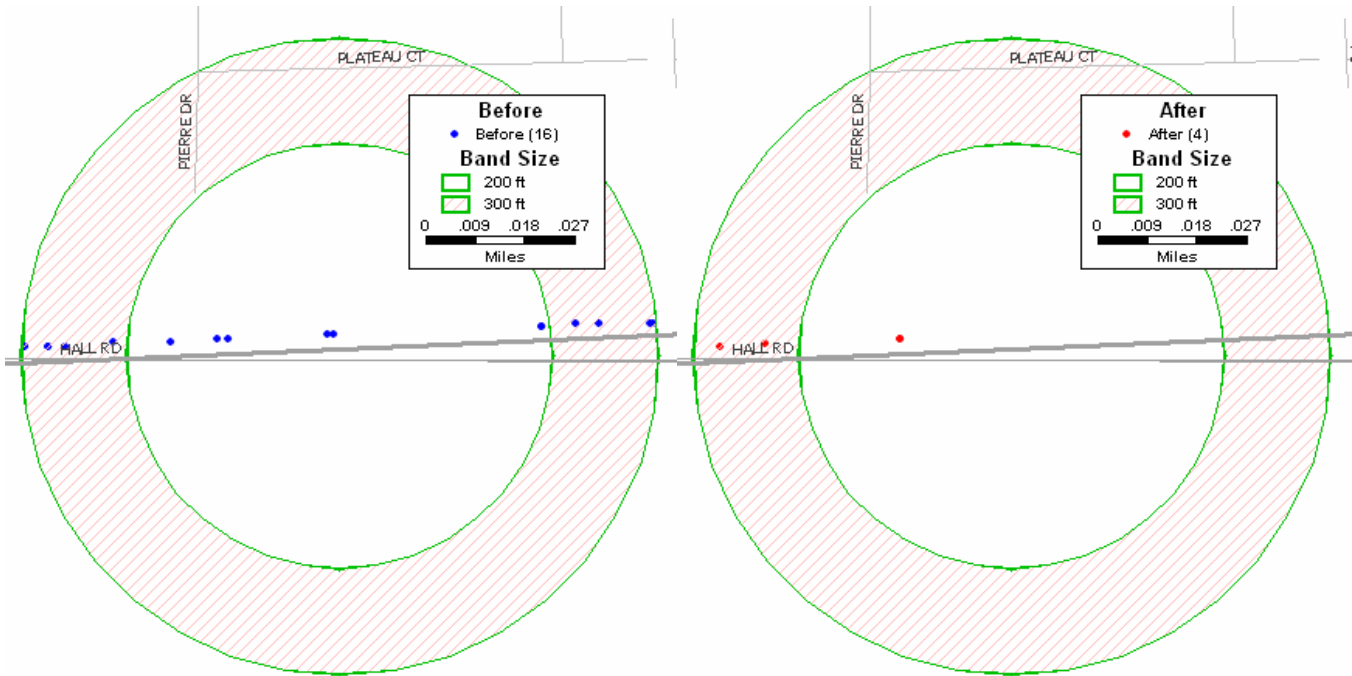
| Time of Day   | Before | %     | After | %     |
|---------------|--------|-------|-------|-------|
| 6am - 9:59am  | 2      | 28.6  | 0     | 0.0   |
| 10am - 3:59pm | 0      | 0.0   | 1     | 25.0  |
| 4pm - 7:59pm  | 4      | 57.1  | 3     | 75.0  |
| 8pm - 5:59am  | 1      | 14.3  | 0     | 0.0   |
| Unknown       | 0      | 0.0   | 0     | 0.0   |
| Total         | 7      | 100.0 | 4     | 100.0 |

| Day of Week | Before | %     | After | %     |
|-------------|--------|-------|-------|-------|
| Sunday      | 1      | 14.3  | 0     | 0.0   |
| Monday      | 0      | 0.0   | 1     | 25.0  |
| Tuesday     | 1      | 14.3  | 0     | 0.0   |
| Wednesday   | 3      | 42.9  | 0     | 0.0   |
| Thursday    | 0      | 0.0   | 2     | 50.0  |
| Friday      | 2      | 28.6  | 1     | 25.0  |
| Saturday    | 0      | 0.0   | 0     | 0.0   |
| Total       | 7      | 100.0 | 4     | 100.0 |

| Crash Type     | Before | %     | After | %     |
|----------------|--------|-------|-------|-------|
| Single vehicle | 2      | 28.6  | 0     | 0.0   |
| Head-on        | 0      | 0.0   | 0     | 0.0   |
| Angle          | 0      | 0.0   | 1     | 25.0  |
| Rear-end       | 3      | 42.9  | 3     | 75.0  |
| Sideswipe      | 1      | 14.3  | 0     | 0.0   |
| Other/unknown  | 1      | 14.3  | 0     | 0.0   |
| Total          | 7      | 100.0 | 4     | 100.0 |

**M59 (Hall Road) Westbound and Crossover East of Chateau Thierry Blvd**

Date of Signal Optimization: May 17, 2004



1,233 days before

593 days after

| Injury Severity | Before | %     | After | %     |
|-----------------|--------|-------|-------|-------|
| Fatal           | 0      | 0.0   | 0     | 0.0   |
| A-Injury        | 0      | 0.0   | 0     | 0.0   |
| B-Injury        | 0      | 0.0   | 0     | 0.0   |
| C-Injury        | 1      | 6.3   | 2     | 50.0  |
| O-Injury        | 15     | 93.8  | 2     | 50.0  |
| Total           | 16     | 100.0 | 4     | 100.0 |

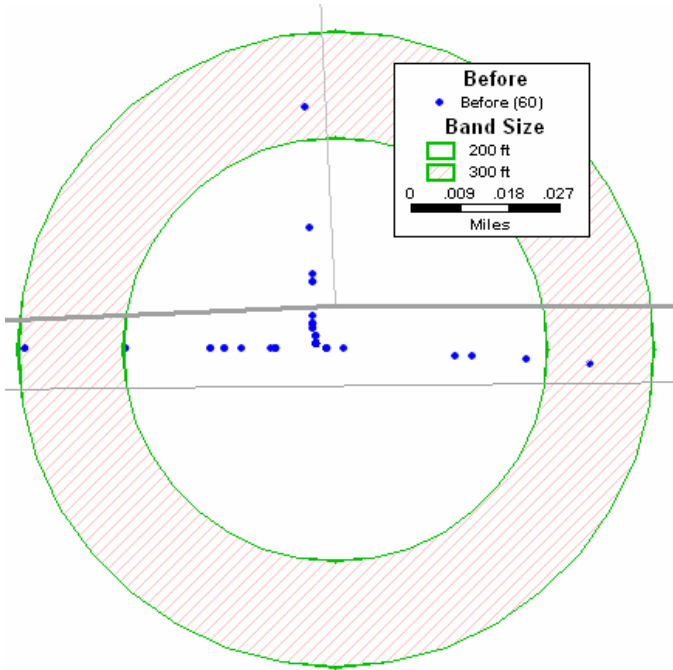
| Time of Day   | Before | %     | After | %     |
|---------------|--------|-------|-------|-------|
| 6am - 9:59am  | 4      | 25.0  | 1     | 25.0  |
| 10am - 3:59pm | 6      | 37.5  | 3     | 75.0  |
| 4pm - 7:59pm  | 3      | 18.8  | 0     | 0.0   |
| 8pm - 5:59am  | 1      | 6.3   | 0     | 0.0   |
| Unknown       | 2      | 12.5  | 0     | 0.0   |
| Total         | 16     | 100.0 | 4     | 100.0 |

| Day of Week | Before | %     | After | %     |
|-------------|--------|-------|-------|-------|
| Sunday      | 2      | 12.5  | 0     | 0.0   |
| Monday      | 3      | 18.8  | 1     | 25.0  |
| Tuesday     | 0      | 0.0   | 0     | 0.0   |
| Wednesday   | 3      | 18.8  | 1     | 25.0  |
| Thursday    | 2      | 12.5  | 1     | 25.0  |
| Friday      | 4      | 25.0  | 0     | 0.0   |
| Saturday    | 2      | 12.5  | 1     | 25.0  |
| Total       | 16     | 100.0 | 4     | 100.0 |

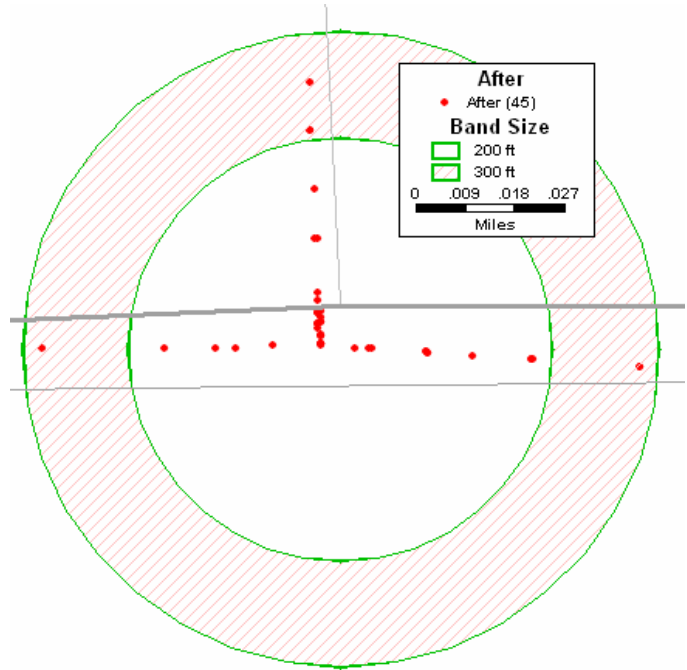
| Crash Type     | Before | %     | After | %     |
|----------------|--------|-------|-------|-------|
| Single vehicle | 0      | 0.0   | 0     | 0.0   |
| Head-on        | 1      | 6.3   | 0     | 0.0   |
| Angle          | 1      | 6.3   | 0     | 0.0   |
| Rear-end       | 12     | 75.0  | 4     | 100.0 |
| Sideswipe      | 1      | 6.3   | 0     | 0.0   |
| Other/unknown  | 1      | 6.3   | 0     | 0.0   |
| Total          | 16     | 100.0 | 4     | 100.0 |

**M59 (Hall Road) Westbound and Card Road**

Date of Signal Optimization: May 17, 2004



1,233 days before



593 days after

| Injury Severity | Before | %     | After | %     |
|-----------------|--------|-------|-------|-------|
| Fatal           | 0      | 0.0   | 0     | 0.0   |
| A-Injury        | 0      | 0.0   | 3     | 6.7   |
| B-Injury        | 0      | 0.0   | 1     | 2.2   |
| C-Injury        | 10     | 16.7  | 3     | 6.7   |
| O-Injury        | 50     | 83.3  | 38    | 84.4  |
| Total           | 60     | 100.0 | 45    | 100.0 |

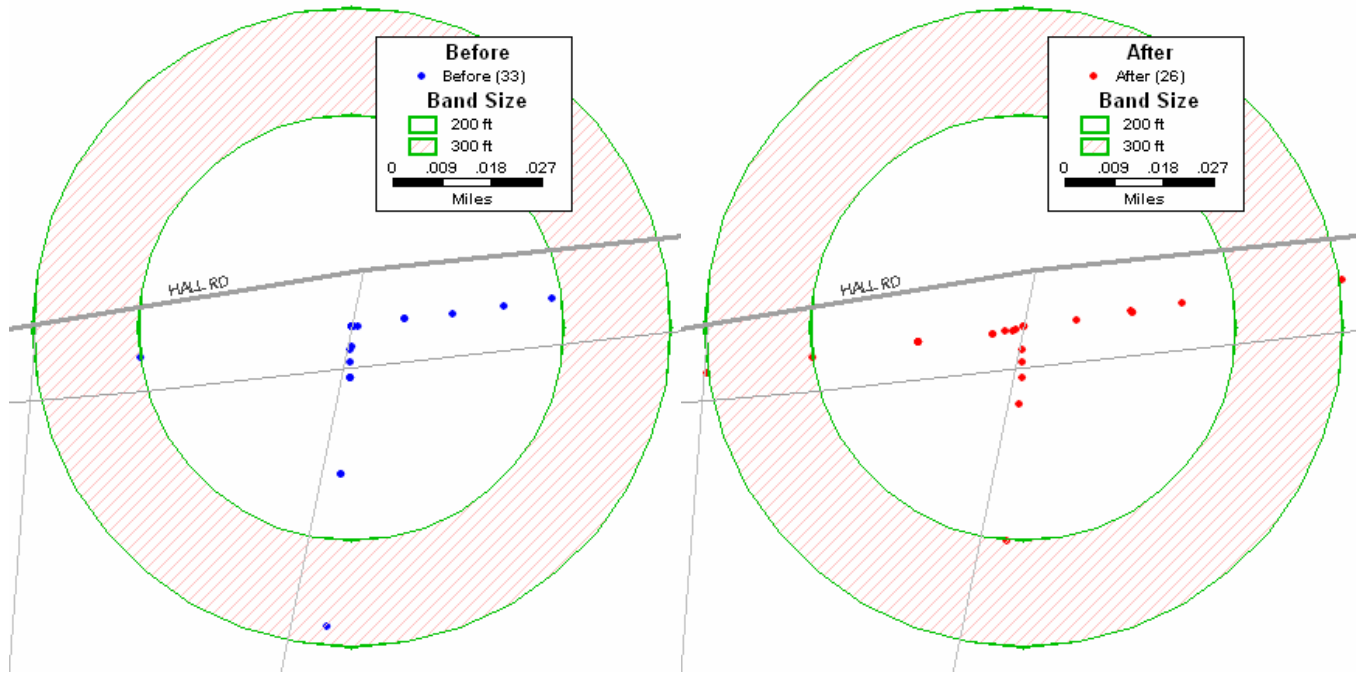
| Time of Day   | Before | %     | After | %     |
|---------------|--------|-------|-------|-------|
| 6am - 9:59am  | 11     | 18.3  | 8     | 17.8  |
| 10am - 3:59pm | 22     | 36.7  | 19    | 42.2  |
| 4pm - 7:59pm  | 19     | 31.7  | 13    | 28.9  |
| 8pm - 5:59am  | 7      | 11.7  | 4     | 8.9   |
| Unknown       | 1      | 1.7   | 1     | 2.2   |
| Total         | 60     | 100.0 | 45    | 100.0 |

| Day of Week | Before | %     | After | %     |
|-------------|--------|-------|-------|-------|
| Sunday      | 3      | 5.0   | 2     | 4.4   |
| Monday      | 10     | 16.7  | 8     | 17.8  |
| Tuesday     | 13     | 21.7  | 3     | 6.7   |
| Wednesday   | 7      | 11.7  | 11    | 24.4  |
| Thursday    | 11     | 18.3  | 10    | 22.2  |
| Friday      | 11     | 18.3  | 6     | 13.3  |
| Saturday    | 5      | 8.3   | 5     | 11.1  |
| Total       | 60     | 100.0 | 45    | 100.0 |

| Crash Type     | Before | %     | After | %     |
|----------------|--------|-------|-------|-------|
| Single vehicle | 3      | 5.0   | 3     | 6.7   |
| Head-on        | 0      | 0.0   | 1     | 2.2   |
| Angle          | 4      | 6.7   | 3     | 6.7   |
| Rear-end       | 42     | 70.0  | 35    | 77.8  |
| Sideswipe      | 11     | 18.3  | 3     | 6.7   |
| Other/unknown  | 0      | 0.0   | 0     | 0.0   |
| Total          | 60     | 100.0 | 45    | 100.0 |

### M59 (Hall Road) Eastbound and Elizabeth Street

Date of Signal Optimization: May 17, 2004



1,233 days before

593 days after

| Injury Severity | Before | %     | After | %     |
|-----------------|--------|-------|-------|-------|
| Fatal           | 0      | 0.0   | 0     | 0.0   |
| A-Injury        | 2      | 6.1   | 0     | 0.0   |
| B-Injury        | 1      | 3.0   | 0     | 0.0   |
| C-Injury        | 3      | 9.1   | 2     | 7.7   |
| O-Injury        | 27     | 81.8  | 24    | 92.3  |
| Total           | 33     | 100.0 | 26    | 100.0 |

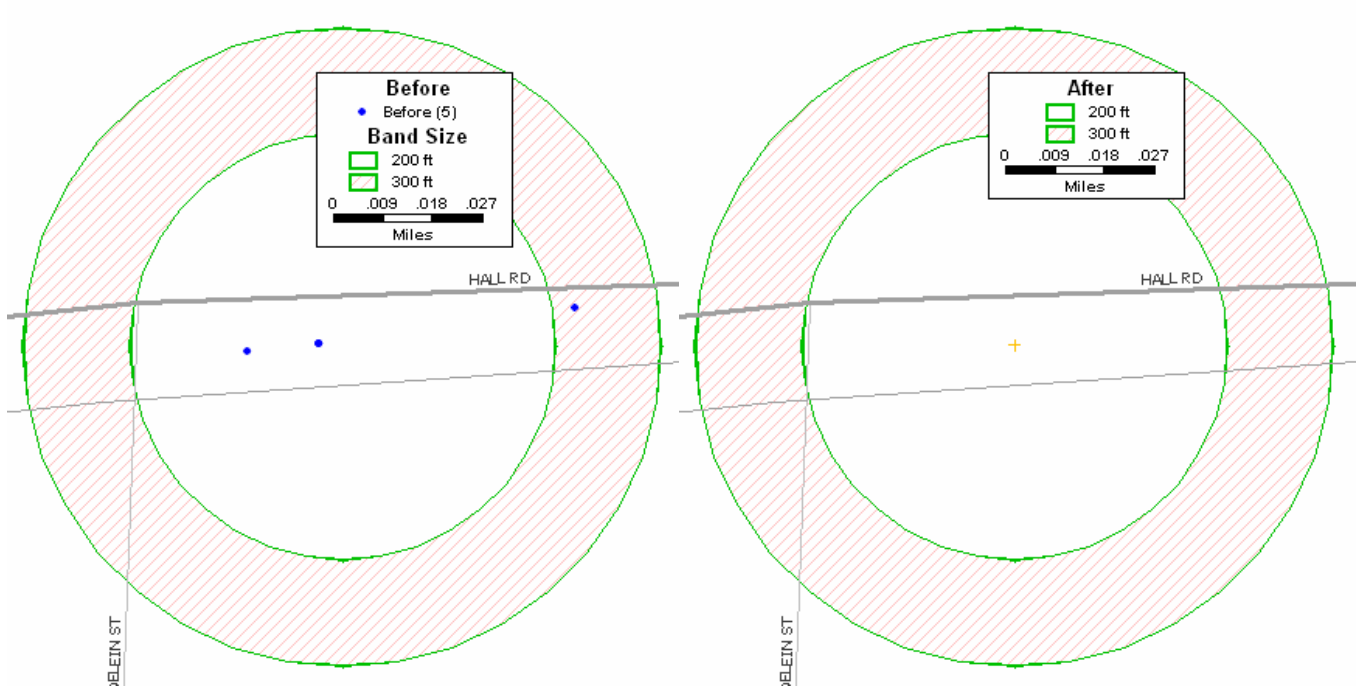
| Time of Day   | Before | %     | After | %     |
|---------------|--------|-------|-------|-------|
| 6am - 9:59am  | 9      | 27.3  | 9     | 34.6  |
| 10am - 3:59pm | 7      | 21.2  | 8     | 30.8  |
| 4pm - 7:59pm  | 9      | 27.3  | 6     | 23.1  |
| 8pm - 5:59am  | 7      | 21.2  | 3     | 11.5  |
| Unknown       | 1      | 3.0   | 0     | 0.0   |
| Total         | 33     | 100.0 | 26    | 100.0 |

| Day of Week | Before | %     | After | %     |
|-------------|--------|-------|-------|-------|
| Sunday      | 3      | 9.1   | 4     | 15.4  |
| Monday      | 6      | 18.2  | 1     | 3.8   |
| Tuesday     | 5      | 15.2  | 6     | 23.1  |
| Wednesday   | 5      | 15.2  | 6     | 23.1  |
| Thursday    | 4      | 12.1  | 3     | 11.5  |
| Friday      | 6      | 18.2  | 5     | 19.2  |
| Saturday    | 4      | 12.1  | 1     | 3.8   |
| Total       | 33     | 100.0 | 26    | 100.0 |

| Crash Type     | Before | %     | After | %     |
|----------------|--------|-------|-------|-------|
| Single vehicle | 3      | 9.1   | 1     | 3.8   |
| Head-on        | 1      | 3.0   | 0     | 0.0   |
| Angle          | 6      | 18.2  | 2     | 7.7   |
| Rear-end       | 20     | 60.6  | 21    | 80.8  |
| Sideswipe      | 2      | 6.1   | 2     | 7.7   |
| Other/unknown  | 1      | 3.0   | 0     | 0.0   |
| Total          | 33     | 100.0 | 26    | 100.0 |

**M59 (Hall Road) Westbound and Crossover East of Elizabeth Street**

Date of Signal Optimization: May 17, 2004



1,233 days before

593 days after

| Injury Severity | Before | %     | After | %   |
|-----------------|--------|-------|-------|-----|
| Fatal           | 0      | 0.0   | 0     | 0.0 |
| A-Injury        | 0      | 0.0   | 0     | 0.0 |
| B-Injury        | 0      | 0.0   | 0     | 0.0 |
| C-Injury        | 0      | 0.0   | 0     | 0.0 |
| O-Injury        | 5      | 100.0 | 0     | 0.0 |
| Total           | 5      | 100.0 | 0     | 0.0 |

| Time of Day   | Before | %     | After | %   |
|---------------|--------|-------|-------|-----|
| 6am - 9:59am  | 1      | 20.0  | 0     | 0.0 |
| 10am - 3:59pm | 3      | 60.0  | 0     | 0.0 |
| 4pm - 7:59pm  | 1      | 20.0  | 0     | 0.0 |
| 8pm - 5:59am  | 0      | 0.0   | 0     | 0.0 |
| Unknown       | 0      | 0.0   | 0     | 0.0 |
| Total         | 5      | 100.0 | 0     | 0.0 |

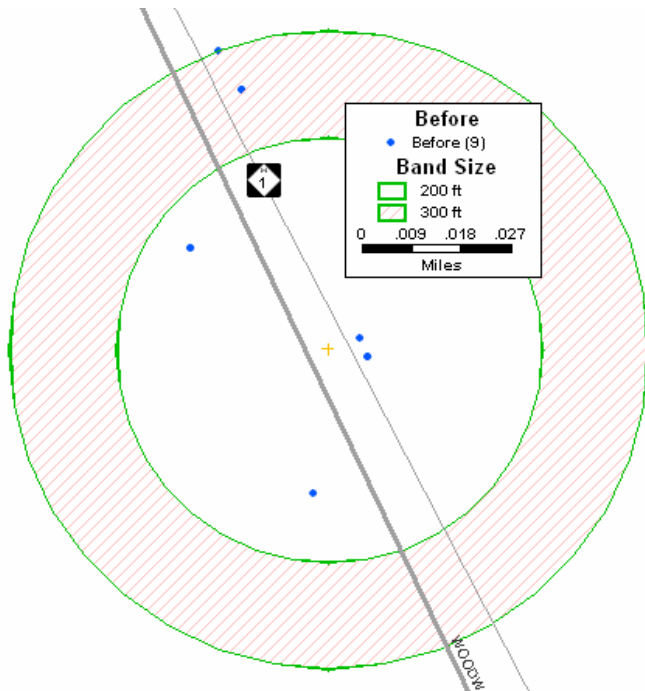
| Day of Week | Before | %     | After | %   |
|-------------|--------|-------|-------|-----|
| Sunday      | 0      | 0.0   | 0     | 0.0 |
| Monday      | 0      | 0.0   | 0     | 0.0 |
| Tuesday     | 0      | 0.0   | 0     | 0.0 |
| Wednesday   | 1      | 20.0  | 0     | 0.0 |
| Thursday    | 1      | 20.0  | 0     | 0.0 |
| Friday      | 1      | 20.0  | 0     | 0.0 |
| Saturday    | 2      | 40.0  | 0     | 0.0 |
| Total       | 5      | 100.0 | 0     | 0.0 |

| Crash Type     | Before | %     | After | %   |
|----------------|--------|-------|-------|-----|
| Single vehicle | 1      | 20.0  | 0     | 0.0 |
| Head-on        | 0      | 0.0   | 0     | 0.0 |
| Angle          | 0      | 0.0   | 0     | 0.0 |
| Rear-end       | 3      | 60.0  | 0     | 0.0 |
| Sideswipe      | 1      | 20.0  | 0     | 0.0 |
| Other/unknown  | 0      | 0.0   | 0     | 0.0 |
| Total          | 5      | 100.0 | 0     | 0.0 |

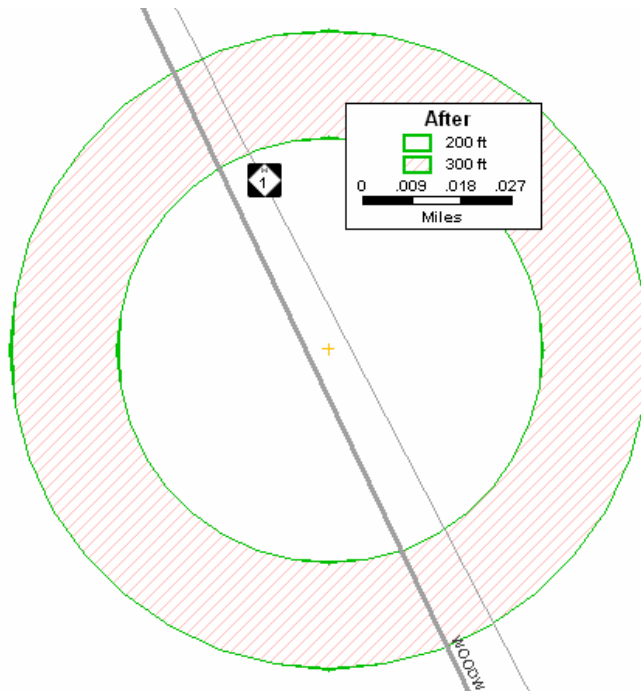
## **Woodward Avenue (M1)**

### M1 (Woodward Avenue) and State Fair Entry Gate 5

Date of Signal Optimization: September 17, 2004



1,356 days before



470 days after

| Injury Severity | Before | %     | After | %   |
|-----------------|--------|-------|-------|-----|
| Fatal           | 0      | 0.0   | 0     | 0.0 |
| A-Injury        | 0      | 0.0   | 0     | 0.0 |
| B-Injury        | 3      | 33.3  | 0     | 0.0 |
| C-Injury        | 3      | 33.3  | 0     | 0.0 |
| O-Injury        | 3      | 33.3  | 0     | 0.0 |
| Total           | 9      | 100.0 | 0     | 0.0 |

| Time of Day   | Before | %     | After | %   |
|---------------|--------|-------|-------|-----|
| 6am - 9:59am  | 3      | 33.3  | 0     | 0.0 |
| 10am - 3:59pm | 3      | 33.3  | 0     | 0.0 |
| 4pm - 7:59pm  | 3      | 33.3  | 0     | 0.0 |
| 8pm - 5:59am  | 0      | 0.0   | 0     | 0.0 |
| Unknown       | 0      | 0.0   | 0     | 0.0 |
| Total         | 9      | 100.0 | 0     | 0.0 |

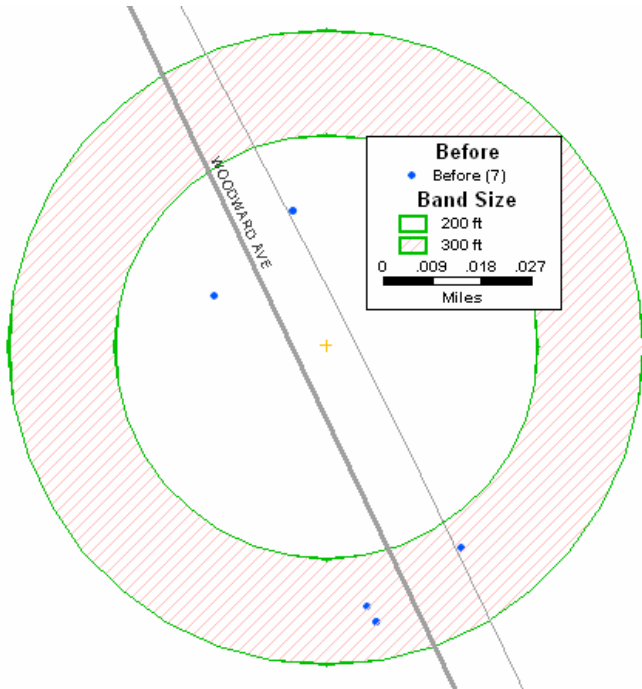
| Day of Week | Before | %     | After | %   |
|-------------|--------|-------|-------|-----|
| Sunday      | 0      | 0.0   | 0     | 0.0 |
| Monday      | 1      | 11.1  | 0     | 0.0 |
| Tuesday     | 1      | 11.1  | 0     | 0.0 |
| Wednesday   | 3      | 33.3  | 0     | 0.0 |
| Thursday    | 0      | 0.0   | 0     | 0.0 |
| Friday      | 2      | 22.2  | 0     | 0.0 |
| Saturday    | 2      | 22.2  | 0     | 0.0 |
| Total       | 9      | 100.0 | 0     | 0.0 |

| Crash Type     | Before | %     | After | %   |
|----------------|--------|-------|-------|-----|
| Single vehicle | 1      | 11.1  | 0     | 0.0 |
| Head-on        | 0      | 0.0   | 0     | 0.0 |
| Angle          | 0      | 0.0   | 0     | 0.0 |
| Rear-end       | 5      | 55.6  | 0     | 0.0 |
| Sideswipe      | 1      | 11.1  | 0     | 0.0 |
| Other/unknown  | 2      | 22.2  | 0     | 0.0 |
| Total          | 9      | 100.0 | 0     | 0.0 |

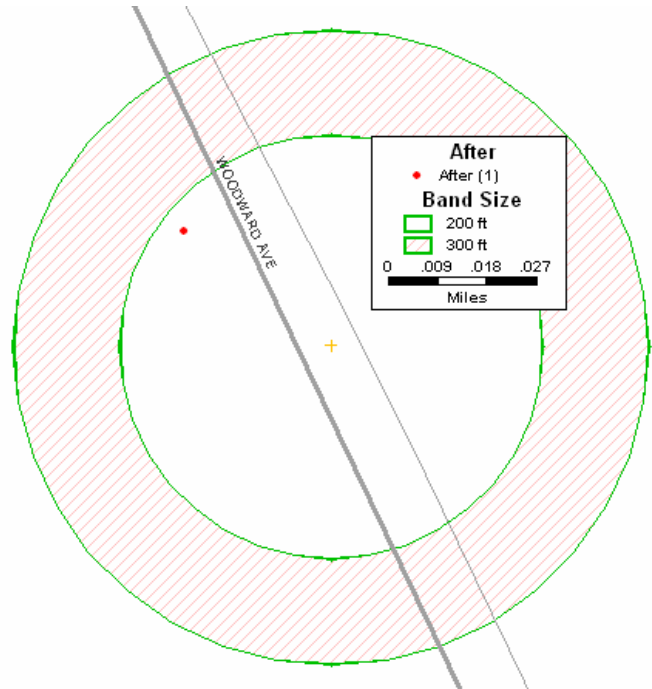


### M1 (Woodward Avenue) and State Fair Bus Loop

Date of Signal Optimization: September 17, 2004



1,356 days before



470 days after

| Injury Severity | Before | %     | After | %     |
|-----------------|--------|-------|-------|-------|
| Fatal           | 0      | 0.0   | 0     | 0.0   |
| A-Injury        | 0      | 0.0   | 1     | 100.0 |
| B-Injury        | 0      | 0.0   | 0     | 0.0   |
| C-Injury        | 3      | 42.9  | 0     | 0.0   |
| O-Injury        | 4      | 57.1  | 0     | 0.0   |
| Total           | 7      | 100.0 | 1     | 100.0 |

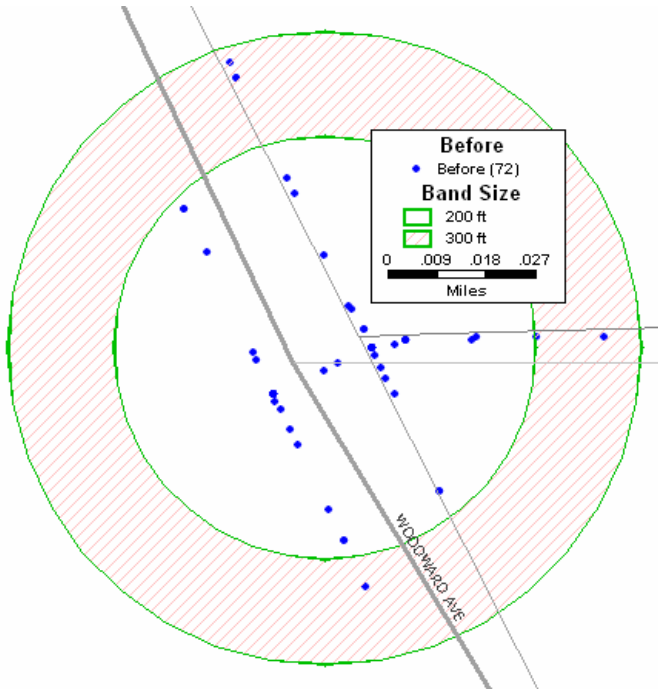
| Time of Day   | Before | %     | After | %     |
|---------------|--------|-------|-------|-------|
| 6am - 9:59am  | 0      | 0.0   | 0     | 0.0   |
| 10am - 3:59pm | 5      | 71.4  | 1     | 100.0 |
| 4pm - 7:59pm  | 1      | 14.3  | 0     | 0.0   |
| 8pm - 5:59am  | 1      | 14.3  | 0     | 0.0   |
| Unknown       | 0      | 0.0   | 0     | 0.0   |
| Total         | 7      | 100.0 | 1     | 100.0 |

| Day of Week | Before | %     | After | %     |
|-------------|--------|-------|-------|-------|
| Sunday      | 0      | 0.0   | 0     | 0.0   |
| Monday      | 1      | 14.3  | 0     | 0.0   |
| Tuesday     | 1      | 14.3  | 0     | 0.0   |
| Wednesday   | 2      | 28.6  | 0     | 0.0   |
| Thursday    | 0      | 0.0   | 0     | 0.0   |
| Friday      | 2      | 28.6  | 0     | 0.0   |
| Saturday    | 1      | 14.3  | 1     | 100.0 |
| Total       | 7      | 100.0 | 1     | 100.0 |

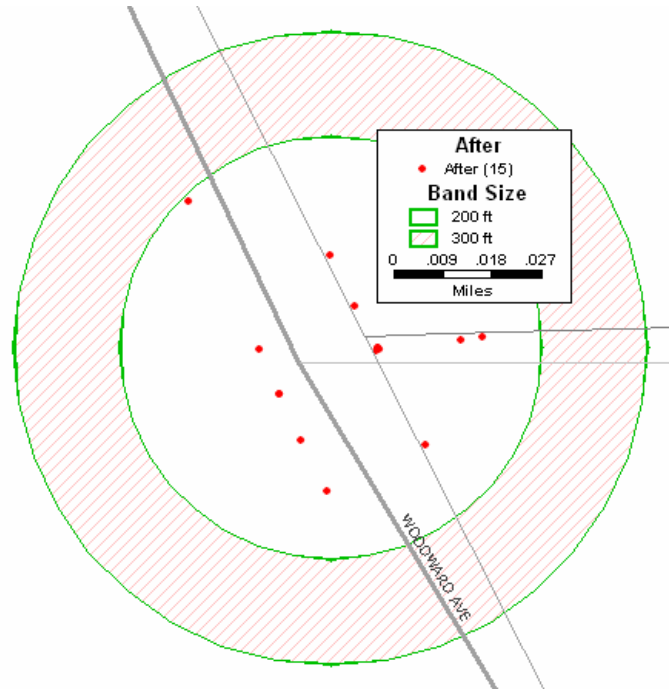
| Crash Type     | Before | %     | After | %     |
|----------------|--------|-------|-------|-------|
| Single vehicle | 0      | 0.0   | 0     | 0.0   |
| Head-on        | 0      | 0.0   | 0     | 0.0   |
| Angle          | 1      | 14.3  | 0     | 0.0   |
| Rear-end       | 4      | 57.1  | 1     | 100.0 |
| Sideswipe      | 1      | 14.3  | 0     | 0.0   |
| Other/unknown  | 1      | 14.3  | 0     | 0.0   |
| Total          | 7      | 100.0 | 1     | 100.0 |

**M1 (Woodward Avenue) and State Fair Avenue**

Date of Signal Optimization: September 17, 2004



1,356 days before



470 days after

| Injury Severity | Before | %     | After | %     |
|-----------------|--------|-------|-------|-------|
| Fatal           | 0      | 0.0   | 0     | 0.0   |
| A-Injury        | 3      | 4.2   | 0     | 0.0   |
| B-Injury        | 4      | 5.6   | 0     | 0.0   |
| C-Injury        | 9      | 12.5  | 4     | 26.7  |
| O-Injury        | 56     | 77.8  | 11    | 73.3  |
| Total           | 72     | 100.0 | 15    | 100.0 |

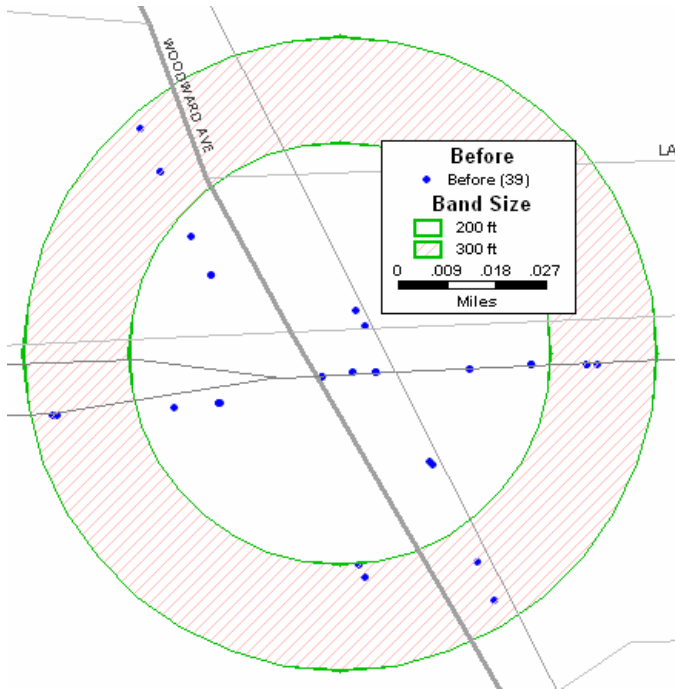
| Time of Day   | Before | %     | After | %     |
|---------------|--------|-------|-------|-------|
| 6am - 9:59am  | 6      | 8.3   | 3     | 20.0  |
| 10am - 3:59pm | 30     | 41.7  | 6     | 40.0  |
| 4pm - 7:59pm  | 19     | 26.4  | 5     | 33.3  |
| 8pm - 5:59am  | 14     | 19.4  | 0     | 0.0   |
| Unknown       | 3      | 4.2   | 1     | 6.7   |
| Total         | 72     | 100.0 | 15    | 100.0 |

| Day of Week | Before | %     | After | %     |
|-------------|--------|-------|-------|-------|
| Sunday      | 13     | 18.1  | 1     | 6.7   |
| Monday      | 11     | 15.3  | 6     | 40.0  |
| Tuesday     | 7      | 9.7   | 2     | 13.3  |
| Wednesday   | 12     | 16.7  | 2     | 13.3  |
| Thursday    | 8      | 11.1  | 0     | 0.0   |
| Friday      | 12     | 16.7  | 3     | 20.0  |
| Saturday    | 9      | 12.5  | 1     | 6.7   |
| Total       | 72     | 100.0 | 15    | 100.0 |

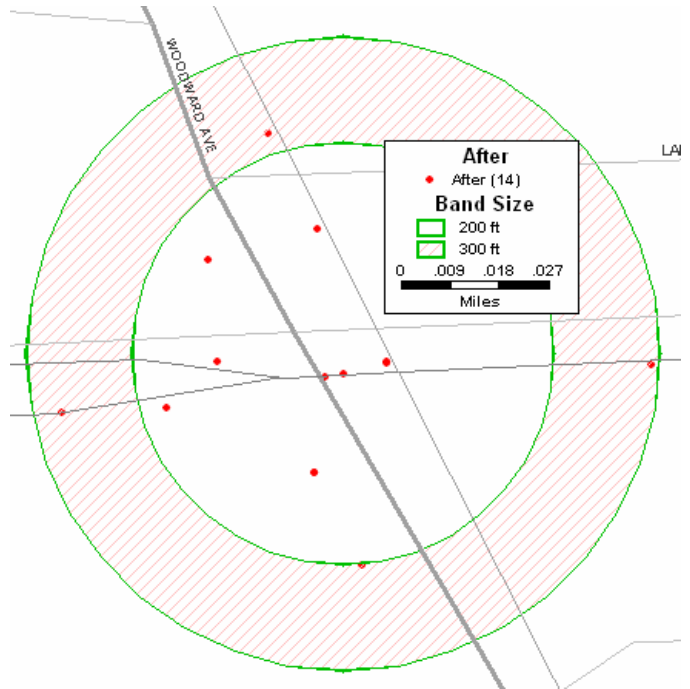
| Crash Type     | Before | %     | After | %     |
|----------------|--------|-------|-------|-------|
| Single vehicle | 4      | 5.6   | 1     | 6.7   |
| Head-on        | 0      | 0.0   | 0     | 0.0   |
| Angle          | 13     | 18.1  | 3     | 20.0  |
| Rear-end       | 35     | 48.6  | 8     | 53.3  |
| Sideswipe      | 12     | 16.7  | 2     | 13.3  |
| Other/unknown  | 8      | 11.1  | 1     | 6.7   |
| Total          | 72     | 100.0 | 15    | 100.0 |

**M1 (Woodward Avenue) and 7 Mile Road**

Date of Signal Optimization: September 17, 2004



1,356 days before



470 days after

| Injury Severity | Before | %     | After | %     |
|-----------------|--------|-------|-------|-------|
| Fatal           | 0      | 0.0   | 0     | 0.0   |
| A-Injury        | 0      | 0.0   | 0     | 0.0   |
| B-Injury        | 3      | 7.7   | 0     | 0.0   |
| C-Injury        | 7      | 17.9  | 4     | 28.6  |
| O-Injury        | 29     | 74.4  | 10    | 71.4  |
| Total           | 39     | 100.0 | 14    | 100.0 |

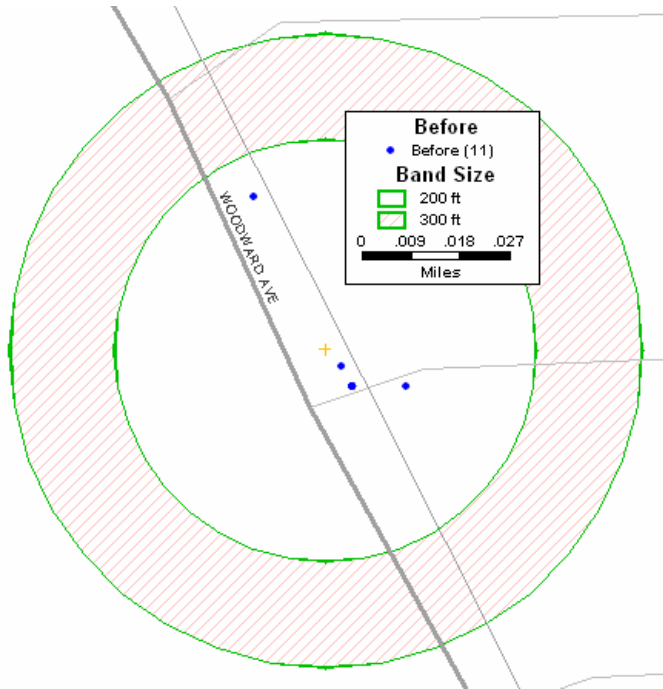
| Time of Day   | Before | %     | After | %     |
|---------------|--------|-------|-------|-------|
| 6am - 9:59am  | 6      | 15.4  | 3     | 21.4  |
| 10am - 3:59pm | 15     | 38.5  | 2     | 14.3  |
| 4pm - 7:59pm  | 7      | 17.9  | 1     | 7.1   |
| 8pm - 5:59am  | 10     | 25.6  | 7     | 50.0  |
| Unknown       | 1      | 2.6   | 1     | 7.1   |
| Total         | 39     | 100.0 | 14    | 100.0 |

| Day of Week | Before | %     | After | %     |
|-------------|--------|-------|-------|-------|
| Sunday      | 7      | 17.9  | 1     | 7.1   |
| Monday      | 4      | 10.3  | 1     | 7.1   |
| Tuesday     | 5      | 12.8  | 2     | 14.3  |
| Wednesday   | 4      | 10.3  | 2     | 14.3  |
| Thursday    | 11     | 28.2  | 4     | 28.6  |
| Friday      | 2      | 5.1   | 0     | 0.0   |
| Saturday    | 6      | 15.4  | 4     | 28.6  |
| Total       | 39     | 100.0 | 14    | 100.0 |

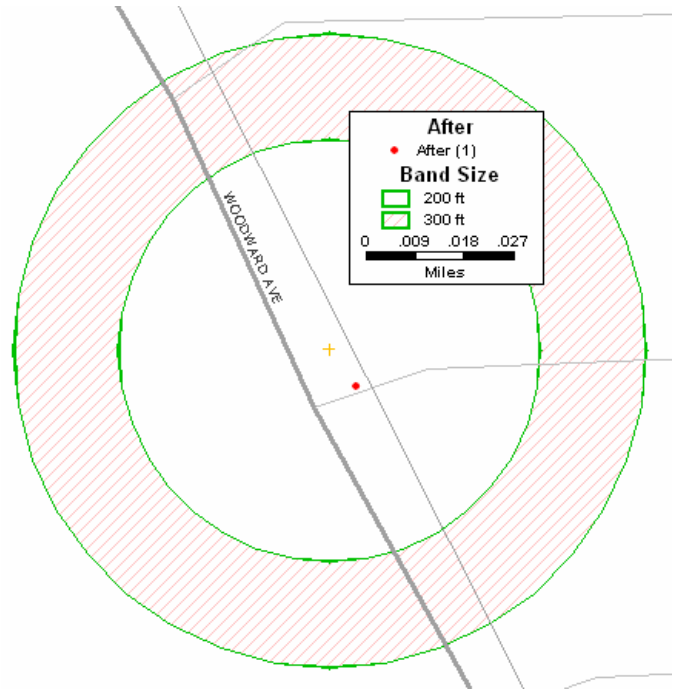
| Crash Type     | Before | %     | After | %     |
|----------------|--------|-------|-------|-------|
| Single vehicle | 4      | 10.3  | 1     | 7.1   |
| Head-on        | 2      | 5.1   | 1     | 7.1   |
| Angle          | 3      | 7.7   | 0     | 0.0   |
| Rear-end       | 10     | 25.6  | 5     | 35.7  |
| Sideswipe      | 14     | 35.9  | 5     | 35.7  |
| Other/unknown  | 6      | 15.4  | 2     | 14.3  |
| Total          | 39     | 100.0 | 14    | 100.0 |

**M1 (Woodward Avenue) and NB Crossover South of 7 Mile Road**

Date of Signal Optimization: September 17, 2004



1,356 days before



470 days after

| Injury Severity | Before | %     | After | %     |
|-----------------|--------|-------|-------|-------|
| Fatal           | 0      | 0.0   | 0     | 0.0   |
| A-Injury        | 0      | 0.0   | 0     | 0.0   |
| B-Injury        | 0      | 0.0   | 0     | 0.0   |
| C-Injury        | 1      | 9.1   | 0     | 0.0   |
| O-Injury        | 10     | 90.9  | 1     | 100.0 |
| Total           | 11     | 100.0 | 1     | 100.0 |

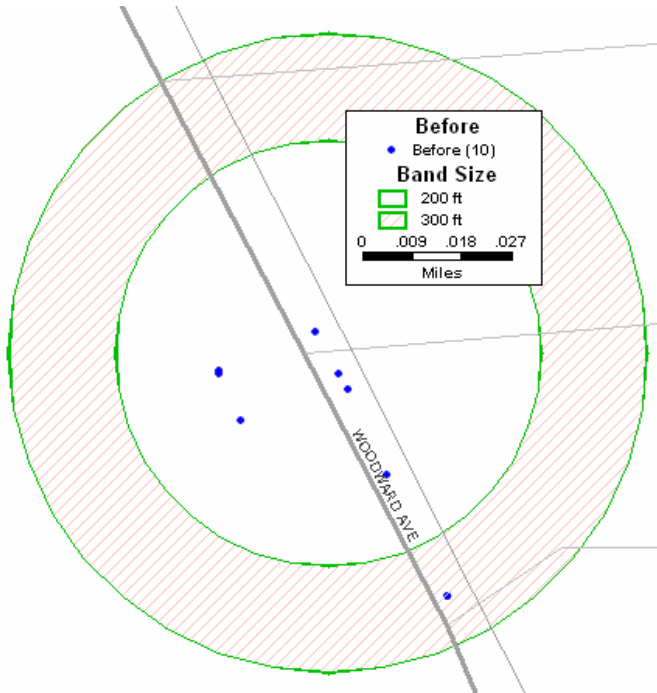
| Time of Day   | Before | %     | After | %     |
|---------------|--------|-------|-------|-------|
| 6am - 9:59am  | 0      | 0.0   | 0     | 0.0   |
| 10am - 3:59pm | 5      | 45.5  | 0     | 0.0   |
| 4pm - 7:59pm  | 4      | 36.4  | 1     | 100.0 |
| 8pm - 5:59am  | 2      | 18.2  | 0     | 0.0   |
| Unknown       | 0      | 0.0   | 0     | 0.0   |
| Total         | 11     | 100.0 | 1     | 100.0 |

| Day of Week | Before | %     | After | %     |
|-------------|--------|-------|-------|-------|
| Sunday      | 2      | 18.2  | 0     | 0.0   |
| Monday      | 1      | 9.1   | 1     | 100.0 |
| Tuesday     | 1      | 9.1   | 0     | 0.0   |
| Wednesday   | 2      | 18.2  | 0     | 0.0   |
| Thursday    | 3      | 27.3  | 0     | 0.0   |
| Friday      | 1      | 9.1   | 0     | 0.0   |
| Saturday    | 1      | 9.1   | 0     | 0.0   |
| Total       | 11     | 100.0 | 1     | 100.0 |

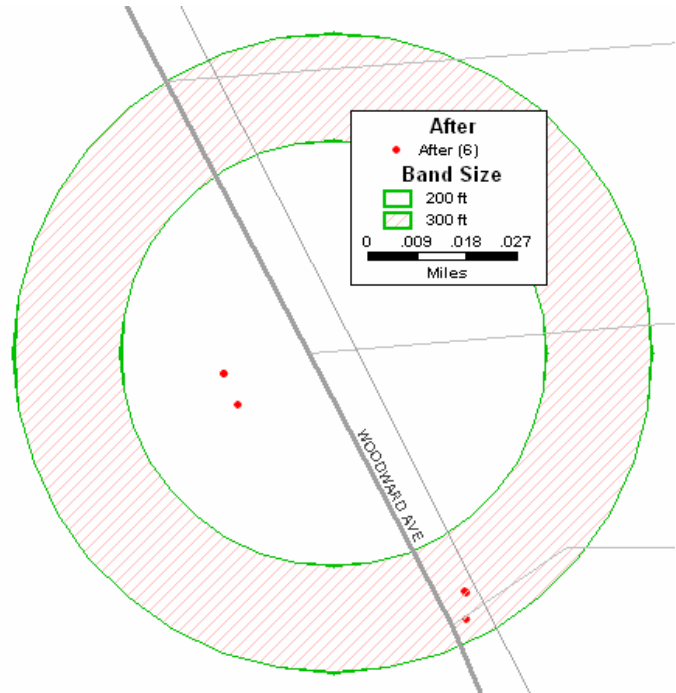
| Crash Type     | Before | %     | After | %     |
|----------------|--------|-------|-------|-------|
| Single vehicle | 0      | 0.0   | 0     | 0.0   |
| Head-on        | 1      | 9.1   | 0     | 0.0   |
| Angle          | 6      | 54.5  | 0     | 0.0   |
| Rear-end       | 3      | 27.3  | 1     | 100.0 |
| Sideswipe      | 0      | 0.0   | 0     | 0.0   |
| Other/unknown  | 1      | 9.1   | 0     | 0.0   |
| Total          | 11     | 100.0 | 1     | 100.0 |

### M1 (Woodward Avenue) and Grixdale

Date of Signal Optimization: September 17, 2004



1,356 days before



470 days after

| Injury Severity | Before | %     | After | %     |
|-----------------|--------|-------|-------|-------|
| Fatal           | 0      | 0.0   | 0     | 0.0   |
| A-Injury        | 0      | 0.0   | 0     | 0.0   |
| B-Injury        | 0      | 0.0   | 0     | 0.0   |
| C-Injury        | 1      | 10.0  | 2     | 33.3  |
| O-Injury        | 9      | 90.0  | 4     | 66.7  |
| Total           | 10     | 100.0 | 6     | 100.0 |

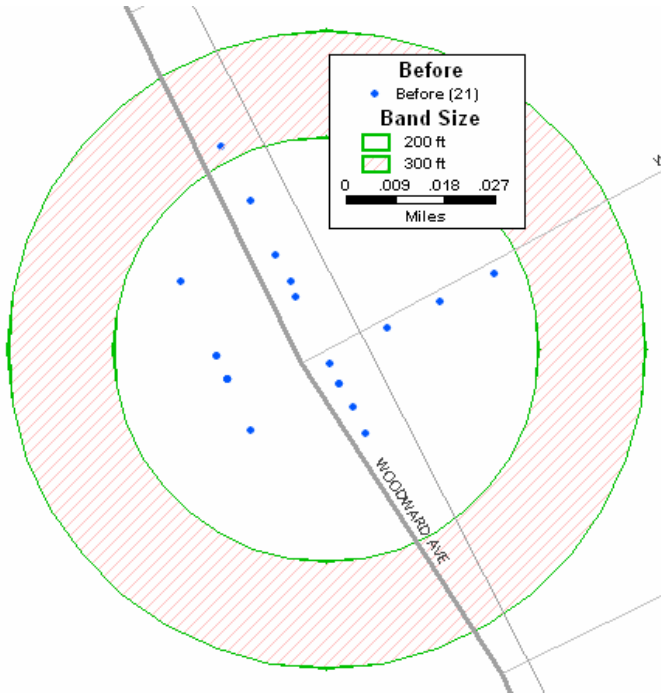
| Time of Day   | Before | %     | After | %     |
|---------------|--------|-------|-------|-------|
| 6am - 9:59am  | 1      | 10.0  | 1     | 16.7  |
| 10am - 3:59pm | 3      | 30.0  | 4     | 66.7  |
| 4pm - 7:59pm  | 1      | 10.0  | 0     | 0.0   |
| 8pm - 5:59am  | 4      | 40.0  | 1     | 16.7  |
| Unknown       | 1      | 10.0  | 0     | 0.0   |
| Total         | 10     | 100.0 | 6     | 100.0 |

| Day of Week | Before | %     | After | %     |
|-------------|--------|-------|-------|-------|
| Sunday      | 2      | 20.0  | 0     | 0.0   |
| Monday      | 2      | 20.0  | 1     | 16.7  |
| Tuesday     | 0      | 0.0   | 1     | 16.7  |
| Wednesday   | 3      | 30.0  | 1     | 16.7  |
| Thursday    | 0      | 0.0   | 1     | 16.7  |
| Friday      | 2      | 20.0  | 1     | 16.7  |
| Saturday    | 1      | 10.0  | 1     | 16.7  |
| Total       | 10     | 100.0 | 6     | 100.0 |

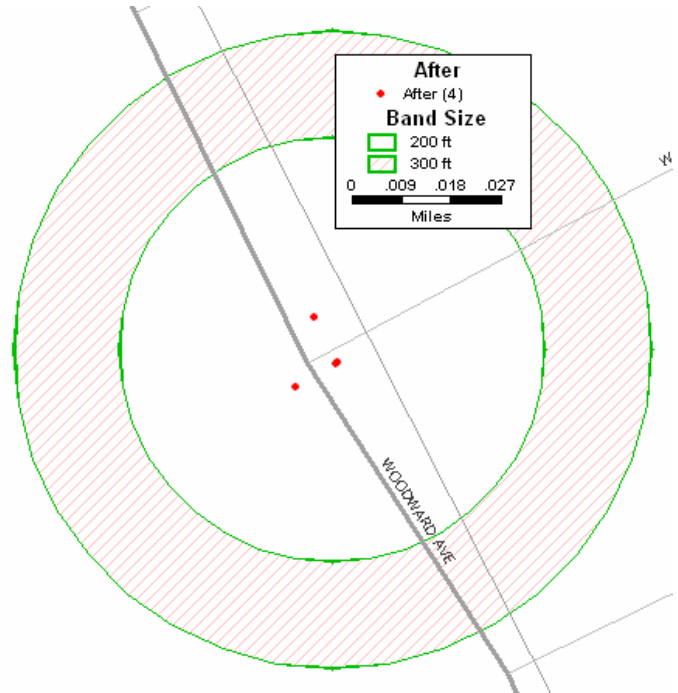
| Crash Type     | Before | %     | After | %     |
|----------------|--------|-------|-------|-------|
| Single vehicle | 1      | 10.0  | 3     | 50.0  |
| Head-on        | 0      | 0.0   | 0     | 0.0   |
| Angle          | 1      | 10.0  | 1     | 16.7  |
| Rear-end       | 5      | 50.0  | 1     | 16.7  |
| Sideswipe      | 2      | 20.0  | 0     | 0.0   |
| Other/unknown  | 1      | 10.0  | 1     | 16.7  |
| Total          | 10     | 100.0 | 6     | 100.0 |

### M1 (Woodward Avenue) and Nevada

Date of Signal Optimization: September 17, 2004



1,356 days before



470 days after

| Injury Severity | Before | %     | After | %     |
|-----------------|--------|-------|-------|-------|
| Fatal           | 0      | 0.0   | 0     | 0.0   |
| A-Injury        | 0      | 0.0   | 0     | 0.0   |
| B-Injury        | 2      | 9.5   | 0     | 0.0   |
| C-Injury        | 6      | 28.6  | 2     | 50.0  |
| O-Injury        | 13     | 61.9  | 2     | 50.0  |
| Total           | 21     | 100.0 | 4     | 100.0 |

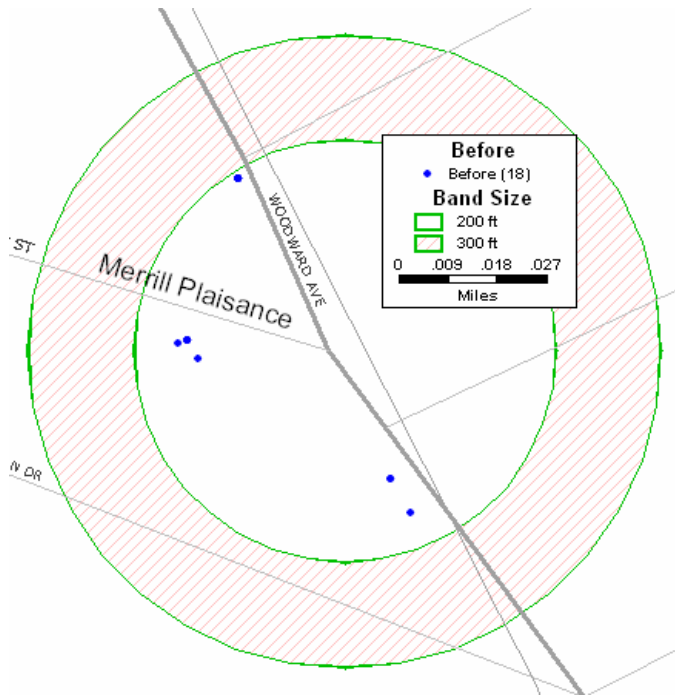
| Time of Day   | Before | %     | After | %     |
|---------------|--------|-------|-------|-------|
| 6am - 9:59am  | 0      | 0.0   | 1     | 25.0  |
| 10am - 3:59pm | 11     | 52.4  | 1     | 25.0  |
| 4pm - 7:59pm  | 3      | 14.3  | 0     | 0.0   |
| 8pm - 5:59am  | 5      | 23.8  | 1     | 25.0  |
| Unknown       | 2      | 9.5   | 1     | 25.0  |
| Total         | 21     | 100.0 | 4     | 100.0 |

| Day of Week | Before | %     | After | %     |
|-------------|--------|-------|-------|-------|
| Sunday      | 4      | 19.0  | 0     | 0.0   |
| Monday      | 3      | 14.3  | 1     | 25.0  |
| Tuesday     | 2      | 9.5   | 1     | 25.0  |
| Wednesday   | 2      | 9.5   | 0     | 0.0   |
| Thursday    | 5      | 23.8  | 1     | 25.0  |
| Friday      | 2      | 9.5   | 0     | 0.0   |
| Saturday    | 3      | 14.3  | 1     | 25.0  |
| Total       | 21     | 100.0 | 4     | 100.0 |

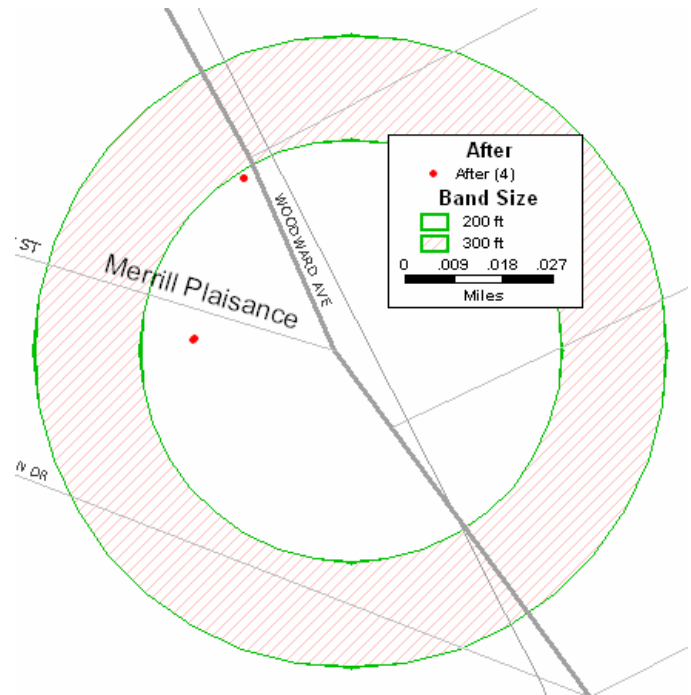
| Crash Type     | Before | %     | After | %     |
|----------------|--------|-------|-------|-------|
| Single vehicle | 3      | 14.3  | 0     | 0.0   |
| Head-on        | 1      | 4.8   | 0     | 0.0   |
| Angle          | 2      | 9.5   | 1     | 25.0  |
| Rear-end       | 8      | 38.1  | 0     | 0.0   |
| Sideswipe      | 4      | 19.0  | 2     | 50.0  |
| Other/unknown  | 3      | 14.3  | 1     | 25.0  |
| Total          | 21     | 100.0 | 4     | 100.0 |

**M1 (Woodward Avenue) and Merrill Plaisance**

Date of Signal Optimization: September 17, 2004



1,356 days before



470 days after

| Injury Severity | Before | %     | After | %     |
|-----------------|--------|-------|-------|-------|
| Fatal           | 0      | 0.0   | 0     | 0.0   |
| A-Injury        | 1      | 5.6   | 0     | 0.0   |
| B-Injury        | 1      | 5.6   | 0     | 0.0   |
| C-Injury        | 1      | 5.6   | 0     | 0.0   |
| O-Injury        | 15     | 83.3  | 4     | 100.0 |
| Total           | 18     | 100.0 | 4     | 100.0 |

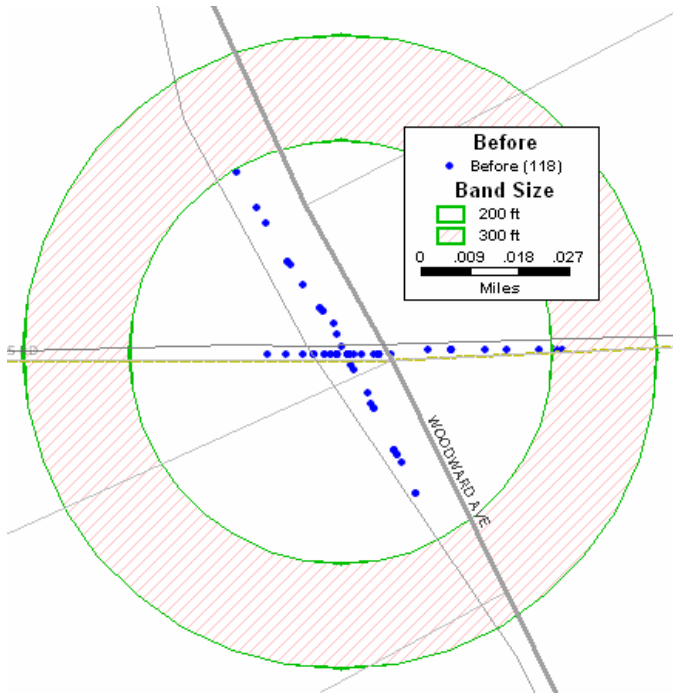
| Time of Day   | Before | %     | After | %     |
|---------------|--------|-------|-------|-------|
| 6am - 9:59am  | 1      | 5.6   | 0     | 0.0   |
| 10am - 3:59pm | 5      | 27.8  | 1     | 25.0  |
| 4pm - 7:59pm  | 5      | 27.8  | 2     | 50.0  |
| 8pm - 5:59am  | 5      | 27.8  | 1     | 25.0  |
| Unknown       | 2      | 11.1  | 0     | 0.0   |
| Total         | 18     | 100.0 | 4     | 100.0 |

| Day of Week | Before | %     | After | %     |
|-------------|--------|-------|-------|-------|
| Sunday      | 5      | 27.8  | 2     | 50.0  |
| Monday      | 4      | 22.2  | 0     | 0.0   |
| Tuesday     | 0      | 0.0   | 0     | 0.0   |
| Wednesday   | 1      | 5.6   | 2     | 50.0  |
| Thursday    | 3      | 16.7  | 0     | 0.0   |
| Friday      | 1      | 5.6   | 0     | 0.0   |
| Saturday    | 4      | 22.2  | 0     | 0.0   |
| Total       | 18     | 100.0 | 4     | 100.0 |

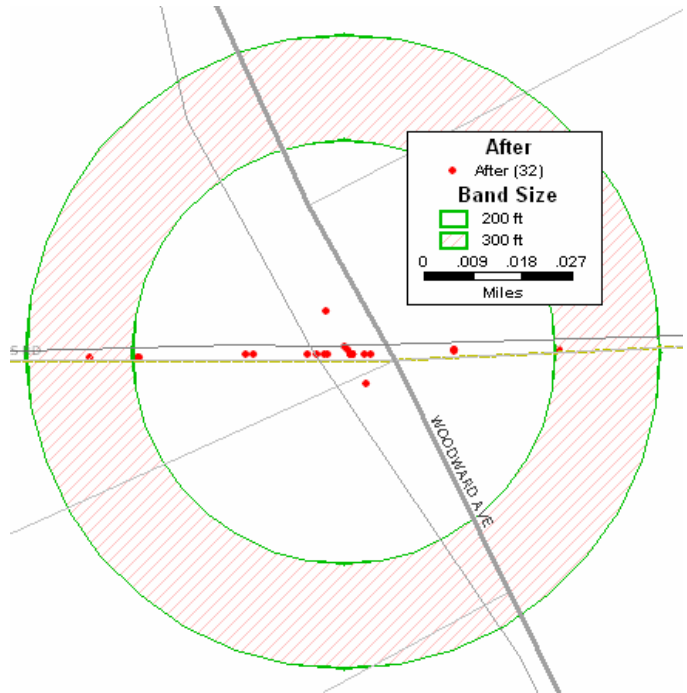
| Crash Type     | Before | %     | After | %     |
|----------------|--------|-------|-------|-------|
| Single vehicle | 3      | 16.7  | 0     | 0.0   |
| Head-on        | 1      | 5.6   | 0     | 0.0   |
| Angle          | 3      | 16.7  | 1     | 25.0  |
| Rear-end       | 7      | 38.9  | 1     | 25.0  |
| Sideswipe      | 4      | 22.2  | 2     | 50.0  |
| Other/unknown  | 0      | 0.0   | 0     | 0.0   |
| Total          | 18     | 100.0 | 4     | 100.0 |

### M1 (Woodward Avenue) and 6 Mile Road

Date of Signal Optimization: September 17, 2004



1,356 days before



470 days after

| Injury Severity | Before | %     | After | %     |
|-----------------|--------|-------|-------|-------|
| Fatal           | 1      | 0.8   | 0     | 0.0   |
| A-Injury        | 5      | 4.2   | 1     | 3.1   |
| B-Injury        | 3      | 2.5   | 1     | 3.1   |
| C-Injury        | 16     | 13.6  | 3     | 9.4   |
| O-Injury        | 93     | 78.8  | 27    | 84.4  |
| Total           | 118    | 100.0 | 32    | 100.0 |

| Time of Day   | Before | %     | After | %     |
|---------------|--------|-------|-------|-------|
| 6am - 9:59am  | 14     | 11.9  | 9     | 28.1  |
| 10am - 3:59pm | 29     | 24.6  | 9     | 28.1  |
| 4pm - 7:59pm  | 28     | 23.7  | 7     | 21.9  |
| 8pm - 5:59am  | 42     | 35.6  | 7     | 21.9  |
| Unknown       | 5      | 4.2   | 0     | 0.0   |
| Total         | 118    | 100.0 | 32    | 100.0 |

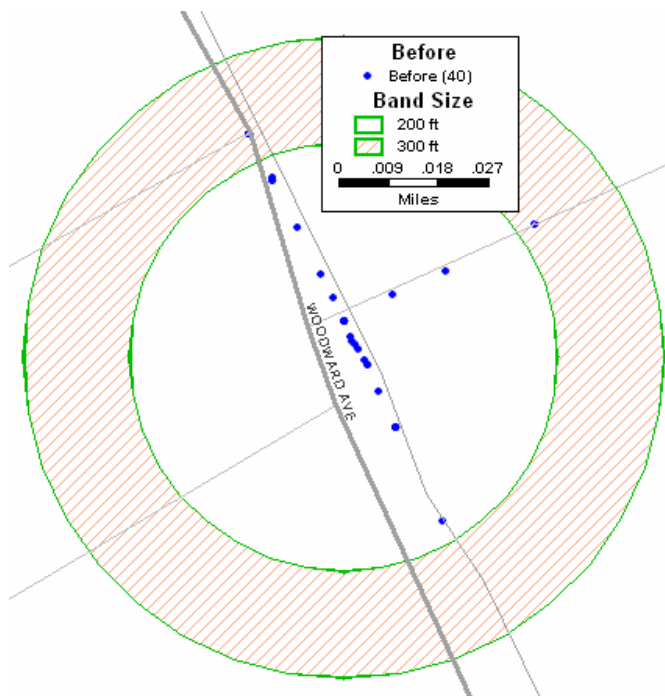
| Day of Week | Before | %     | After | %     |
|-------------|--------|-------|-------|-------|
| Sunday      | 23     | 19.5  | 2     | 6.3   |
| Monday      | 14     | 11.9  | 5     | 15.6  |
| Tuesday     | 10     | 8.5   | 4     | 12.5  |
| Wednesday   | 16     | 13.6  | 7     | 21.9  |
| Thursday    | 17     | 14.4  | 4     | 12.5  |
| Friday      | 29     | 24.6  | 6     | 18.8  |
| Saturday    | 9      | 7.6   | 4     | 12.5  |
| Total       | 118    | 100.0 | 32    | 100.0 |

| Crash Type     | Before | %     | After | %     |
|----------------|--------|-------|-------|-------|
| Single vehicle | 8      | 6.8   | 3     | 9.4   |
| Head-on        | 3      | 2.5   | 1     | 3.1   |
| Angle          | 22     | 18.6  | 9     | 28.1  |
| Rear-end       | 46     | 39.0  | 11    | 34.4  |
| Sideswipe      | 29     | 24.6  | 7     | 21.9  |
| Other/unknown  | 10     | 8.5   | 1     | 3.1   |
| Total          | 118    | 100.0 | 32    | 100.0 |

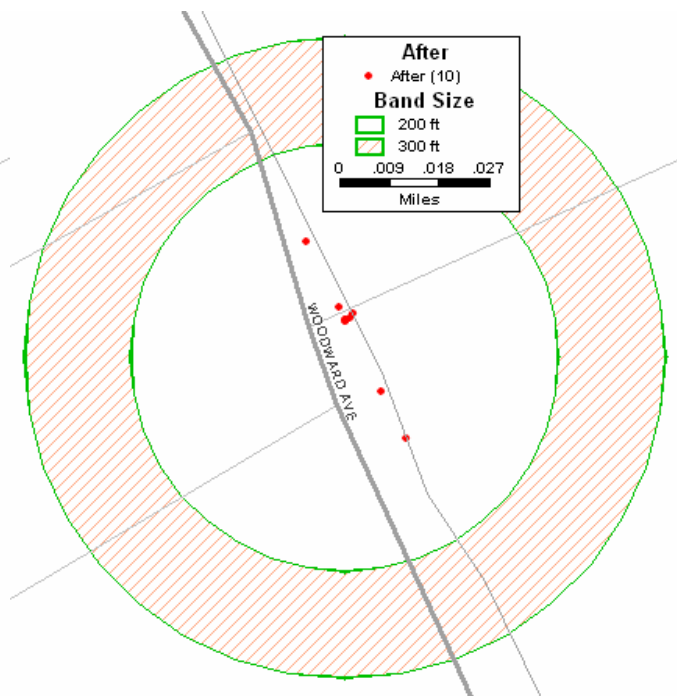


### M1 (Woodward Avenue) and Pilgrim (Ferris)

Date of Signal Optimization: September 17, 2004



1,356 days before



470 days after

| Injury Severity | Before | %     | After | %     |
|-----------------|--------|-------|-------|-------|
| Fatal           | 0      | 0.0   | 0     | 0.0   |
| A-Injury        | 2      | 5.0   | 0     | 0.0   |
| B-Injury        | 0      | 0.0   | 1     | 10.0  |
| C-Injury        | 5      | 12.5  | 1     | 10.0  |
| O-Injury        | 33     | 82.5  | 8     | 80.0  |
| Total           | 40     | 100.0 | 10    | 100.0 |

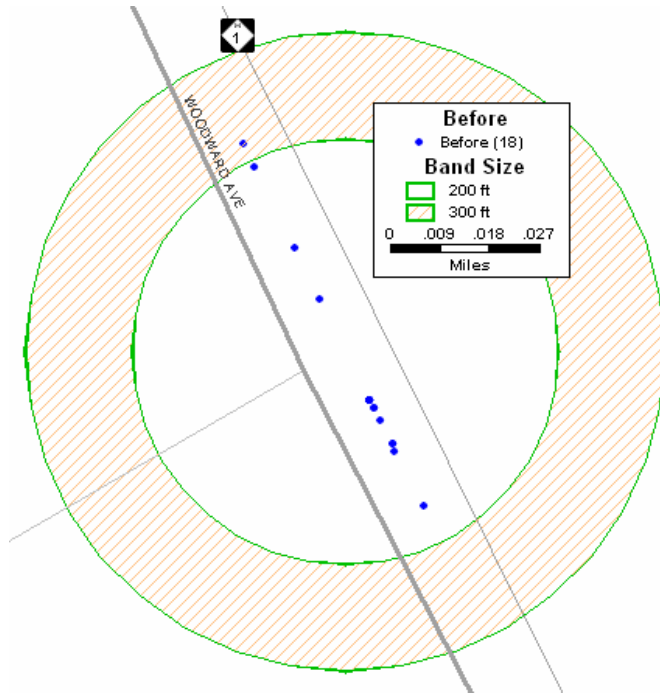
| Time of Day   | Before | %     | After | %     |
|---------------|--------|-------|-------|-------|
| 6am - 9:59am  | 13     | 32.5  | 1     | 10.0  |
| 10am - 3:59pm | 11     | 27.5  | 7     | 70.0  |
| 4pm - 7:59pm  | 11     | 27.5  | 2     | 20.0  |
| 8pm - 5:59am  | 4      | 10.0  | 0     | 0.0   |
| Unknown       | 1      | 2.5   | 0     | 0.0   |
| Total         | 40     | 100.0 | 10    | 100.0 |

| Day of Week | Before | %     | After | %     |
|-------------|--------|-------|-------|-------|
| Sunday      | 2      | 5.0   | 3     | 30.0  |
| Monday      | 6      | 15.0  | 0     | 0.0   |
| Tuesday     | 8      | 20.0  | 1     | 10.0  |
| Wednesday   | 6      | 15.0  | 1     | 10.0  |
| Thursday    | 7      | 17.5  | 4     | 40.0  |
| Friday      | 9      | 22.5  | 1     | 10.0  |
| Saturday    | 2      | 5.0   | 0     | 0.0   |
| Total       | 40     | 100.0 | 10    | 100.0 |

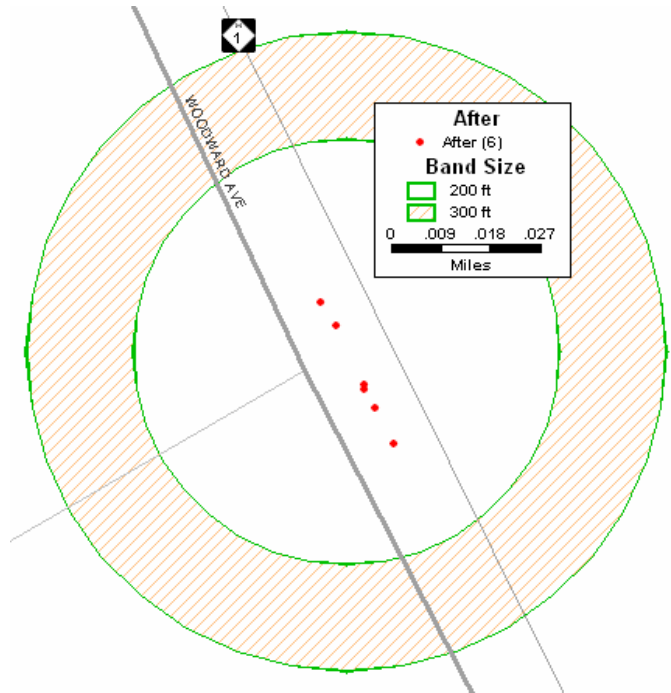
| Crash Type     | Before | %     | After | %     |
|----------------|--------|-------|-------|-------|
| Single vehicle | 0      | 0.0   | 2     | 20.0  |
| Head-on        | 4      | 10.0  | 0     | 0.0   |
| Angle          | 10     | 25.0  | 1     | 10.0  |
| Rear-end       | 13     | 32.5  | 5     | 50.0  |
| Sideswipe      | 10     | 25.0  | 2     | 20.0  |
| Other/unknown  | 3      | 7.5   | 0     | 0.0   |
| Total          | 40     | 100.0 | 10    | 100.0 |

**M1 (Woodward Avenue) and Sears and Ford Drive**

Date of Signal Optimization: September 17, 2004



1,356 days before



470 days after

| Injury Severity | Before | %     | After | %     |
|-----------------|--------|-------|-------|-------|
| Fatal           | 0      | 0.0   | 0     | 0.0   |
| A-Injury        | 2      | 11.1  | 0     | 0.0   |
| B-Injury        | 1      | 5.6   | 0     | 0.0   |
| C-Injury        | 1      | 5.6   | 0     | 0.0   |
| O-Injury        | 14     | 77.8  | 6     | 100.0 |
| Total           | 18     | 100.0 | 6     | 100.0 |

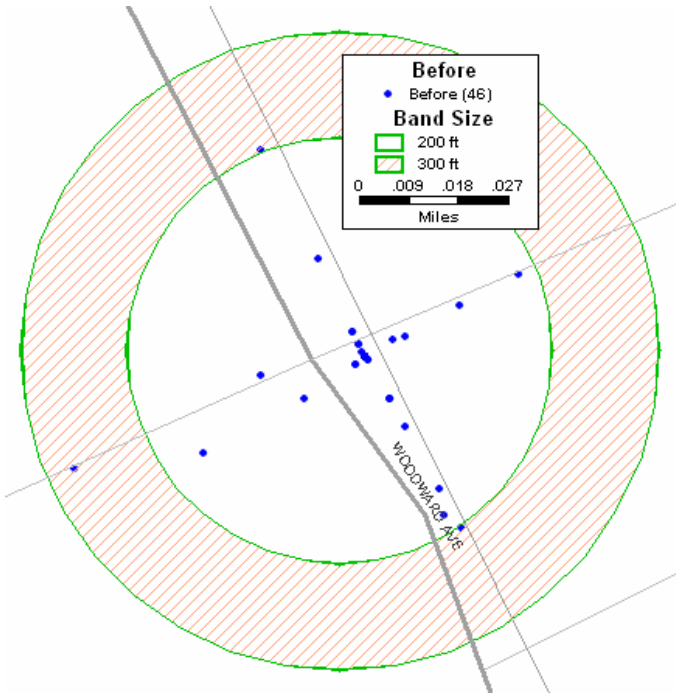
| Time of Day   | Before | %     | After | %     |
|---------------|--------|-------|-------|-------|
| 6am - 9:59am  | 2      | 11.1  | 2     | 33.3  |
| 10am - 3:59pm | 8      | 44.4  | 2     | 33.3  |
| 4pm - 7:59pm  | 6      | 33.3  | 1     | 16.7  |
| 8pm - 5:59am  | 2      | 11.1  | 1     | 16.7  |
| Unknown       | 0      | 0.0   | 0     | 0.0   |
| Total         | 18     | 100.0 | 6     | 100.0 |

| Day of Week | Before | %     | After | %     |
|-------------|--------|-------|-------|-------|
| Sunday      | 1      | 5.6   | 0     | 0.0   |
| Monday      | 4      | 22.2  | 2     | 33.3  |
| Tuesday     | 0      | 0.0   | 2     | 33.3  |
| Wednesday   | 3      | 16.7  | 0     | 0.0   |
| Thursday    | 5      | 27.8  | 0     | 0.0   |
| Friday      | 2      | 11.1  | 1     | 16.7  |
| Saturday    | 3      | 16.7  | 1     | 16.7  |
| Total       | 18     | 100.0 | 6     | 100.0 |

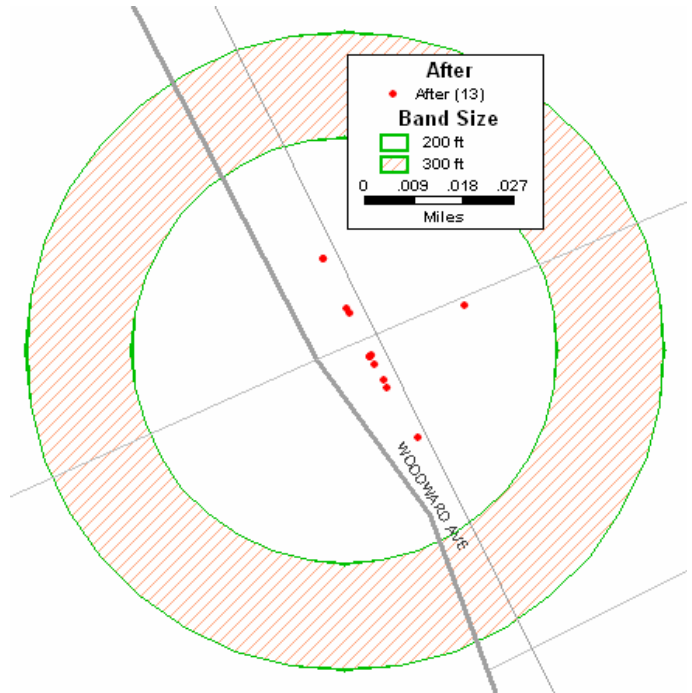
| Crash Type     | Before | %     | After | %     |
|----------------|--------|-------|-------|-------|
| Single vehicle | 2      | 11.1  | 0     | 0.0   |
| Head-on        | 1      | 5.6   | 0     | 0.0   |
| Angle          | 2      | 11.1  | 0     | 0.0   |
| Rear-end       | 8      | 44.4  | 4     | 66.7  |
| Sideswipe      | 4      | 22.2  | 1     | 16.7  |
| Other/unknown  | 1      | 5.6   | 1     | 16.7  |
| Total          | 18     | 100.0 | 6     | 100.0 |

### M1 (Woodward Avenue) and Manchester

Date of Signal Optimization: September 17, 2004



1,356 days before



470 days after

| Injury Severity | Before | %     | After | %     |
|-----------------|--------|-------|-------|-------|
| Fatal           | 0      | 0.0   | 0     | 0.0   |
| A-Injury        | 1      | 2.2   | 0     | 0.0   |
| B-Injury        | 4      | 8.7   | 2     | 15.4  |
| C-Injury        | 11     | 23.9  | 3     | 23.1  |
| O-Injury        | 30     | 65.2  | 8     | 61.5  |
| Total           | 46     | 100.0 | 13    | 100.0 |

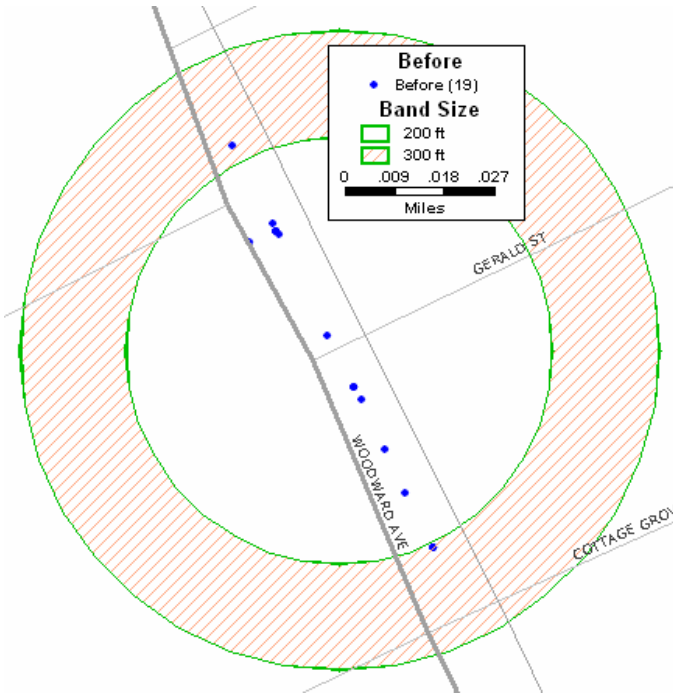
| Time of Day   | Before | %     | After | %     |
|---------------|--------|-------|-------|-------|
| 6am - 9:59am  | 5      | 10.9  | 1     | 7.7   |
| 10am - 3:59pm | 15     | 32.6  | 5     | 38.5  |
| 4pm - 7:59pm  | 13     | 28.3  | 5     | 38.5  |
| 8pm - 5:59am  | 11     | 23.9  | 2     | 15.4  |
| Unknown       | 2      | 4.3   | 0     | 0.0   |
| Total         | 46     | 100.0 | 13    | 100.0 |

| Day of Week | Before | %     | After | %     |
|-------------|--------|-------|-------|-------|
| Sunday      | 6      | 13.0  | 2     | 15.4  |
| Monday      | 4      | 8.7   | 1     | 7.7   |
| Tuesday     | 10     | 21.7  | 1     | 7.7   |
| Wednesday   | 9      | 19.6  | 2     | 15.4  |
| Thursday    | 4      | 8.7   | 0     | 0.0   |
| Friday      | 9      | 19.6  | 2     | 15.4  |
| Saturday    | 4      | 8.7   | 5     | 38.5  |
| Total       | 46     | 100.0 | 13    | 100.0 |

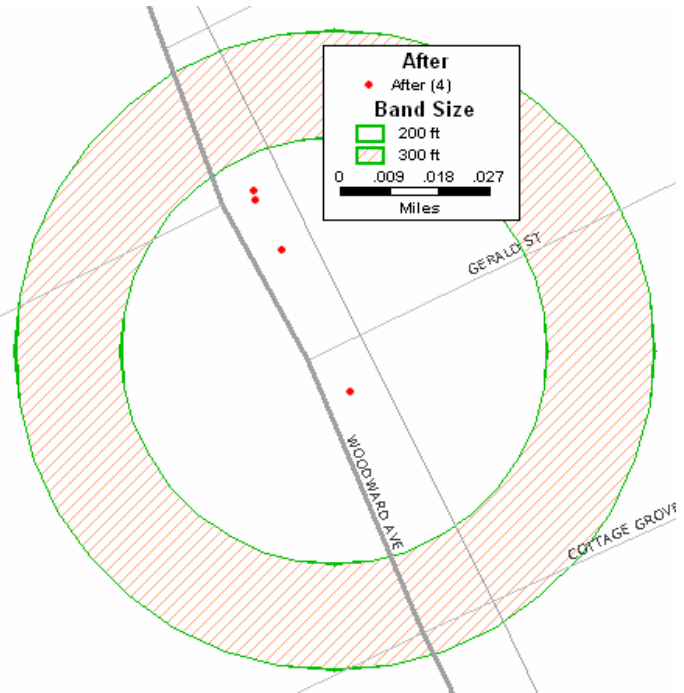
| Crash Type     | Before | %     | After | %     |
|----------------|--------|-------|-------|-------|
| Single vehicle | 4      | 8.7   | 2     | 15.4  |
| Head-on        | 7      | 15.2  | 1     | 7.7   |
| Angle          | 9      | 19.6  | 7     | 53.8  |
| Rear-end       | 14     | 30.4  | 2     | 15.4  |
| Sideswipe      | 6      | 13.0  | 1     | 7.7   |
| Other/unknown  | 6      | 13.0  | 0     | 0.0   |
| Total          | 46     | 100.0 | 13    | 100.0 |

### M1 (Woodward Avenue) and Gerald Street

Date of Signal Optimization: September 17, 2004



1,356 days before



470 days after

| Injury Severity | Before | %     | After | %     |
|-----------------|--------|-------|-------|-------|
| Fatal           | 0      | 0.0   | 0     | 0.0   |
| A-Injury        | 1      | 5.3   | 0     | 0.0   |
| B-Injury        | 2      | 10.5  | 0     | 0.0   |
| C-Injury        | 2      | 10.5  | 0     | 0.0   |
| O-Injury        | 14     | 73.7  | 4     | 100.0 |
| Total           | 19     | 100.0 | 4     | 100.0 |

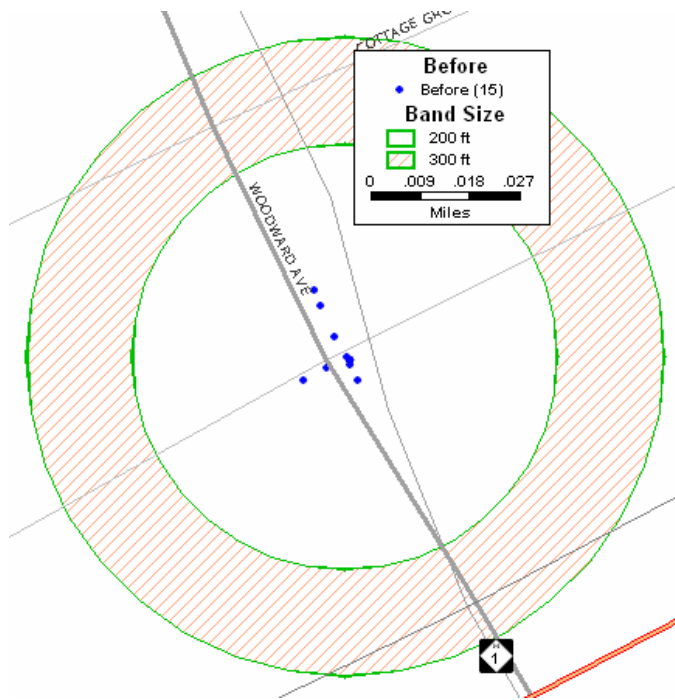
| Time of Day   | Before | %     | After | %     |
|---------------|--------|-------|-------|-------|
| 6am - 9:59am  | 2      | 10.5  | 0     | 0.0   |
| 10am - 3:59pm | 4      | 21.1  | 2     | 50.0  |
| 4pm - 7:59pm  | 4      | 21.1  | 0     | 0.0   |
| 8pm - 5:59am  | 7      | 36.8  | 2     | 50.0  |
| Unknown       | 2      | 10.5  | 0     | 0.0   |
| Total         | 19     | 100.0 | 4     | 100.0 |

| Day of Week | Before | %     | After | %     |
|-------------|--------|-------|-------|-------|
| Sunday      | 2      | 10.5  | 0     | 0.0   |
| Monday      | 4      | 21.1  | 1     | 25.0  |
| Tuesday     | 2      | 10.5  | 1     | 25.0  |
| Wednesday   | 1      | 5.3   | 0     | 0.0   |
| Thursday    | 4      | 21.1  | 1     | 25.0  |
| Friday      | 1      | 5.3   | 0     | 0.0   |
| Saturday    | 5      | 26.3  | 1     | 25.0  |
| Total       | 19     | 100.0 | 4     | 100.0 |

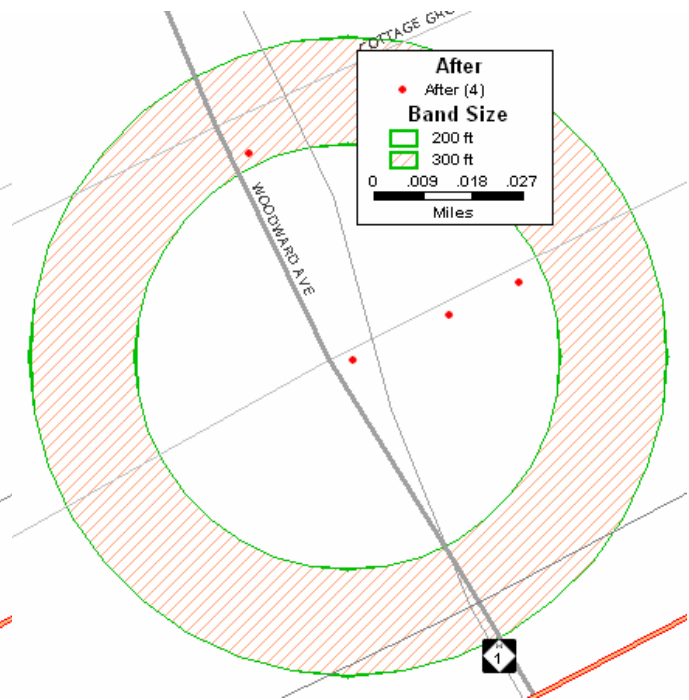
| Crash Type     | Before | %     | After | %     |
|----------------|--------|-------|-------|-------|
| Single vehicle | 1      | 5.3   | 1     | 25.0  |
| Head-on        | 3      | 15.8  | 0     | 0.0   |
| Angle          | 3      | 15.8  | 0     | 0.0   |
| Rear-end       | 7      | 36.8  | 3     | 75.0  |
| Sideswipe      | 3      | 15.8  | 0     | 0.0   |
| Other/unknown  | 2      | 10.5  | 0     | 0.0   |
| Total          | 19     | 100.0 | 4     | 100.0 |

### M1 (Woodward Avenue) and Grand

Date of Signal Optimization: September 17, 2004



1,356 days before



470 days after

| Injury Severity | Before | %     | After | %     |
|-----------------|--------|-------|-------|-------|
| Fatal           | 0      | 0.0   | 0     | 0.0   |
| A-Injury        | 0      | 0.0   | 0     | 0.0   |
| B-Injury        | 0      | 0.0   | 0     | 0.0   |
| C-Injury        | 2      | 13.3  | 1     | 25.0  |
| O-Injury        | 13     | 86.7  | 3     | 75.0  |
| Total           | 15     | 100.0 | 4     | 100.0 |

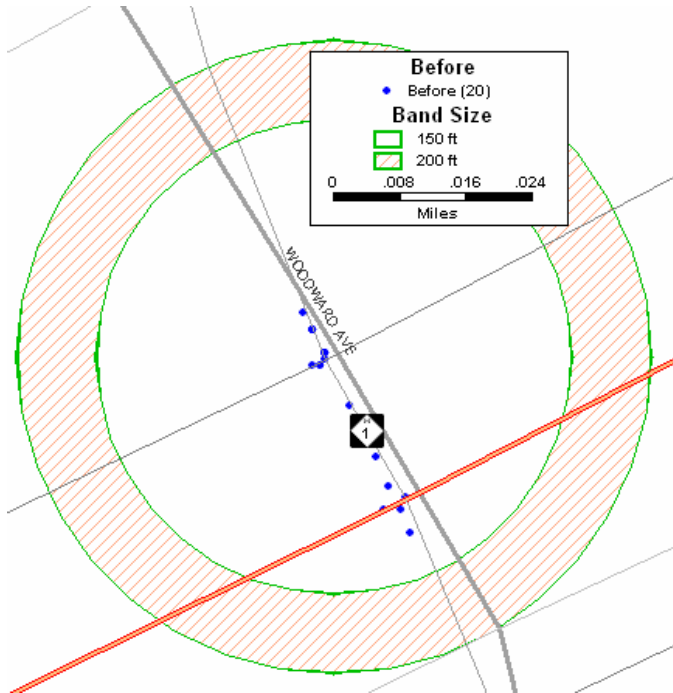
| Time of Day   | Before | %     | After | %     |
|---------------|--------|-------|-------|-------|
| 6am - 9:59am  | 1      | 6.7   | 0     | 0.0   |
| 10am - 3:59pm | 8      | 53.3  | 1     | 25.0  |
| 4pm - 7:59pm  | 5      | 33.3  | 1     | 25.0  |
| 8pm - 5:59am  | 1      | 6.7   | 2     | 50.0  |
| Unknown       | 0      | 0.0   | 0     | 0.0   |
| Total         | 15     | 100.0 | 4     | 100.0 |

| Day of Week | Before | %     | After | %     |
|-------------|--------|-------|-------|-------|
| Sunday      | 2      | 13.3  | 0     | 0.0   |
| Monday      | 3      | 20.0  | 0     | 0.0   |
| Tuesday     | 1      | 6.7   | 1     | 25.0  |
| Wednesday   | 2      | 13.3  | 0     | 0.0   |
| Thursday    | 1      | 6.7   | 1     | 25.0  |
| Friday      | 1      | 6.7   | 0     | 0.0   |
| Saturday    | 5      | 33.3  | 2     | 50.0  |
| Total       | 15     | 100.0 | 4     | 100.0 |

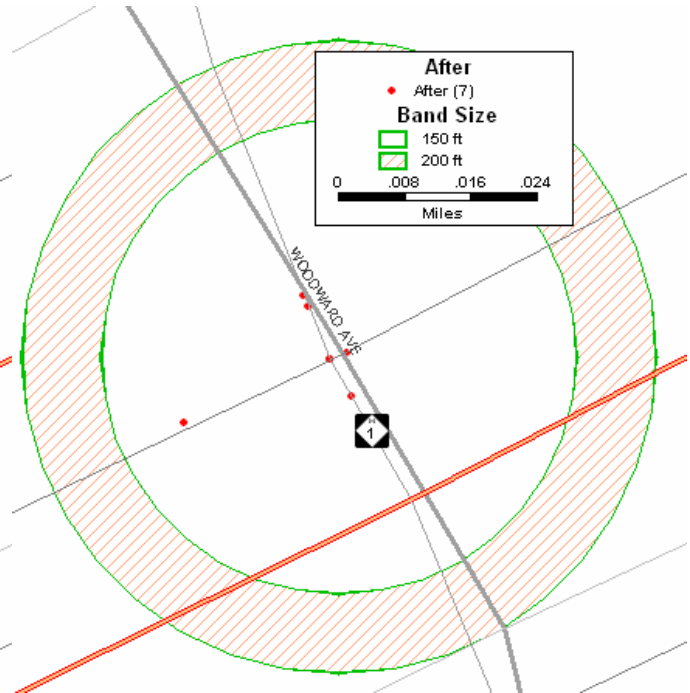
| Crash Type     | Before | %     | After | %     |
|----------------|--------|-------|-------|-------|
| Single vehicle | 1      | 6.7   | 0     | 0.0   |
| Head-on        | 3      | 20.0  | 0     | 0.0   |
| Angle          | 2      | 13.3  | 1     | 25.0  |
| Rear-end       | 5      | 33.3  | 2     | 50.0  |
| Sideswipe      | 3      | 20.0  | 1     | 25.0  |
| Other/unknown  | 1      | 6.7   | 0     | 0.0   |
| Total          | 15     | 100.0 | 4     | 100.0 |

**M1 (Woodward Avenue) and WB Davison (M8)**

Date of Signal Optimization: September 17, 2004



1,356 days before



470 days after

| Injury Severity | Before | %     | After | %     |
|-----------------|--------|-------|-------|-------|
| Fatal           | 0      | 0.0   | 0     | 0.0   |
| A-Injury        | 2      | 10.0  | 1     | 14.3  |
| B-Injury        | 0      | 0.0   | 0     | 0.0   |
| C-Injury        | 3      | 15.0  | 1     | 14.3  |
| O-Injury        | 15     | 75.0  | 5     | 71.4  |
| Total           | 20     | 100.0 | 7     | 100.0 |

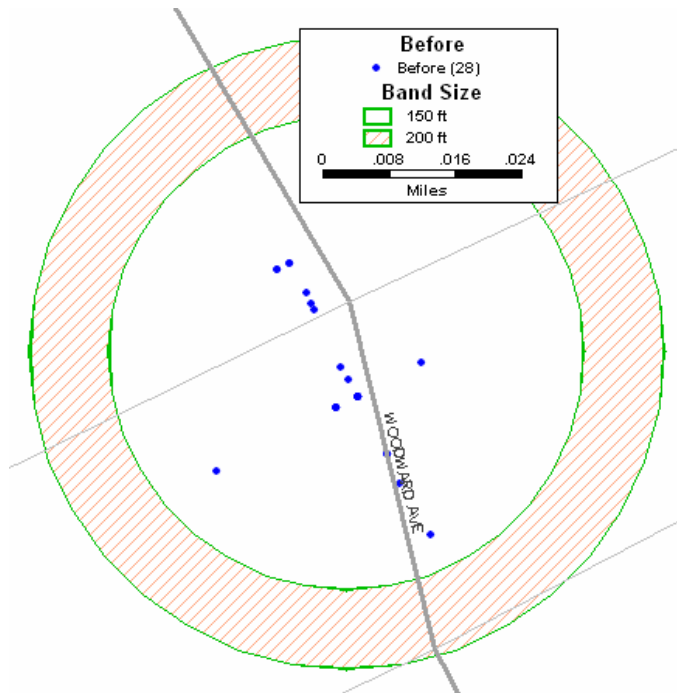
| Time of Day   | Before | %     | After | %     |
|---------------|--------|-------|-------|-------|
| 6am - 9:59am  | 2      | 10.0  | 2     | 28.6  |
| 10am - 3:59pm | 7      | 35.0  | 2     | 28.6  |
| 4pm - 7:59pm  | 4      | 20.0  | 1     | 14.3  |
| 8pm - 5:59am  | 6      | 30.0  | 2     | 28.6  |
| Unknown       | 1      | 5.0   | 0     | 0.0   |
| Total         | 20     | 100.0 | 7     | 100.0 |

| Day of Week | Before | %     | After | %     |
|-------------|--------|-------|-------|-------|
| Sunday      | 2      | 10.0  | 0     | 0.0   |
| Monday      | 5      | 25.0  | 0     | 0.0   |
| Tuesday     | 1      | 5.0   | 3     | 42.9  |
| Wednesday   | 5      | 25.0  | 1     | 14.3  |
| Thursday    | 2      | 10.0  | 2     | 28.6  |
| Friday      | 2      | 10.0  | 0     | 0.0   |
| Saturday    | 3      | 15.0  | 1     | 14.3  |
| Total       | 20     | 100.0 | 7     | 100.0 |

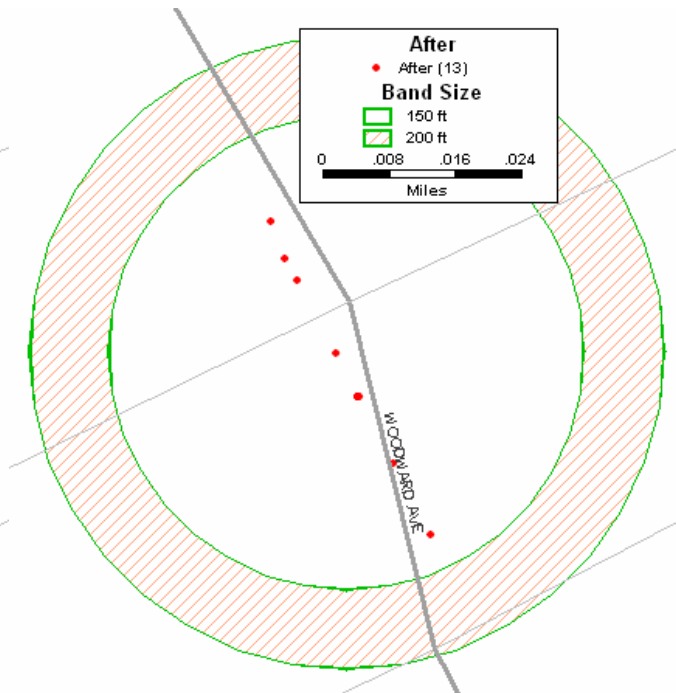
| Crash Type     | Before | %     | After | %     |
|----------------|--------|-------|-------|-------|
| Single vehicle | 3      | 15.0  | 1     | 14.3  |
| Head-on        | 0      | 0.0   | 0     | 0.0   |
| Angle          | 3      | 15.0  | 3     | 42.9  |
| Rear-end       | 7      | 35.0  | 1     | 14.3  |
| Sideswipe      | 6      | 30.0  | 2     | 28.6  |
| Other/unknown  | 1      | 5.0   | 0     | 0.0   |
| Total          | 20     | 100.0 | 7     | 100.0 |

**M1 (Woodward Avenue) and EB Davison (M8)**

Date of Signal Optimization: September 17, 2004



1,356 days before



470 days after

| Injury Severity | Before | %     | After | %     |
|-----------------|--------|-------|-------|-------|
| Fatal           | 0      | 0.0   | 0     | 0.0   |
| A-Injury        | 3      | 10.7  | 1     | 7.7   |
| B-Injury        | 0      | 0.0   | 1     | 7.7   |
| C-Injury        | 1      | 3.6   | 3     | 23.1  |
| O-Injury        | 24     | 85.7  | 8     | 61.5  |
| Total           | 28     | 100.0 | 13    | 100.0 |

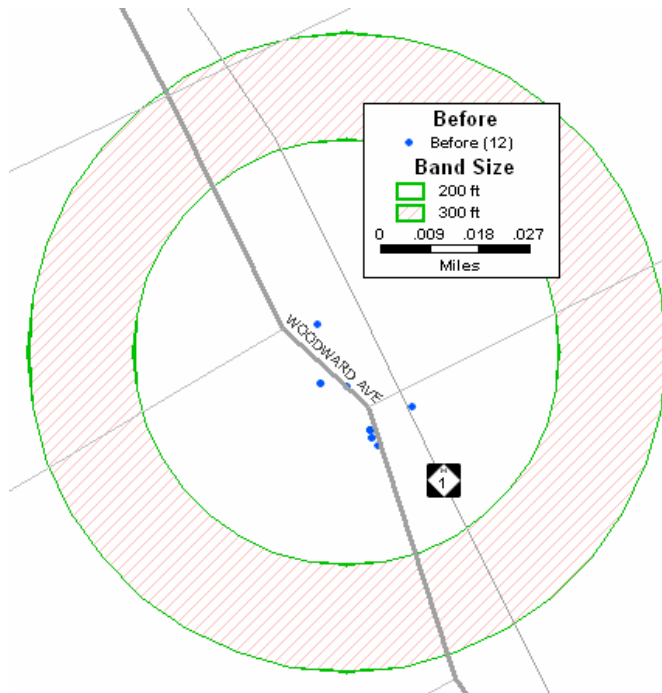
| Time of Day   | Before | %     | After | %     |
|---------------|--------|-------|-------|-------|
| 6am - 9:59am  | 0      | 0.0   | 1     | 7.7   |
| 10am - 3:59pm | 7      | 25.0  | 3     | 23.1  |
| 4pm - 7:59pm  | 9      | 32.1  | 5     | 38.5  |
| 8pm - 5:59am  | 9      | 32.1  | 4     | 30.8  |
| Unknown       | 3      | 10.7  | 0     | 0.0   |
| Total         | 28     | 100.0 | 13    | 100.0 |

| Day of Week | Before | %     | After | %     |
|-------------|--------|-------|-------|-------|
| Sunday      | 2      | 7.1   | 3     | 23.1  |
| Monday      | 3      | 10.7  | 2     | 15.4  |
| Tuesday     | 1      | 3.6   | 2     | 15.4  |
| Wednesday   | 6      | 21.4  | 1     | 7.7   |
| Thursday    | 4      | 14.3  | 1     | 7.7   |
| Friday      | 5      | 17.9  | 0     | 0.0   |
| Saturday    | 7      | 25.0  | 4     | 30.8  |
| Total       | 28     | 100.0 | 13    | 100.0 |

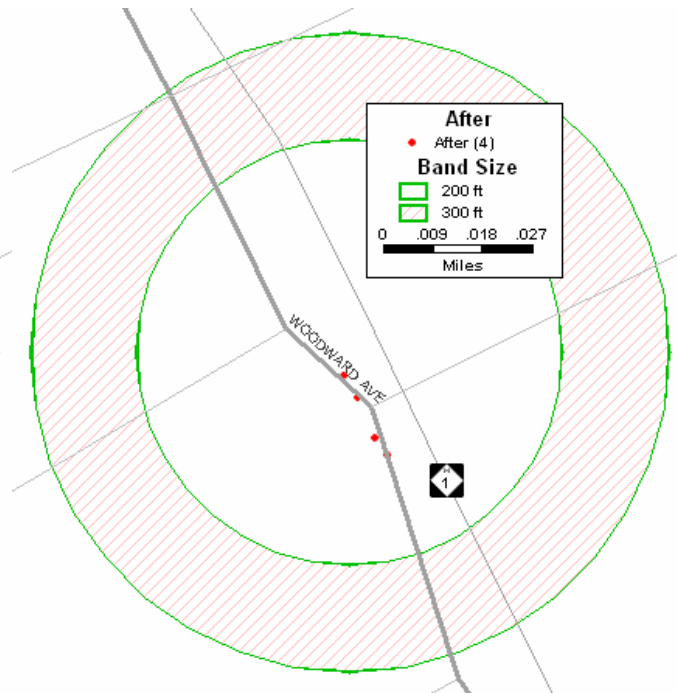
| Crash Type     | Before | %     | After | %     |
|----------------|--------|-------|-------|-------|
| Single vehicle | 3      | 10.7  | 1     | 7.7   |
| Head-on        | 3      | 10.7  | 0     | 0.0   |
| Angle          | 3      | 10.7  | 6     | 46.2  |
| Rear-end       | 12     | 42.9  | 3     | 23.1  |
| Sideswipe      | 3      | 10.7  | 3     | 23.1  |
| Other/unknown  | 4      | 14.3  | 0     | 0.0   |
| Total          | 28     | 100.0 | 13    | 100.0 |

### M1 (Woodward Avenue) and Buena Vista

Date of Signal Optimization: September 17, 2004



1,356 days before



470 days after

| Injury Severity | Before | %     | After | %     |
|-----------------|--------|-------|-------|-------|
| Fatal           | 0      | 0.0   | 0     | 0.0   |
| A-Injury        | 0      | 0.0   | 0     | 0.0   |
| B-Injury        | 0      | 0.0   | 0     | 0.0   |
| C-Injury        | 1      | 8.3   | 1     | 25.0  |
| O-Injury        | 11     | 91.7  | 3     | 75.0  |
| Total           | 12     | 100.0 | 4     | 100.0 |

| Time of Day   | Before | %     | After | %     |
|---------------|--------|-------|-------|-------|
| 6am - 9:59am  | 1      | 8.3   | 2     | 50.0  |
| 10am - 3:59pm | 6      | 50.0  | 1     | 25.0  |
| 4pm - 7:59pm  | 3      | 25.0  | 1     | 25.0  |
| 8pm - 5:59am  | 2      | 16.7  | 0     | 0.0   |
| Unknown       | 0      | 0.0   | 0     | 0.0   |
| Total         | 12     | 100.0 | 4     | 100.0 |

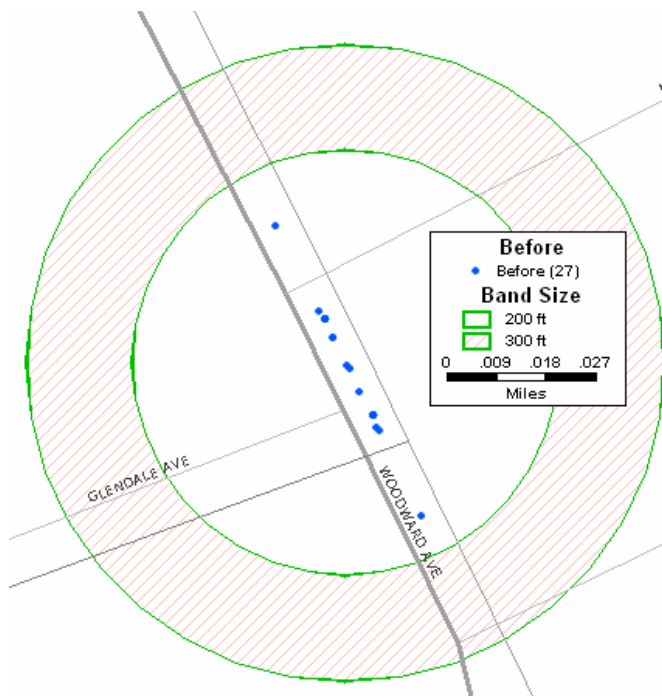
| Day of Week | Before | %     | After | %     |
|-------------|--------|-------|-------|-------|
| Sunday      | 0      | 0.0   | 0     | 0.0   |
| Monday      | 3      | 25.0  | 1     | 25.0  |
| Tuesday     | 4      | 33.3  | 1     | 25.0  |
| Wednesday   | 2      | 16.7  | 1     | 25.0  |
| Thursday    | 1      | 8.3   | 0     | 0.0   |
| Friday      | 1      | 8.3   | 0     | 0.0   |
| Saturday    | 1      | 8.3   | 1     | 25.0  |
| Total       | 12     | 100.0 | 4     | 100.0 |

| Crash Type     | Before | %     | After | %     |
|----------------|--------|-------|-------|-------|
| Single vehicle | 0      | 0.0   | 0     | 0.0   |
| Head-on        | 0      | 0.0   | 0     | 0.0   |
| Angle          | 3      | 25.0  | 1     | 25.0  |
| Rear-end       | 5      | 41.7  | 3     | 75.0  |
| Sideswipe      | 2      | 16.7  | 0     | 0.0   |
| Other/unknown  | 2      | 16.7  | 0     | 0.0   |
| Total          | 12     | 100.0 | 4     | 100.0 |

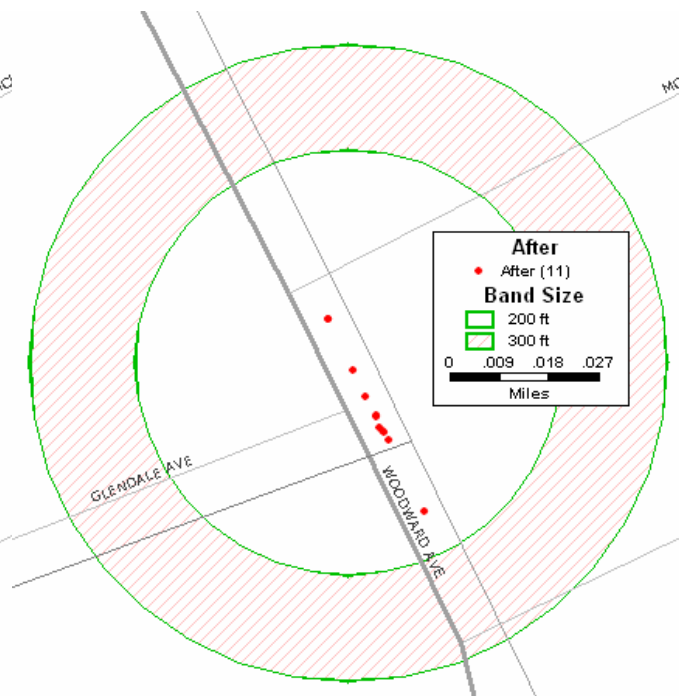


### M1 (Woodward Avenue) and Glendale and Mclean Street

Date of Signal Optimization: September 17, 2004



1,356 days before



470 days after

| Injury Severity | Before | %     | After | %     |
|-----------------|--------|-------|-------|-------|
| Fatal           | 0      | 0.0   | 0     | 0.0   |
| A-Injury        | 0      | 0.0   | 1     | 9.1   |
| B-Injury        | 4      | 14.8  | 1     | 9.1   |
| C-Injury        | 2      | 7.4   | 3     | 27.3  |
| O-Injury        | 21     | 77.8  | 6     | 54.5  |
| Total           | 27     | 100.0 | 11    | 100.0 |

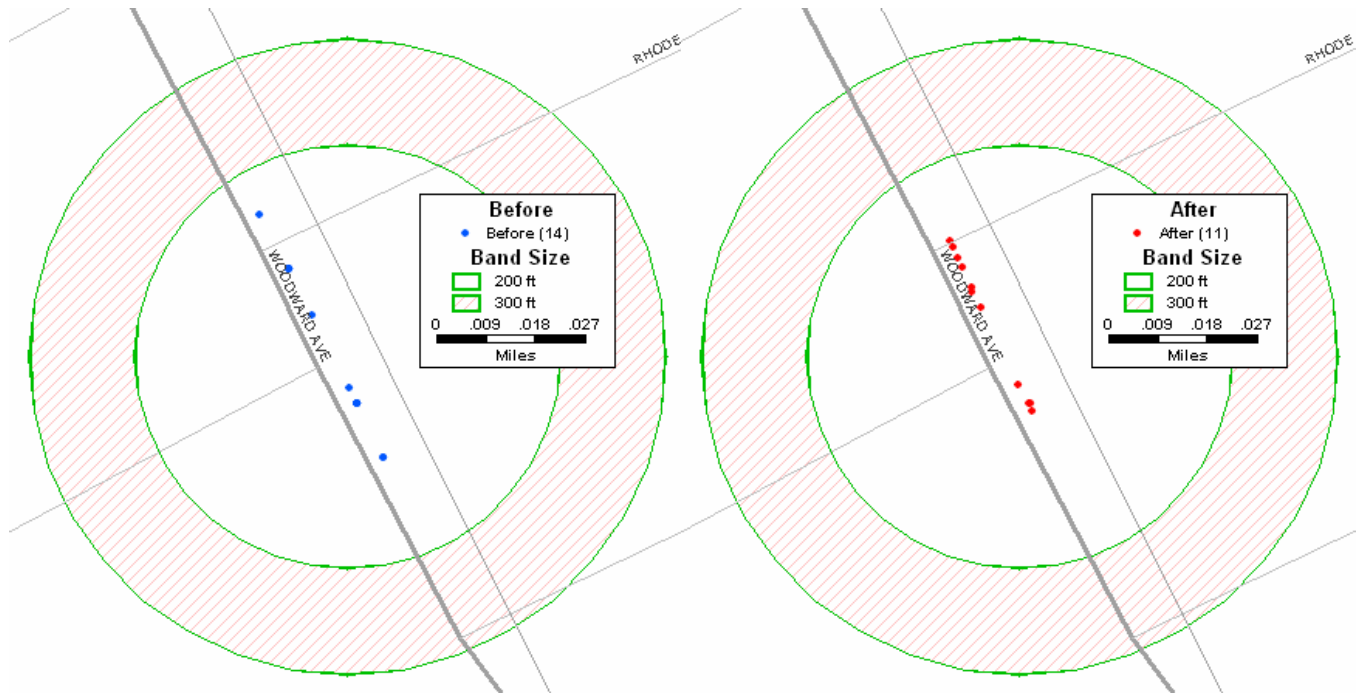
| Time of Day   | Before | %     | After | %     |
|---------------|--------|-------|-------|-------|
| 6am - 9:59am  | 3      | 11.1  | 1     | 9.1   |
| 10am - 3:59pm | 5      | 18.5  | 3     | 27.3  |
| 4pm - 7:59pm  | 12     | 44.4  | 2     | 18.2  |
| 8pm - 5:59am  | 7      | 25.9  | 4     | 36.4  |
| Unknown       | 0      | 0.0   | 1     | 9.1   |
| Total         | 27     | 100.0 | 11    | 100.0 |

| Day of Week | Before | %     | After | %     |
|-------------|--------|-------|-------|-------|
| Sunday      | 3      | 11.1  | 1     | 9.1   |
| Monday      | 3      | 11.1  | 0     | 0.0   |
| Tuesday     | 6      | 22.2  | 1     | 9.1   |
| Wednesday   | 5      | 18.5  | 1     | 9.1   |
| Thursday    | 0      | 0.0   | 2     | 18.2  |
| Friday      | 7      | 25.9  | 5     | 45.5  |
| Saturday    | 3      | 11.1  | 1     | 9.1   |
| Total       | 27     | 100.0 | 11    | 100.0 |

| Crash Type     | Before | %     | After | %     |
|----------------|--------|-------|-------|-------|
| Single vehicle | 1      | 3.7   | 1     | 9.1   |
| Head-on        | 6      | 22.2  | 4     | 36.4  |
| Angle          | 8      | 29.6  | 3     | 27.3  |
| Rear-end       | 10     | 37.0  | 2     | 18.2  |
| Sideswipe      | 2      | 7.4   | 1     | 9.1   |
| Other/unknown  | 0      | 0.0   | 0     | 0.0   |
| Total          | 27     | 100.0 | 11    | 100.0 |

### M1 (Woodward Avenue) and Cortland Street

Date of Signal Optimization: September 17, 2004



1,356 days before

470 days after

| Injury Severity | Before | %     | After | %     |
|-----------------|--------|-------|-------|-------|
| Fatal           | 0      | 0.0   | 0     | 0.0   |
| A-Injury        | 0      | 0.0   | 2     | 18.2  |
| B-Injury        | 0      | 0.0   | 0     | 0.0   |
| C-Injury        | 1      | 7.1   | 0     | 0.0   |
| O-Injury        | 13     | 92.9  | 9     | 81.8  |
| Total           | 14     | 100.0 | 11    | 100.0 |

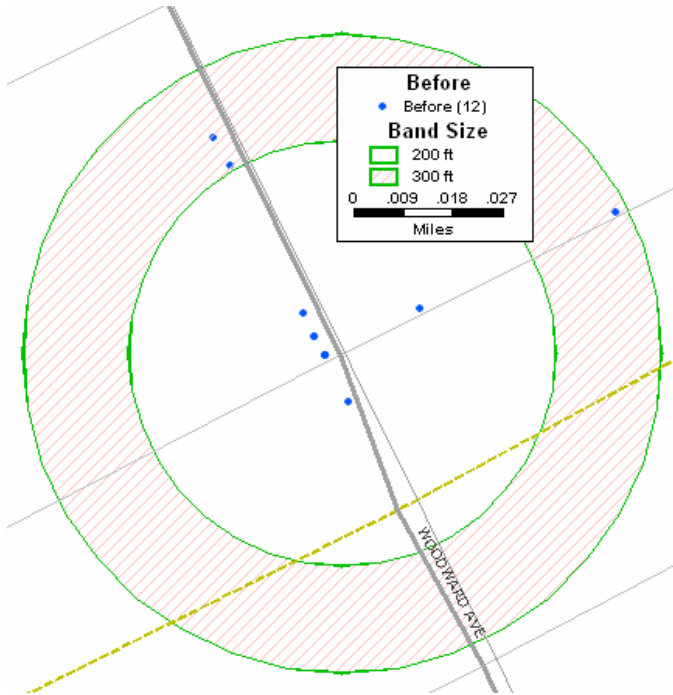
| Time of Day   | Before | %     | After | %     |
|---------------|--------|-------|-------|-------|
| 6am - 9:59am  | 1      | 7.1   | 1     | 9.1   |
| 10am - 3:59pm | 5      | 35.7  | 5     | 45.5  |
| 4pm - 7:59pm  | 6      | 42.9  | 5     | 45.5  |
| 8pm - 5:59am  | 1      | 7.1   | 0     | 0.0   |
| Unknown       | 1      | 7.1   | 0     | 0.0   |
| Total         | 14     | 100.0 | 11    | 100.0 |

| Day of Week | Before | %     | After | %     |
|-------------|--------|-------|-------|-------|
| Sunday      | 2      | 14.3  | 0     | 0.0   |
| Monday      | 1      | 7.1   | 2     | 18.2  |
| Tuesday     | 3      | 21.4  | 2     | 18.2  |
| Wednesday   | 2      | 14.3  | 3     | 27.3  |
| Thursday    | 3      | 21.4  | 2     | 18.2  |
| Friday      | 2      | 14.3  | 1     | 9.1   |
| Saturday    | 1      | 7.1   | 1     | 9.1   |
| Total       | 14     | 100.0 | 11    | 100.0 |

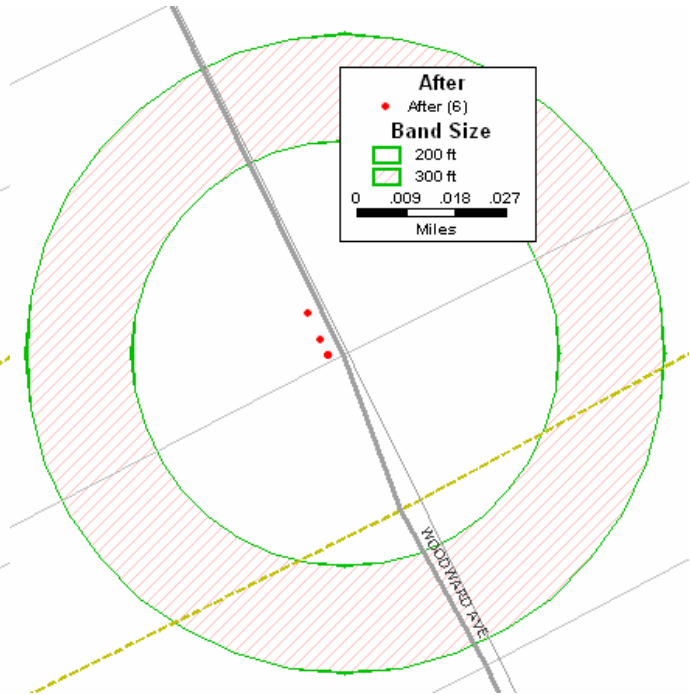
| Crash Type     | Before | %     | After | %     |
|----------------|--------|-------|-------|-------|
| Single vehicle | 0      | 0.0   | 2     | 18.2  |
| Head-on        | 2      | 14.3  | 3     | 27.3  |
| Angle          | 3      | 21.4  | 0     | 0.0   |
| Rear-end       | 5      | 35.7  | 3     | 27.3  |
| Sideswipe      | 1      | 7.1   | 3     | 27.3  |
| Other/unknown  | 3      | 21.4  | 0     | 0.0   |
| Total          | 14     | 100.0 | 11    | 100.0 |

### M1 (Woodward Avenue) and Tuxedo and Tennyson Street

Date of Signal Optimization: September 17, 2004



1,356 days before



470 days after

| Injury Severity | Before | %     | After | %     |
|-----------------|--------|-------|-------|-------|
| Fatal           | 0      | 0.0   | 0     | 0.0   |
| A-Injury        | 2      | 16.7  | 1     | 16.7  |
| B-Injury        | 1      | 8.3   | 1     | 16.7  |
| C-Injury        | 2      | 16.7  | 1     | 16.7  |
| O-Injury        | 7      | 58.3  | 3     | 50.0  |
| Total           | 12     | 100.0 | 6     | 100.0 |

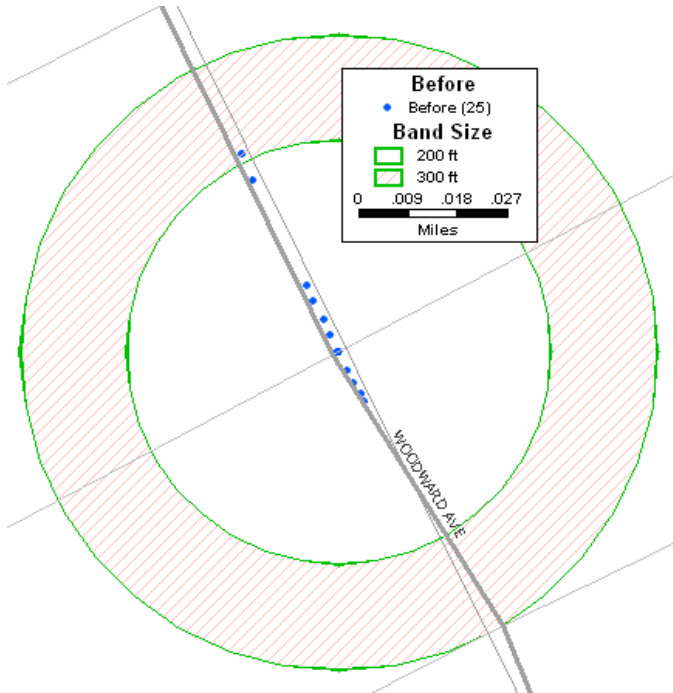
| Time of Day   | Before | %     | After | %     |
|---------------|--------|-------|-------|-------|
| 6am - 9:59am  | 0      | 0.0   | 3     | 50.0  |
| 10am - 3:59pm | 4      | 33.3  | 1     | 16.7  |
| 4pm - 7:59pm  | 5      | 41.7  | 1     | 16.7  |
| 8pm - 5:59am  | 3      | 25.0  | 1     | 16.7  |
| Unknown       | 0      | 0.0   | 0     | 0.0   |
| Total         | 12     | 100.0 | 6     | 100.0 |

| Day of Week | Before | %     | After | %     |
|-------------|--------|-------|-------|-------|
| Sunday      | 2      | 16.7  | 1     | 16.7  |
| Monday      | 0      | 0.0   | 1     | 16.7  |
| Tuesday     | 5      | 41.7  | 1     | 16.7  |
| Wednesday   | 3      | 25.0  | 1     | 16.7  |
| Thursday    | 0      | 0.0   | 0     | 0.0   |
| Friday      | 1      | 8.3   | 1     | 16.7  |
| Saturday    | 1      | 8.3   | 1     | 16.7  |
| Total       | 12     | 100.0 | 6     | 100.0 |

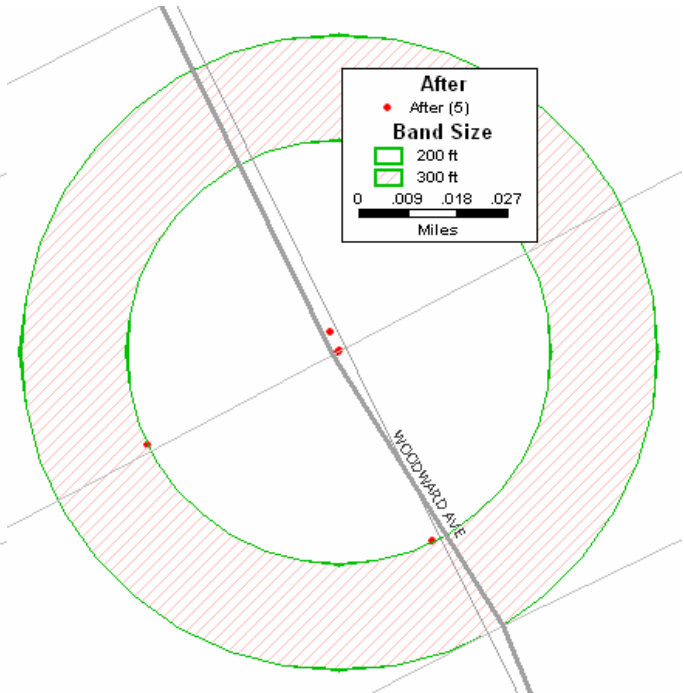
| Crash Type     | Before | %     | After | %     |
|----------------|--------|-------|-------|-------|
| Single vehicle | 0      | 0.0   | 0     | 0.0   |
| Head-on        | 1      | 8.3   | 0     | 0.0   |
| Angle          | 3      | 25.0  | 1     | 16.7  |
| Rear-end       | 4      | 33.3  | 3     | 50.0  |
| Sideswipe      | 4      | 33.3  | 1     | 16.7  |
| Other/unknown  | 0      | 0.0   | 1     | 16.7  |
| Total          | 12     | 100.0 | 6     | 100.0 |

**M1 (Woodward Avenue) and Calvert and Trowbridge Street**

Date of Signal Optimization: September 17, 2004



1,356 days before



470 days after

| Injury Severity | Before | %     | After | %     |
|-----------------|--------|-------|-------|-------|
| Fatal           | 0      | 0.0   | 0     | 0.0   |
| A-Injury        | 1      | 4.0   | 1     | 20.0  |
| B-Injury        | 0      | 0.0   | 0     | 0.0   |
| C-Injury        | 4      | 16.0  | 0     | 0.0   |
| O-Injury        | 20     | 80.0  | 4     | 80.0  |
| Total           | 25     | 100.0 | 5     | 100.0 |

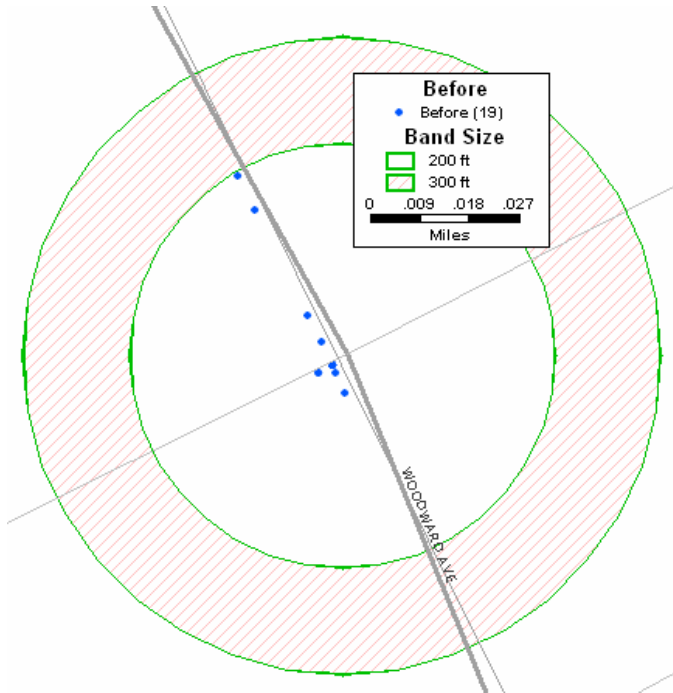
| Time of Day   | Before | %     | After | %     |
|---------------|--------|-------|-------|-------|
| 6am - 9:59am  | 3      | 12.0  | 1     | 20.0  |
| 10am - 3:59pm | 7      | 28.0  | 3     | 60.0  |
| 4pm - 7:59pm  | 6      | 24.0  | 0     | 0.0   |
| 8pm - 5:59am  | 5      | 20.0  | 1     | 20.0  |
| Unknown       | 4      | 16.0  | 0     | 0.0   |
| Total         | 25     | 100.0 | 5     | 100.0 |

| Day of Week | Before | %     | After | %     |
|-------------|--------|-------|-------|-------|
| Sunday      | 3      | 12.0  | 0     | 0.0   |
| Monday      | 4      | 16.0  | 1     | 20.0  |
| Tuesday     | 7      | 28.0  | 1     | 20.0  |
| Wednesday   | 3      | 12.0  | 0     | 0.0   |
| Thursday    | 3      | 12.0  | 1     | 20.0  |
| Friday      | 3      | 12.0  | 2     | 40.0  |
| Saturday    | 2      | 8.0   | 0     | 0.0   |
| Total       | 25     | 100.0 | 5     | 100.0 |

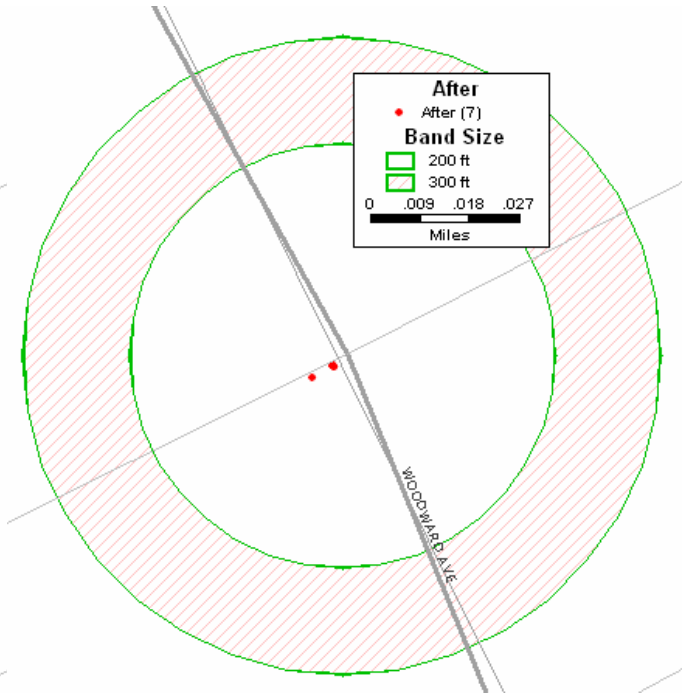
| Crash Type     | Before | %     | After | %     |
|----------------|--------|-------|-------|-------|
| Single vehicle | 1      | 4.0   | 1     | 20.0  |
| Head-on        | 1      | 4.0   | 0     | 0.0   |
| Angle          | 3      | 12.0  | 1     | 20.0  |
| Rear-end       | 11     | 44.0  | 1     | 20.0  |
| Sideswipe      | 6      | 24.0  | 1     | 20.0  |
| Other/unknown  | 3      | 12.0  | 1     | 20.0  |
| Total          | 25     | 100.0 | 5     | 100.0 |

**M1 (Woodward Avenue) and Chicago Blvd and Arden Park Blvd**

Date of Signal Optimization: September 17, 2004



1,356 days before



470 days after

| Injury Severity | Before | %     | After | %     |
|-----------------|--------|-------|-------|-------|
| Fatal           | 0      | 0.0   | 1     | 14.3  |
| A-Injury        | 0      | 0.0   | 0     | 0.0   |
| B-Injury        | 0      | 0.0   | 1     | 14.3  |
| C-Injury        | 3      | 15.8  | 2     | 28.6  |
| O-Injury        | 16     | 84.2  | 3     | 42.9  |
| Total           | 19     | 100.0 | 7     | 100.0 |

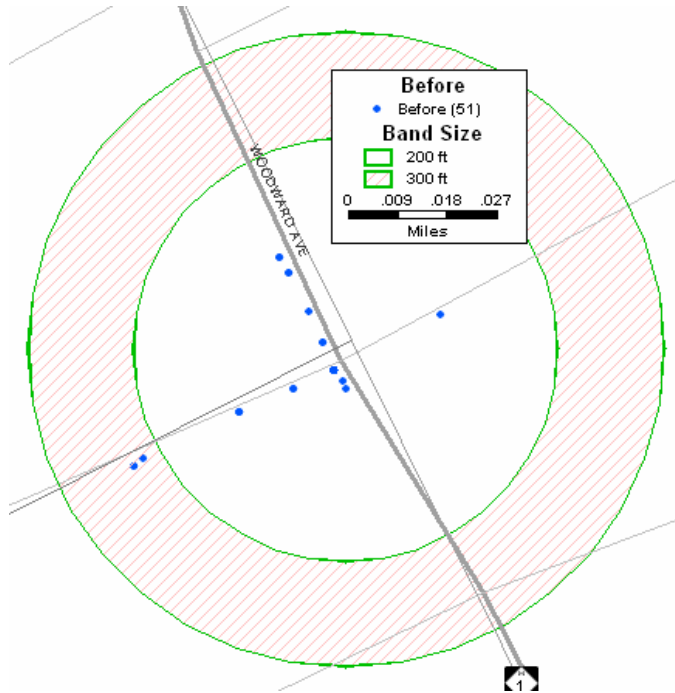
| Time of Day   | Before | %     | After | %     |
|---------------|--------|-------|-------|-------|
| 6am - 9:59am  | 4      | 21.1  | 1     | 14.3  |
| 10am - 3:59pm | 8      | 42.1  | 4     | 57.1  |
| 4pm - 7:59pm  | 2      | 10.5  | 0     | 0.0   |
| 8pm - 5:59am  | 4      | 21.1  | 2     | 28.6  |
| Unknown       | 1      | 5.3   | 0     | 0.0   |
| Total         | 19     | 100.0 | 7     | 100.0 |

| Day of Week | Before | %     | After | %     |
|-------------|--------|-------|-------|-------|
| Sunday      | 1      | 5.3   | 0     | 0.0   |
| Monday      | 4      | 21.1  | 0     | 0.0   |
| Tuesday     | 2      | 10.5  | 1     | 14.3  |
| Wednesday   | 3      | 15.8  | 0     | 0.0   |
| Thursday    | 3      | 15.8  | 0     | 0.0   |
| Friday      | 3      | 15.8  | 5     | 71.4  |
| Saturday    | 3      | 15.8  | 1     | 14.3  |
| Total       | 19     | 100.0 | 7     | 100.0 |

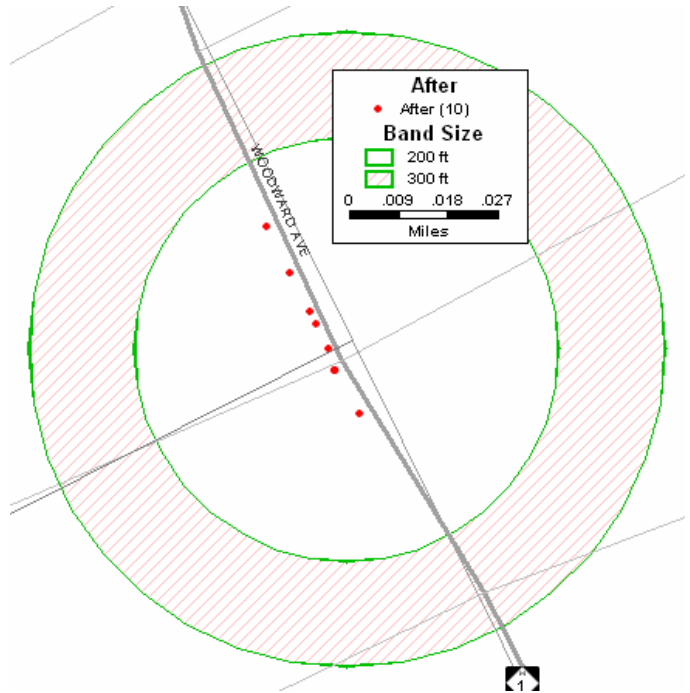
| Crash Type     | Before | %     | After | %     |
|----------------|--------|-------|-------|-------|
| Single vehicle | 1      | 5.3   | 1     | 14.3  |
| Head-on        | 1      | 5.3   | 1     | 14.3  |
| Angle          | 3      | 15.8  | 2     | 28.6  |
| Rear-end       | 11     | 57.9  | 1     | 14.3  |
| Sideswipe      | 1      | 5.3   | 2     | 28.6  |
| Other/unknown  | 2      | 10.5  | 0     | 0.0   |
| Total          | 19     | 100.0 | 7     | 100.0 |

**M1 (Woodward Avenue) and Clairmount and Owen Street**

Date of Signal Optimization: September 17, 2004



1,356 days before



470 days after

| Injury Severity | Before | %     | After | %     |
|-----------------|--------|-------|-------|-------|
| Fatal           | 0      | 0.0   | 0     | 0.0   |
| A-Injury        | 3      | 5.9   | 0     | 0.0   |
| B-Injury        | 2      | 3.9   | 1     | 10.0  |
| C-Injury        | 7      | 13.7  | 3     | 30.0  |
| O-Injury        | 39     | 76.5  | 6     | 60.0  |
| Total           | 51     | 100.0 | 10    | 100.0 |

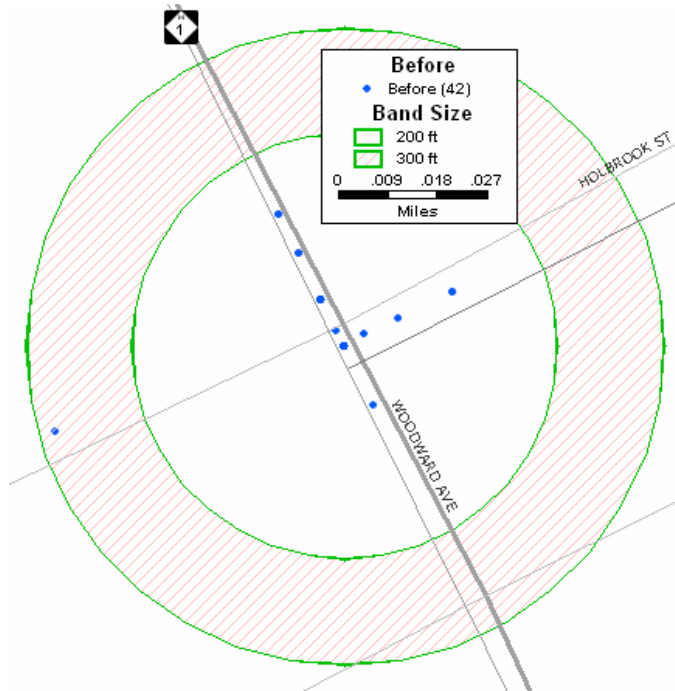
| Time of Day   | Before | %     | After | %     |
|---------------|--------|-------|-------|-------|
| 6am - 9:59am  | 4      | 7.8   | 1     | 10.0  |
| 10am - 3:59pm | 16     | 31.4  | 4     | 40.0  |
| 4pm - 7:59pm  | 15     | 29.4  | 3     | 30.0  |
| 8pm - 5:59am  | 13     | 25.5  | 2     | 20.0  |
| Unknown       | 3      | 5.9   | 0     | 0.0   |
| Total         | 51     | 100.0 | 10    | 100.0 |

| Day of Week | Before | %     | After | %     |
|-------------|--------|-------|-------|-------|
| Sunday      | 5      | 9.8   | 1     | 10.0  |
| Monday      | 8      | 15.7  | 2     | 20.0  |
| Tuesday     | 4      | 7.8   | 3     | 30.0  |
| Wednesday   | 8      | 15.7  | 1     | 10.0  |
| Thursday    | 8      | 15.7  | 1     | 10.0  |
| Friday      | 9      | 17.6  | 0     | 0.0   |
| Saturday    | 9      | 17.6  | 2     | 20.0  |
| Total       | 51     | 100.0 | 10    | 100.0 |

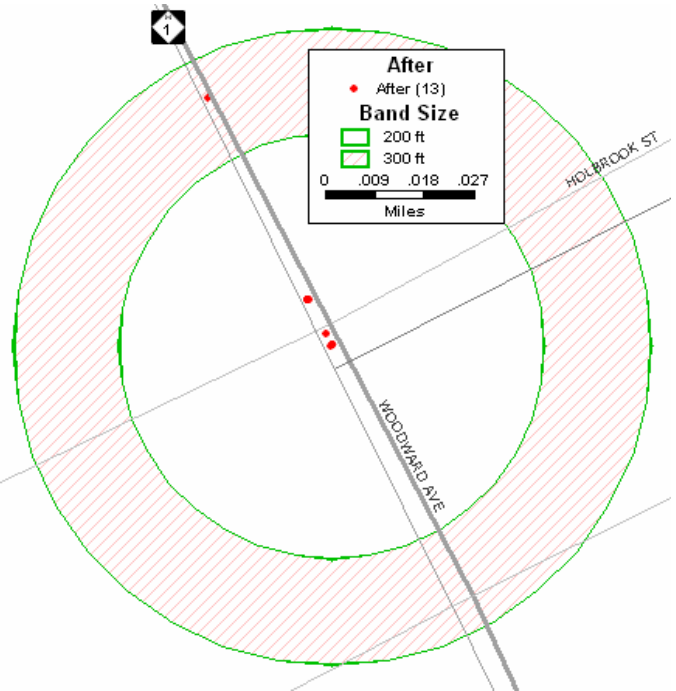
| Crash Type     | Before | %     | After | %     |
|----------------|--------|-------|-------|-------|
| Single vehicle | 3      | 5.9   | 1     | 10.0  |
| Head-on        | 4      | 7.8   | 0     | 0.0   |
| Angle          | 18     | 35.3  | 4     | 40.0  |
| Rear-end       | 8      | 15.7  | 2     | 20.0  |
| Sideswipe      | 15     | 29.4  | 3     | 30.0  |
| Other/unknown  | 3      | 5.9   | 0     | 0.0   |
| Total          | 51     | 100.0 | 10    | 100.0 |

### M1 (Woodward Avenue) and Hazelwood and Holbrook Street

Date of Signal Optimization: September 17, 2004



1,356 days before



470 days after

| Injury Severity | Before | %     | After | %     |
|-----------------|--------|-------|-------|-------|
| Fatal           | 0      | 0.0   | 0     | 0.0   |
| A-Injury        | 1      | 2.4   | 1     | 7.7   |
| B-Injury        | 3      | 7.1   | 1     | 7.7   |
| C-Injury        | 10     | 23.8  | 1     | 7.7   |
| O-Injury        | 28     | 66.7  | 10    | 76.9  |
| Total           | 42     | 100.0 | 13    | 100.0 |

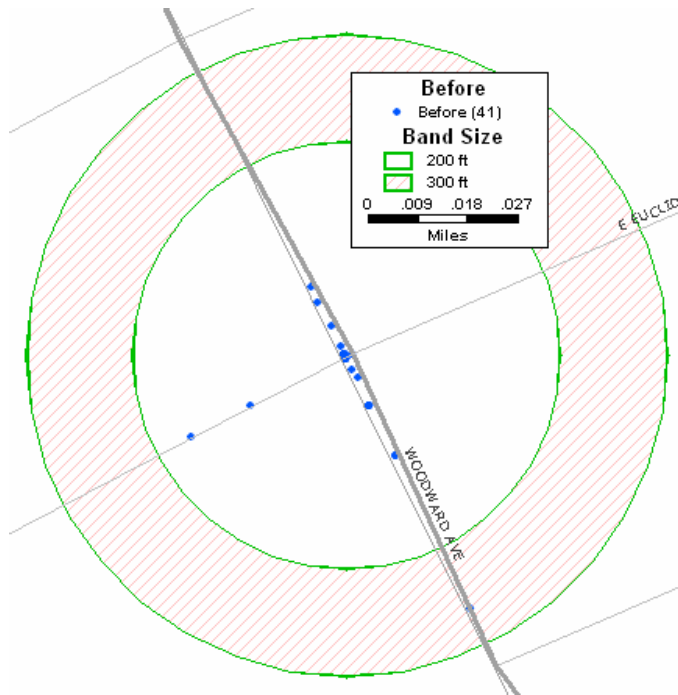
| Time of Day   | Before | %     | After | %     |
|---------------|--------|-------|-------|-------|
| 6am - 9:59am  | 4      | 9.5   | 4     | 30.8  |
| 10am - 3:59pm | 14     | 33.3  | 4     | 30.8  |
| 4pm - 7:59pm  | 13     | 31.0  | 2     | 15.4  |
| 8pm - 5:59am  | 10     | 23.8  | 2     | 15.4  |
| Unknown       | 1      | 2.4   | 1     | 7.7   |
| Total         | 42     | 100.0 | 13    | 100.0 |

| Day of Week | Before | %     | After | %     |
|-------------|--------|-------|-------|-------|
| Sunday      | 6      | 14.3  | 0     | 0.0   |
| Monday      | 3      | 7.1   | 2     | 15.4  |
| Tuesday     | 11     | 26.2  | 2     | 15.4  |
| Wednesday   | 3      | 7.1   | 3     | 23.1  |
| Thursday    | 4      | 9.5   | 1     | 7.7   |
| Friday      | 8      | 19.0  | 3     | 23.1  |
| Saturday    | 7      | 16.7  | 2     | 15.4  |
| Total       | 42     | 100.0 | 13    | 100.0 |

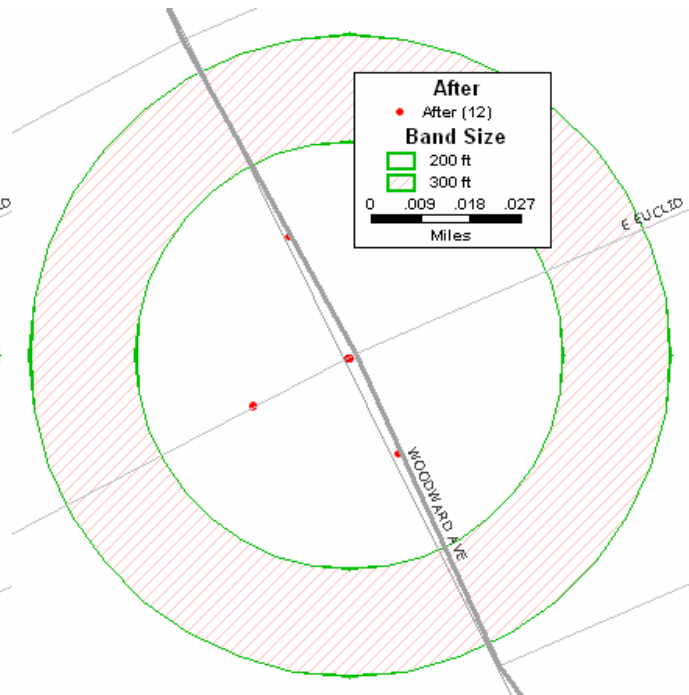
| Crash Type     | Before | %     | After | %     |
|----------------|--------|-------|-------|-------|
| Single vehicle | 3      | 7.1   | 0     | 0.0   |
| Head-on        | 3      | 7.1   | 3     | 23.1  |
| Angle          | 8      | 19.0  | 3     | 23.1  |
| Rear-end       | 19     | 45.2  | 3     | 23.1  |
| Sideswipe      | 5      | 11.9  | 3     | 23.1  |
| Other/unknown  | 4      | 9.5   | 1     | 7.7   |
| Total          | 42     | 100.0 | 13    | 100.0 |

### M1 (Woodward Avenue) and Euclid Street

Date of Signal Optimization: September 17, 2004



1,356 days before



470 days after

| Injury Severity | Before | %     | After | %     |
|-----------------|--------|-------|-------|-------|
| Fatal           | 1      | 2.4   | 0     | 0.0   |
| A-Injury        | 2      | 4.9   | 0     | 0.0   |
| B-Injury        | 2      | 4.9   | 1     | 8.3   |
| C-Injury        | 3      | 7.3   | 2     | 16.7  |
| O-Injury        | 33     | 80.5  | 9     | 75.0  |
| Total           | 41     | 100.0 | 12    | 100.0 |

| Time of Day   | Before | %     | After | %     |
|---------------|--------|-------|-------|-------|
| 6am - 9:59am  | 8      | 19.5  | 1     | 8.3   |
| 10am - 3:59pm | 11     | 26.8  | 4     | 33.3  |
| 4pm - 7:59pm  | 8      | 19.5  | 4     | 33.3  |
| 8pm - 5:59am  | 11     | 26.8  | 2     | 16.7  |
| Unknown       | 3      | 7.3   | 1     | 8.3   |
| Total         | 41     | 100.0 | 12    | 100.0 |

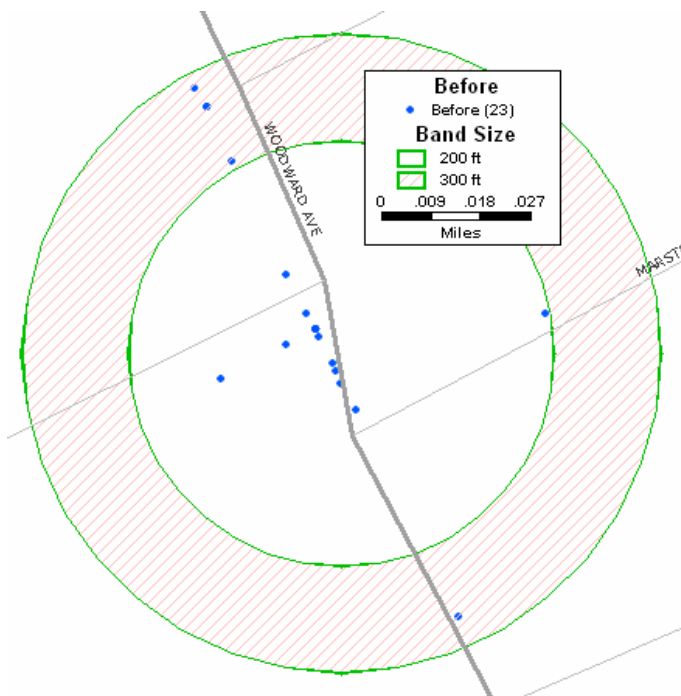
| Day of Week | Before | %     | After | %     |
|-------------|--------|-------|-------|-------|
| Sunday      | 4      | 9.8   | 0     | 0.0   |
| Monday      | 5      | 12.2  | 1     | 8.3   |
| Tuesday     | 4      | 9.8   | 2     | 16.7  |
| Wednesday   | 7      | 17.1  | 2     | 16.7  |
| Thursday    | 5      | 12.2  | 2     | 16.7  |
| Friday      | 8      | 19.5  | 5     | 41.7  |
| Saturday    | 8      | 19.5  | 0     | 0.0   |
| Total       | 41     | 100.0 | 12    | 100.0 |

| Crash Type     | Before | %     | After | %     |
|----------------|--------|-------|-------|-------|
| Single vehicle | 2      | 4.9   | 1     | 8.3   |
| Head-on        | 2      | 4.9   | 0     | 0.0   |
| Angle          | 12     | 29.3  | 2     | 16.7  |
| Rear-end       | 14     | 34.1  | 5     | 41.7  |
| Sideswipe      | 8      | 19.5  | 3     | 25.0  |
| Other/unknown  | 3      | 7.3   | 1     | 8.3   |
| Total          | 41     | 100.0 | 12    | 100.0 |

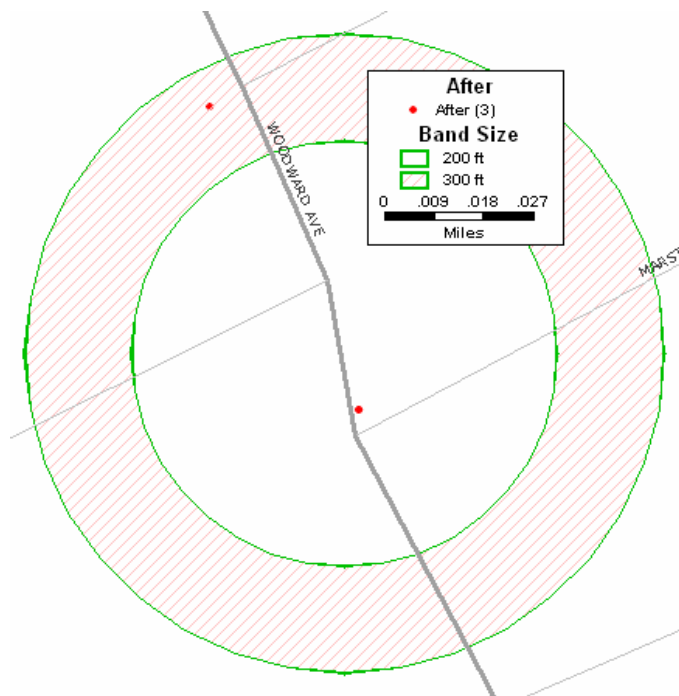


### M1 (Woodward Avenue) and Seward and Marston Street

Date of Signal Optimization: September 17, 2004



1,356 days before



470 days after

| Injury Severity | Before | %     | After | %     |
|-----------------|--------|-------|-------|-------|
| Fatal           | 0      | 0.0   | 0     | 0.0   |
| A-Injury        | 2      | 8.7   | 0     | 0.0   |
| B-Injury        | 4      | 17.4  | 0     | 0.0   |
| C-Injury        | 2      | 8.7   | 0     | 0.0   |
| O-Injury        | 15     | 65.2  | 3     | 100.0 |
| Total           | 23     | 100.0 | 3     | 100.0 |

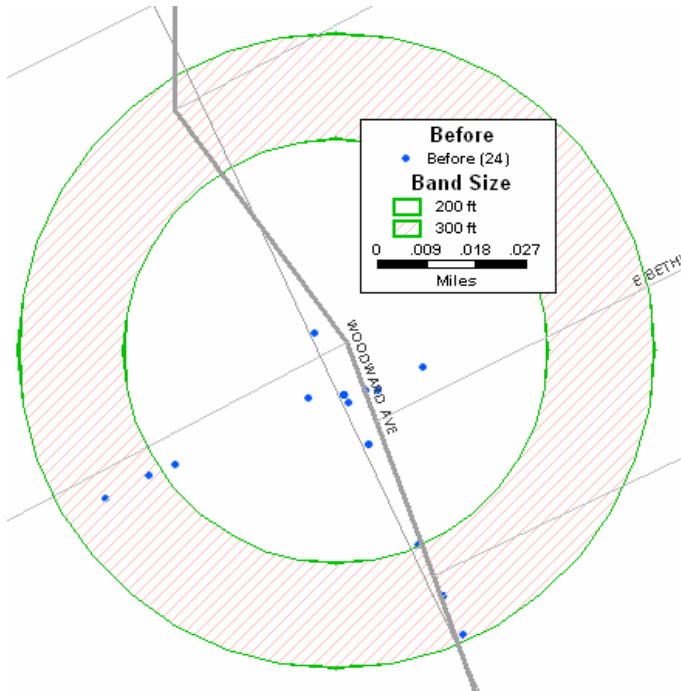
| Time of Day   | Before | %     | After | %     |
|---------------|--------|-------|-------|-------|
| 6am - 9:59am  | 2      | 8.7   | 0     | 0.0   |
| 10am - 3:59pm | 8      | 34.8  | 1     | 33.3  |
| 4pm - 7:59pm  | 5      | 21.7  | 2     | 66.7  |
| 8pm - 5:59am  | 8      | 34.8  | 0     | 0.0   |
| Unknown       | 0      | 0.0   | 0     | 0.0   |
| Total         | 23     | 100.0 | 3     | 100.0 |

| Day of Week | Before | %     | After | %     |
|-------------|--------|-------|-------|-------|
| Sunday      | 5      | 21.7  | 0     | 0.0   |
| Monday      | 3      | 13.0  | 0     | 0.0   |
| Tuesday     | 4      | 17.4  | 1     | 33.3  |
| Wednesday   | 3      | 13.0  | 0     | 0.0   |
| Thursday    | 3      | 13.0  | 0     | 0.0   |
| Friday      | 3      | 13.0  | 2     | 66.7  |
| Saturday    | 2      | 8.7   | 0     | 0.0   |
| Total       | 23     | 100.0 | 3     | 100.0 |

| Crash Type     | Before | %     | After | %     |
|----------------|--------|-------|-------|-------|
| Single vehicle | 1      | 4.3   | 0     | 0.0   |
| Head-on        | 4      | 17.4  | 0     | 0.0   |
| Angle          | 2      | 8.7   | 1     | 33.3  |
| Rear-end       | 7      | 30.4  | 1     | 33.3  |
| Sideswipe      | 7      | 30.4  | 1     | 33.3  |
| Other/unknown  | 2      | 8.7   | 0     | 0.0   |
| Total          | 23     | 100.0 | 3     | 100.0 |

**M1 (Woodward Avenue) and Bethune Street**

Date of Signal Optimization: September 17, 2004



1,356 days before



470 days after

| Injury Severity | Before | %     | After | %     |
|-----------------|--------|-------|-------|-------|
| Fatal           | 0      | 0.0   | 0     | 0.0   |
| A-Injury        | 0      | 0.0   | 0     | 0.0   |
| B-Injury        | 1      | 4.2   | 0     | 0.0   |
| C-Injury        | 6      | 25.0  | 5     | 41.7  |
| O-Injury        | 17     | 70.8  | 7     | 58.3  |
| Total           | 24     | 100.0 | 12    | 100.0 |

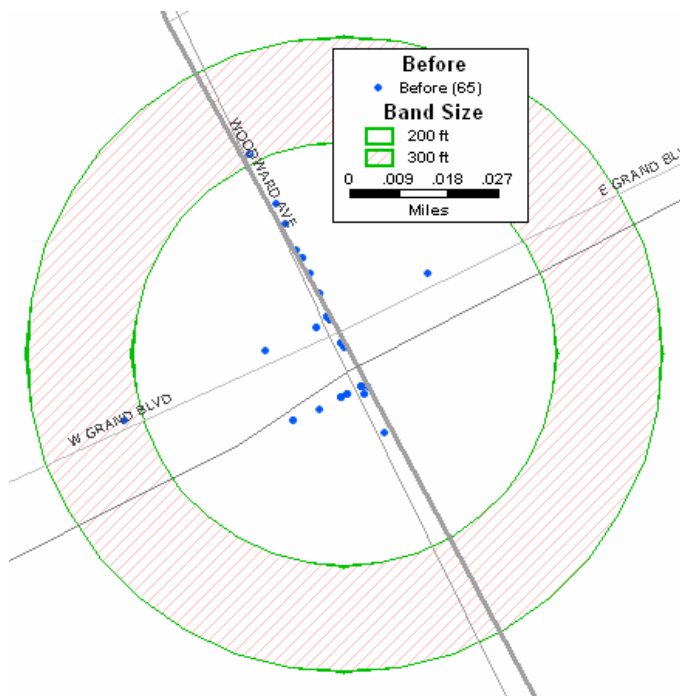
| Time of Day   | Before | %     | After | %     |
|---------------|--------|-------|-------|-------|
| 6am - 9:59am  | 6      | 25.0  | 2     | 16.7  |
| 10am - 3:59pm | 10     | 41.7  | 5     | 41.7  |
| 4pm - 7:59pm  | 3      | 12.5  | 3     | 25.0  |
| 8pm - 5:59am  | 3      | 12.5  | 2     | 16.7  |
| Unknown       | 2      | 8.3   | 0     | 0.0   |
| Total         | 24     | 100.0 | 12    | 100.0 |

| Day of Week | Before | %     | After | %     |
|-------------|--------|-------|-------|-------|
| Sunday      | 1      | 4.2   | 3     | 25.0  |
| Monday      | 6      | 25.0  | 3     | 25.0  |
| Tuesday     | 2      | 8.3   | 0     | 0.0   |
| Wednesday   | 5      | 20.8  | 0     | 0.0   |
| Thursday    | 5      | 20.8  | 3     | 25.0  |
| Friday      | 3      | 12.5  | 1     | 8.3   |
| Saturday    | 2      | 8.3   | 2     | 16.7  |
| Total       | 24     | 100.0 | 12    | 100.0 |

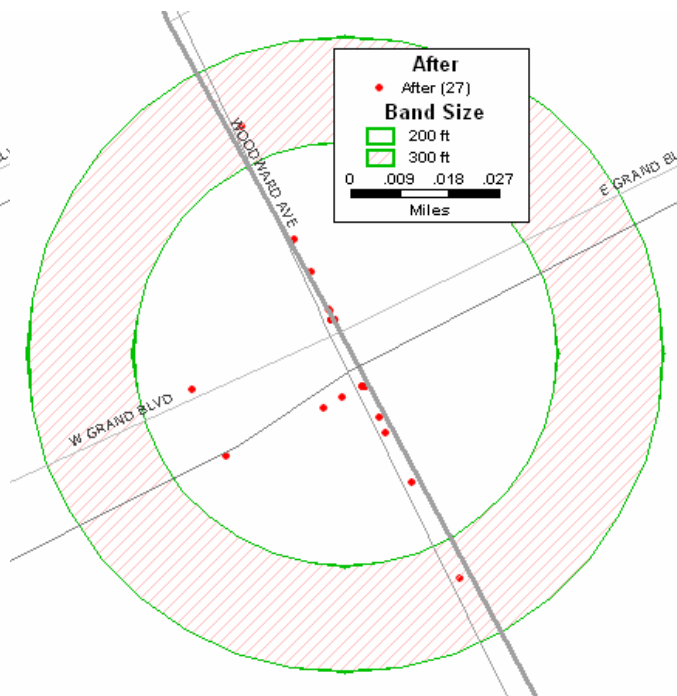
| Crash Type     | Before | %     | After | %     |
|----------------|--------|-------|-------|-------|
| Single vehicle | 4      | 16.7  | 0     | 0.0   |
| Head-on        | 2      | 8.3   | 1     | 8.3   |
| Angle          | 5      | 20.8  | 3     | 25.0  |
| Rear-end       | 7      | 29.2  | 6     | 50.0  |
| Sideswipe      | 4      | 16.7  | 2     | 16.7  |
| Other/unknown  | 2      | 8.3   | 0     | 0.0   |
| Total          | 24     | 100.0 | 12    | 100.0 |

### M1 (Woodward Avenue) and Grand Blvd

Date of Signal Optimization: September 17, 2004



1,356 days before



470 days after

| Injury Severity | Before | %     | After | %     |
|-----------------|--------|-------|-------|-------|
| Fatal           | 1      | 1.5   | 0     | 0.0   |
| A-Injury        | 4      | 6.2   | 1     | 3.7   |
| B-Injury        | 1      | 1.5   | 0     | 0.0   |
| C-Injury        | 6      | 9.2   | 9     | 33.3  |
| O-Injury        | 53     | 81.5  | 17    | 63.0  |
| Total           | 65     | 100.0 | 27    | 100.0 |

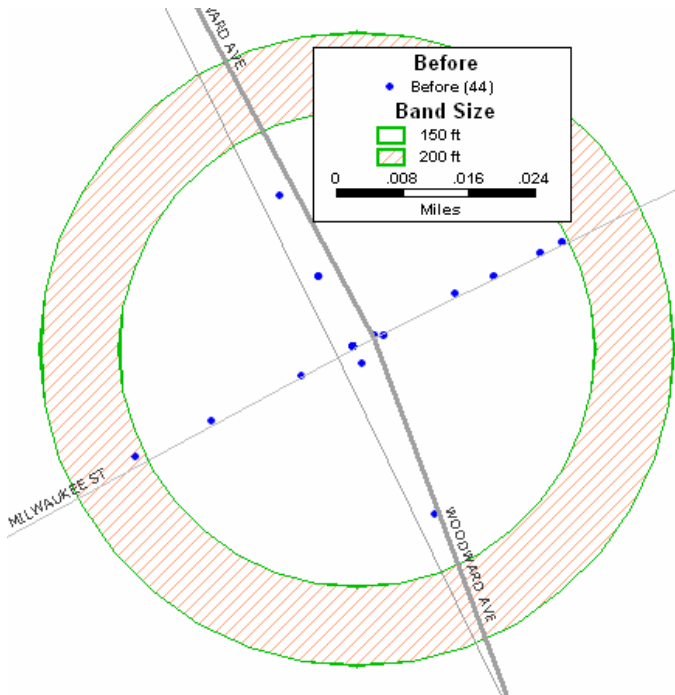
| Time of Day   | Before | %     | After | %     |
|---------------|--------|-------|-------|-------|
| 6am - 9:59am  | 9      | 13.8  | 4     | 14.8  |
| 10am - 3:59pm | 26     | 40.0  | 11    | 40.7  |
| 4pm - 7:59pm  | 16     | 24.6  | 5     | 18.5  |
| 8pm - 5:59am  | 9      | 13.8  | 7     | 25.9  |
| Unknown       | 5      | 7.7   | 0     | 0.0   |
| Total         | 65     | 100.0 | 27    | 100.0 |

| Day of Week | Before | %     | After | %     |
|-------------|--------|-------|-------|-------|
| Sunday      | 4      | 6.2   | 1     | 3.7   |
| Monday      | 11     | 16.9  | 3     | 11.1  |
| Tuesday     | 14     | 21.5  | 3     | 11.1  |
| Wednesday   | 6      | 9.2   | 5     | 18.5  |
| Thursday    | 14     | 21.5  | 6     | 22.2  |
| Friday      | 11     | 16.9  | 3     | 11.1  |
| Saturday    | 5      | 7.7   | 6     | 22.2  |
| Total       | 65     | 100.0 | 27    | 100.0 |

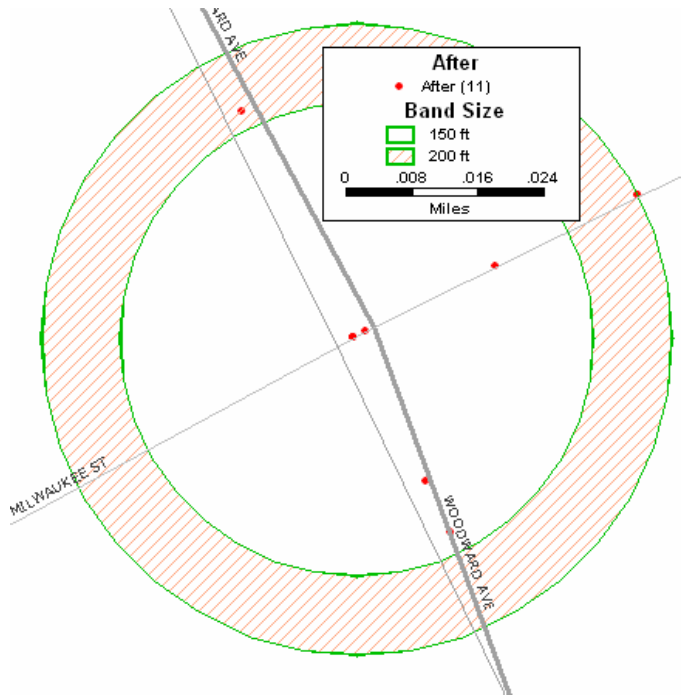
| Crash Type     | Before | %     | After | %     |
|----------------|--------|-------|-------|-------|
| Single vehicle | 0      | 0.0   | 2     | 7.4   |
| Head-on        | 4      | 6.2   | 3     | 11.1  |
| Angle          | 19     | 29.2  | 5     | 18.5  |
| Rear-end       | 21     | 32.3  | 5     | 18.5  |
| Sideswipe      | 14     | 21.5  | 10    | 37.0  |
| Other/unknown  | 7      | 10.8  | 2     | 7.4   |
| Total          | 65     | 100.0 | 27    | 100.0 |

### M1 (Woodward Avenue) and Milwaukee Street

Date of Signal Optimization: September 17, 2004



1,356 days before



470 days after

| Injury Severity | Before | %     | After | %     |
|-----------------|--------|-------|-------|-------|
| Fatal           | 0      | 0.0   | 0     | 0.0   |
| A-Injury        | 0      | 0.0   | 0     | 0.0   |
| B-Injury        | 1      | 2.3   | 0     | 0.0   |
| C-Injury        | 5      | 11.4  | 1     | 9.1   |
| O-Injury        | 38     | 86.4  | 10    | 90.9  |
| Total           | 44     | 100.0 | 11    | 100.0 |

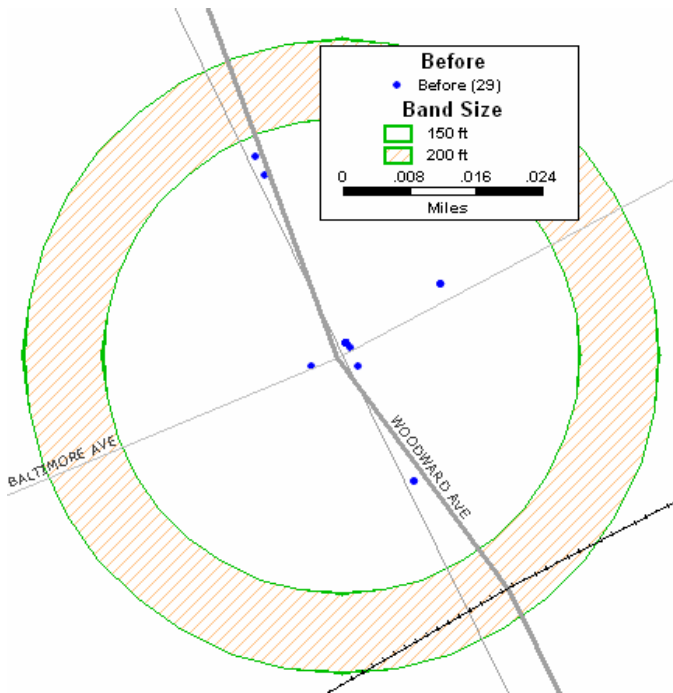
| Time of Day   | Before | %     | After | %     |
|---------------|--------|-------|-------|-------|
| 6am - 9:59am  | 2      | 4.5   | 1     | 9.1   |
| 10am - 3:59pm | 19     | 43.2  | 4     | 36.4  |
| 4pm - 7:59pm  | 9      | 20.5  | 2     | 18.2  |
| 8pm - 5:59am  | 10     | 22.7  | 3     | 27.3  |
| Unknown       | 4      | 9.1   | 1     | 9.1   |
| Total         | 44     | 100.0 | 11    | 100.0 |

| Day of Week | Before | %     | After | %     |
|-------------|--------|-------|-------|-------|
| Sunday      | 4      | 9.1   | 3     | 27.3  |
| Monday      | 11     | 25.0  | 2     | 18.2  |
| Tuesday     | 5      | 11.4  | 0     | 0.0   |
| Wednesday   | 5      | 11.4  | 0     | 0.0   |
| Thursday    | 3      | 6.8   | 2     | 18.2  |
| Friday      | 10     | 22.7  | 1     | 9.1   |
| Saturday    | 6      | 13.6  | 3     | 27.3  |
| Total       | 44     | 100.0 | 11    | 100.0 |

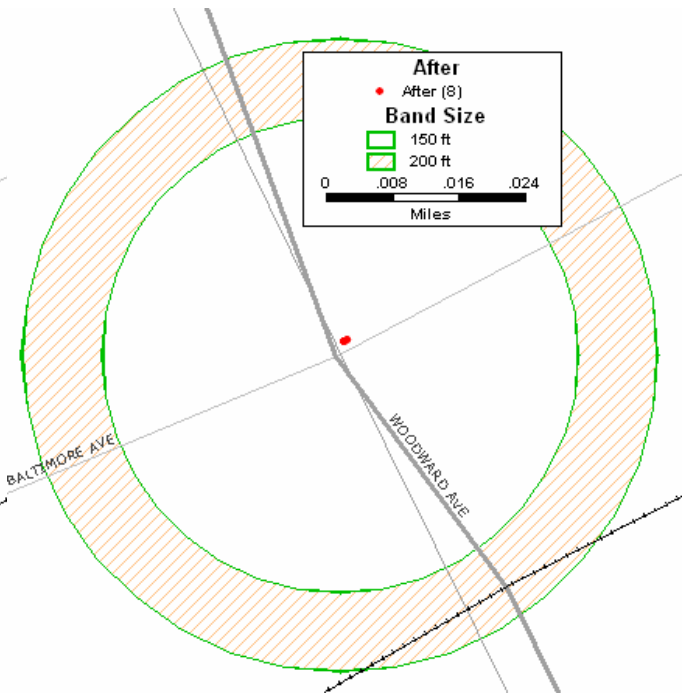
| Crash Type     | Before | %     | After | %     |
|----------------|--------|-------|-------|-------|
| Single vehicle | 0      | 0.0   | 0     | 0.0   |
| Head-on        | 0      | 0.0   | 0     | 0.0   |
| Angle          | 12     | 27.3  | 0     | 0.0   |
| Rear-end       | 6      | 13.6  | 2     | 18.2  |
| Sideswipe      | 18     | 40.9  | 8     | 72.7  |
| Other/unknown  | 8      | 18.2  | 1     | 9.1   |
| Total          | 44     | 100.0 | 11    | 100.0 |

**M1 (Woodward Avenue) and Baltimore Street**

Date of Signal Optimization: September 17, 2004



1,356 days before



470 days after

| Injury Severity | Before | %     | After | %     |
|-----------------|--------|-------|-------|-------|
| Fatal           | 0      | 0.0   | 0     | 0.0   |
| A-Injury        | 0      | 0.0   | 0     | 0.0   |
| B-Injury        | 3      | 10.3  | 1     | 12.5  |
| C-Injury        | 5      | 17.2  | 0     | 0.0   |
| O-Injury        | 21     | 72.4  | 7     | 87.5  |
| Total           | 29     | 100.0 | 8     | 100.0 |

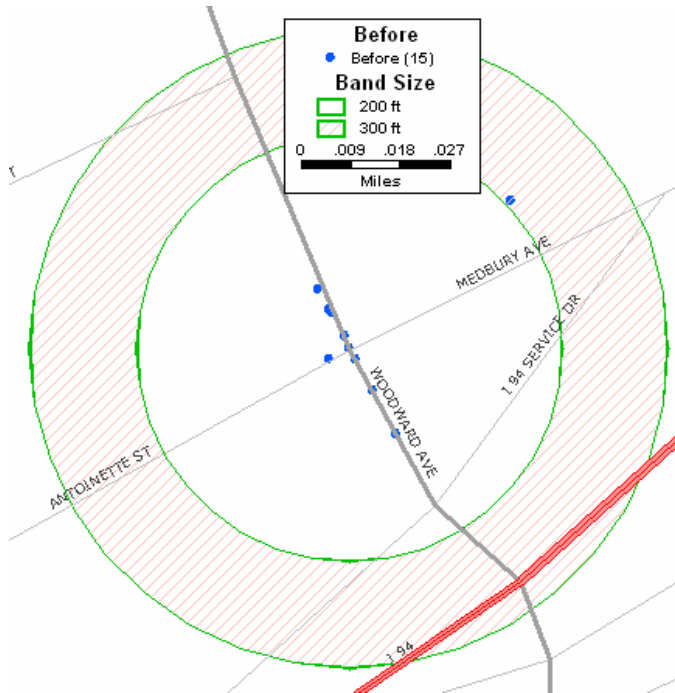
| Time of Day   | Before | %     | After | %     |
|---------------|--------|-------|-------|-------|
| 6am - 9:59am  | 3      | 10.3  | 0     | 0.0   |
| 10am - 3:59pm | 6      | 20.7  | 5     | 62.5  |
| 4pm - 7:59pm  | 10     | 34.5  | 2     | 25.0  |
| 8pm - 5:59am  | 9      | 31.0  | 1     | 12.5  |
| Unknown       | 1      | 3.4   | 0     | 0.0   |
| Total         | 29     | 100.0 | 8     | 100.0 |

| Day of Week | Before | %     | After | %     |
|-------------|--------|-------|-------|-------|
| Sunday      | 5      | 17.2  | 0     | 0.0   |
| Monday      | 2      | 6.9   | 1     | 12.5  |
| Tuesday     | 4      | 13.8  | 2     | 25.0  |
| Wednesday   | 4      | 13.8  | 1     | 12.5  |
| Thursday    | 5      | 17.2  | 0     | 0.0   |
| Friday      | 5      | 17.2  | 2     | 25.0  |
| Saturday    | 4      | 13.8  | 2     | 25.0  |
| Total       | 29     | 100.0 | 8     | 100.0 |

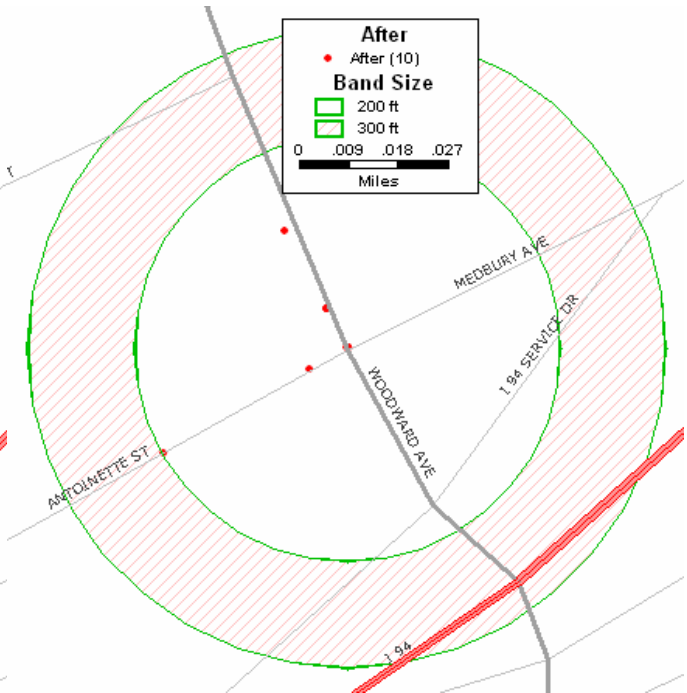
| Crash Type     | Before | %     | After | %     |
|----------------|--------|-------|-------|-------|
| Single vehicle | 1      | 3.4   | 0     | 0.0   |
| Head-on        | 3      | 10.3  | 0     | 0.0   |
| Angle          | 4      | 13.8  | 5     | 62.5  |
| Rear-end       | 14     | 48.3  | 1     | 12.5  |
| Sideswipe      | 5      | 17.2  | 1     | 12.5  |
| Other/unknown  | 2      | 6.9   | 1     | 12.5  |
| Total          | 29     | 100.0 | 8     | 100.0 |

### M1 (Woodward Avenue) and Antoinette Street

Date of Signal Optimization: September 17, 2004



1,356 days before



470 days after

| Injury Severity | Before | %     | After | %     |
|-----------------|--------|-------|-------|-------|
| Fatal           | 0      | 0.0   | 0     | 0.0   |
| A-Injury        | 1      | 6.7   | 0     | 0.0   |
| B-Injury        | 0      | 0.0   | 0     | 0.0   |
| C-Injury        | 1      | 6.7   | 1     | 10.0  |
| O-Injury        | 13     | 86.7  | 9     | 90.0  |
| Total           | 15     | 100.0 | 10    | 100.0 |

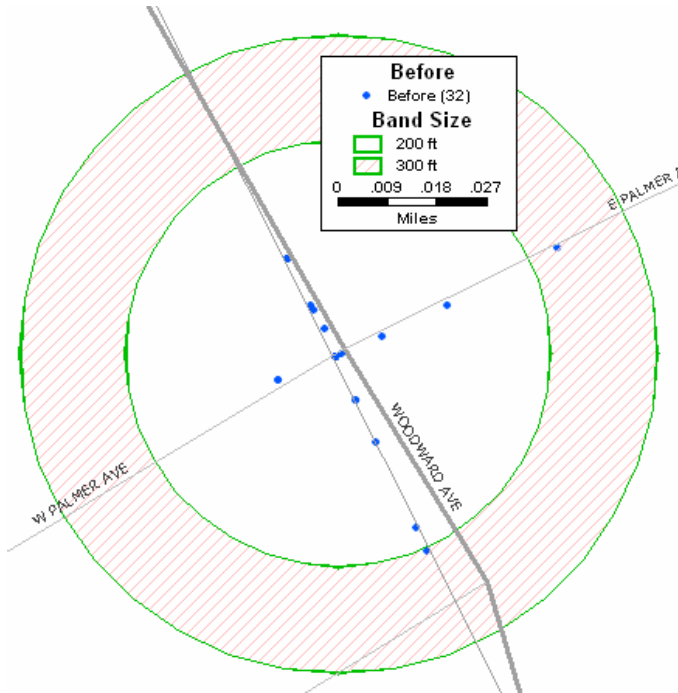
| Time of Day   | Before | %     | After | %     |
|---------------|--------|-------|-------|-------|
| 6am - 9:59am  | 2      | 13.3  | 2     | 20.0  |
| 10am - 3:59pm | 5      | 33.3  | 6     | 60.0  |
| 4pm - 7:59pm  | 5      | 33.3  | 1     | 10.0  |
| 8pm - 5:59am  | 3      | 20.0  | 1     | 10.0  |
| Unknown       | 0      | 0.0   | 0     | 0.0   |
| Total         | 15     | 100.0 | 10    | 100.0 |

| Day of Week | Before | %     | After | %     |
|-------------|--------|-------|-------|-------|
| Sunday      | 2      | 13.3  | 0     | 0.0   |
| Monday      | 4      | 26.7  | 0     | 0.0   |
| Tuesday     | 2      | 13.3  | 3     | 30.0  |
| Wednesday   | 1      | 6.7   | 2     | 20.0  |
| Thursday    | 4      | 26.7  | 2     | 20.0  |
| Friday      | 2      | 13.3  | 2     | 20.0  |
| Saturday    | 0      | 0.0   | 1     | 10.0  |
| Total       | 15     | 100.0 | 10    | 100.0 |

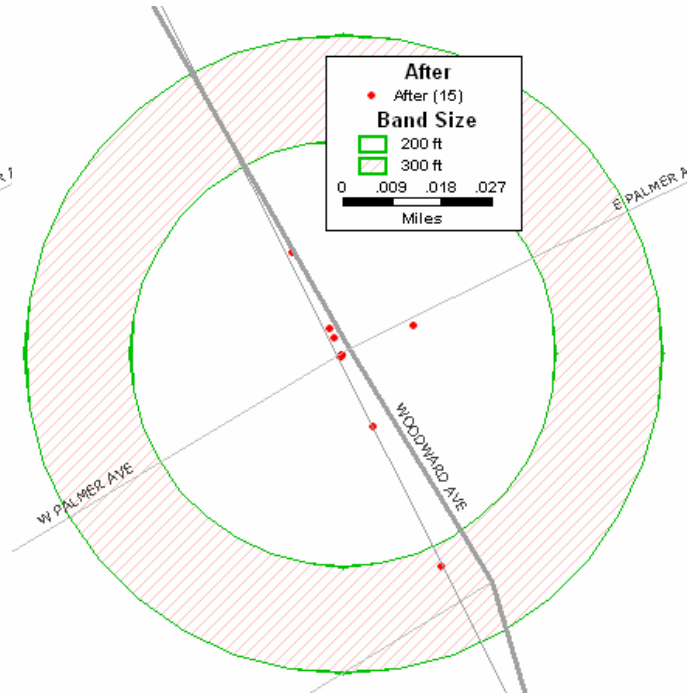
| Crash Type     | Before | %     | After | %     |
|----------------|--------|-------|-------|-------|
| Single vehicle | 2      | 13.3  | 2     | 20.0  |
| Head-on        | 3      | 20.0  | 0     | 0.0   |
| Angle          | 4      | 26.7  | 2     | 20.0  |
| Rear-end       | 2      | 13.3  | 2     | 20.0  |
| Sideswipe      | 3      | 20.0  | 4     | 40.0  |
| Other/unknown  | 1      | 6.7   | 0     | 0.0   |
| Total          | 15     | 100.0 | 10    | 100.0 |

### M1 (Woodward Avenue) and Palmer Street

Date of Signal Optimization: September 17, 2004



1,356 days before



470 days after

| Injury Severity | Before | %     | After | %     |
|-----------------|--------|-------|-------|-------|
| Fatal           | 0      | 0.0   | 0     | 0.0   |
| A-Injury        | 0      | 0.0   | 0     | 0.0   |
| B-Injury        | 1      | 3.1   | 0     | 0.0   |
| C-Injury        | 3      | 9.4   | 1     | 6.7   |
| O-Injury        | 28     | 87.5  | 14    | 93.3  |
| Total           | 32     | 100.0 | 15    | 100.0 |

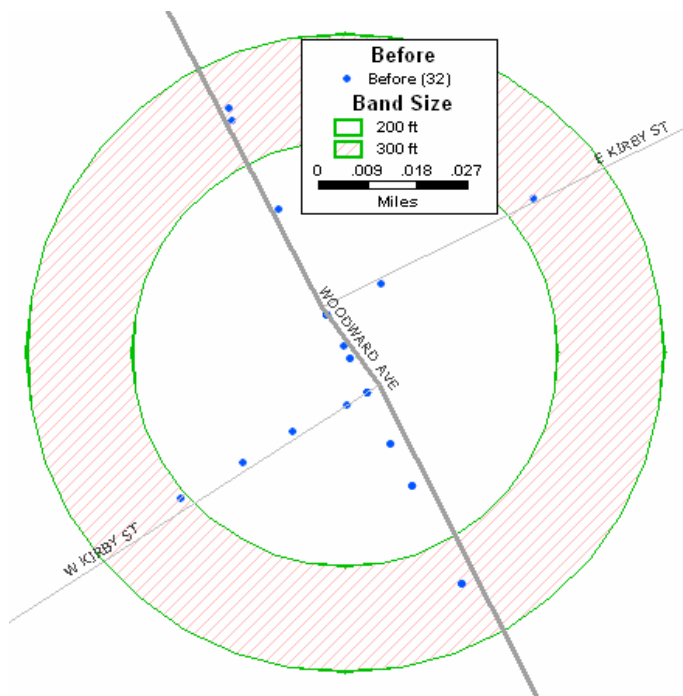
| Time of Day   | Before | %     | After | %     |
|---------------|--------|-------|-------|-------|
| 6am - 9:59am  | 7      | 21.9  | 2     | 13.3  |
| 10am - 3:59pm | 10     | 31.3  | 6     | 40.0  |
| 4pm - 7:59pm  | 9      | 28.1  | 2     | 13.3  |
| 8pm - 5:59am  | 2      | 6.3   | 5     | 33.3  |
| Unknown       | 4      | 12.5  | 0     | 0.0   |
| Total         | 32     | 100.0 | 15    | 100.0 |

| Day of Week | Before | %     | After | %     |
|-------------|--------|-------|-------|-------|
| Sunday      | 0      | 0.0   | 1     | 6.7   |
| Monday      | 4      | 12.5  | 3     | 20.0  |
| Tuesday     | 3      | 9.4   | 1     | 6.7   |
| Wednesday   | 14     | 43.8  | 4     | 26.7  |
| Thursday    | 4      | 12.5  | 6     | 40.0  |
| Friday      | 6      | 18.8  | 0     | 0.0   |
| Saturday    | 1      | 3.1   | 0     | 0.0   |
| Total       | 32     | 100.0 | 15    | 100.0 |

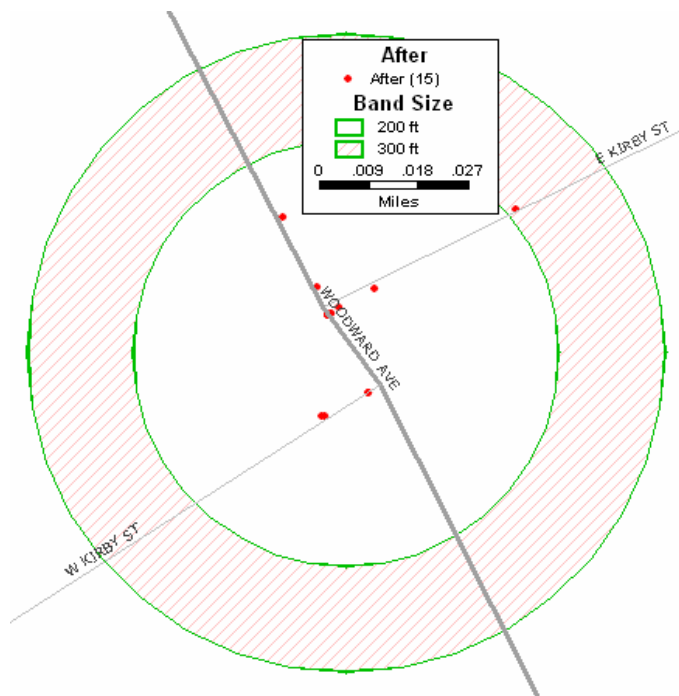
| Crash Type     | Before | %     | After | %     |
|----------------|--------|-------|-------|-------|
| Single vehicle | 0      | 0.0   | 2     | 13.3  |
| Head-on        | 2      | 6.3   | 1     | 6.7   |
| Angle          | 9      | 28.1  | 5     | 33.3  |
| Rear-end       | 8      | 25.0  | 2     | 13.3  |
| Sideswipe      | 11     | 34.4  | 5     | 33.3  |
| Other/unknown  | 2      | 6.3   | 0     | 0.0   |
| Total          | 32     | 100.0 | 15    | 100.0 |

### M1 (Woodward Avenue) and Kirby Street

Date of Signal Optimization: September 17, 2004



1,356 days before



470 days after

| Injury Severity | Before | %     | After | %     |
|-----------------|--------|-------|-------|-------|
| Fatal           | 1      | 3.1   | 0     | 0.0   |
| A-Injury        | 0      | 0.0   | 1     | 6.7   |
| B-Injury        | 1      | 3.1   | 0     | 0.0   |
| C-Injury        | 2      | 6.3   | 1     | 6.7   |
| O-Injury        | 28     | 87.5  | 13    | 86.7  |
| Total           | 32     | 100.0 | 15    | 100.0 |

| Time of Day   | Before | %     | After | %     |
|---------------|--------|-------|-------|-------|
| 6am - 9:59am  | 2      | 6.3   | 1     | 6.7   |
| 10am - 3:59pm | 15     | 46.9  | 10    | 66.7  |
| 4pm - 7:59pm  | 7      | 21.9  | 2     | 13.3  |
| 8pm - 5:59am  | 5      | 15.6  | 1     | 6.7   |
| Unknown       | 3      | 9.4   | 1     | 6.7   |
| Total         | 32     | 100.0 | 15    | 100.0 |

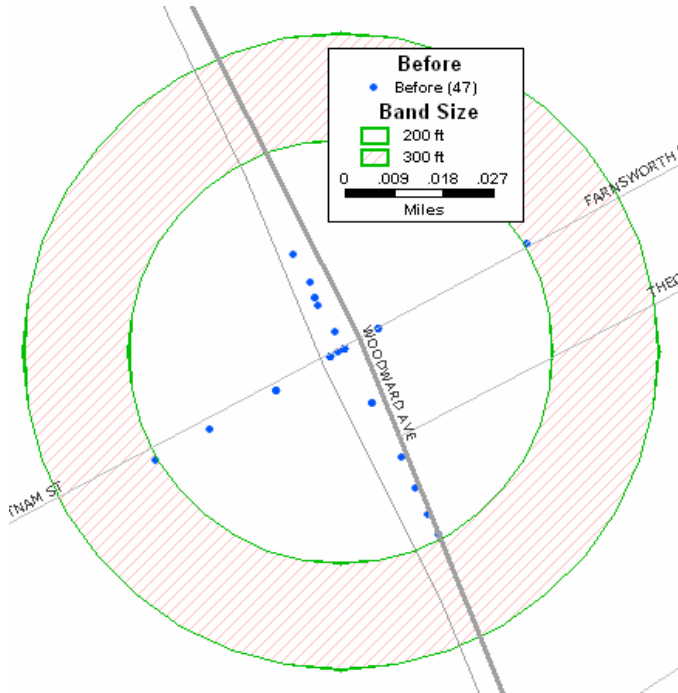
| Day of Week | Before | %     | After | %     |
|-------------|--------|-------|-------|-------|
| Sunday      | 2      | 6.3   | 0     | 0.0   |
| Monday      | 4      | 12.5  | 3     | 20.0  |
| Tuesday     | 7      | 21.9  | 2     | 13.3  |
| Wednesday   | 4      | 12.5  | 4     | 26.7  |
| Thursday    | 6      | 18.8  | 2     | 13.3  |
| Friday      | 7      | 21.9  | 4     | 26.7  |
| Saturday    | 2      | 6.3   | 0     | 0.0   |
| Total       | 32     | 100.0 | 15    | 100.0 |

| Crash Type     | Before | %     | After | %     |
|----------------|--------|-------|-------|-------|
| Single vehicle | 1      | 3.1   | 1     | 6.7   |
| Head-on        | 0      | 0.0   | 0     | 0.0   |
| Angle          | 5      | 15.6  | 3     | 20.0  |
| Rear-end       | 8      | 25.0  | 3     | 20.0  |
| Sideswipe      | 16     | 50.0  | 5     | 33.3  |
| Other/unknown  | 2      | 6.3   | 3     | 20.0  |
| Total          | 32     | 100.0 | 15    | 100.0 |

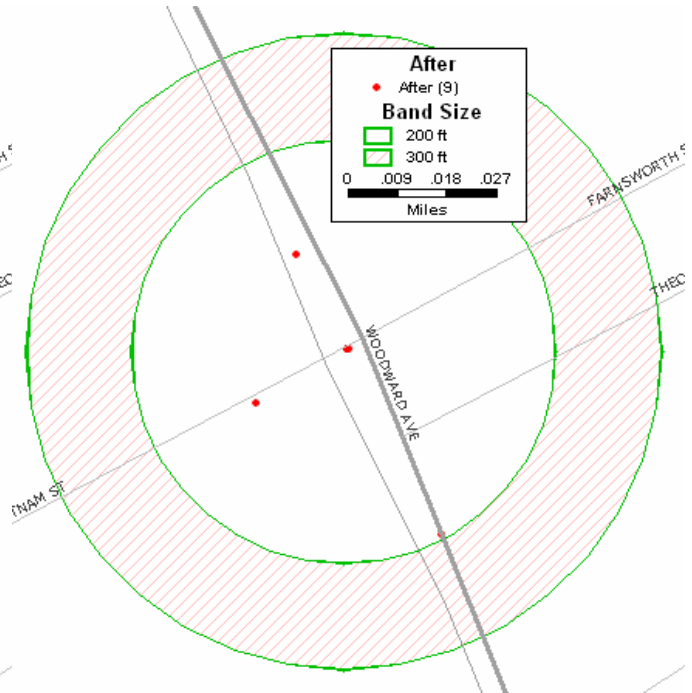


**M1 (Woodward Avenue) and Putnam and Farnsworth Street**

Date of Signal Optimization: September 17, 2004



1,356 days before



470 days after

| Injury Severity | Before | %     | After | %     |
|-----------------|--------|-------|-------|-------|
| Fatal           | 0      | 0.0   | 0     | 0.0   |
| A-Injury        | 0      | 0.0   | 0     | 0.0   |
| B-Injury        | 2      | 4.3   | 1     | 11.1  |
| C-Injury        | 4      | 8.5   | 2     | 22.2  |
| O-Injury        | 41     | 87.2  | 6     | 66.7  |
| Total           | 47     | 100.0 | 9     | 100.0 |

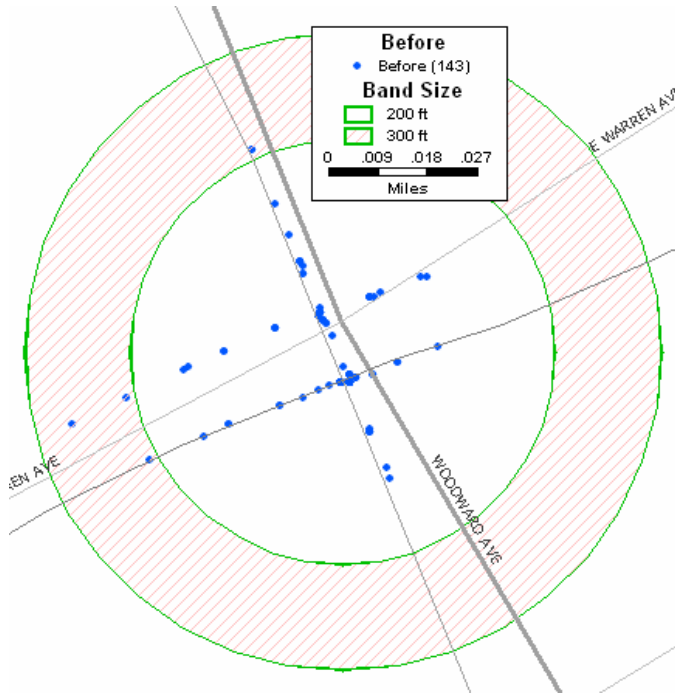
| Time of Day   | Before | %     | After | %     |
|---------------|--------|-------|-------|-------|
| 6am - 9:59am  | 1      | 2.1   | 2     | 22.2  |
| 10am - 3:59pm | 24     | 51.1  | 5     | 55.6  |
| 4pm - 7:59pm  | 13     | 27.7  | 2     | 22.2  |
| 8pm - 5:59am  | 3      | 6.4   | 0     | 0.0   |
| Unknown       | 6      | 12.8  | 0     | 0.0   |
| Total         | 47     | 100.0 | 9     | 100.0 |

| Day of Week | Before | %     | After | %     |
|-------------|--------|-------|-------|-------|
| Sunday      | 1      | 2.1   | 0     | 0.0   |
| Monday      | 5      | 10.6  | 1     | 11.1  |
| Tuesday     | 13     | 27.7  | 0     | 0.0   |
| Wednesday   | 5      | 10.6  | 2     | 22.2  |
| Thursday    | 10     | 21.3  | 0     | 0.0   |
| Friday      | 9      | 19.1  | 6     | 66.7  |
| Saturday    | 4      | 8.5   | 0     | 0.0   |
| Total       | 47     | 100.0 | 9     | 100.0 |

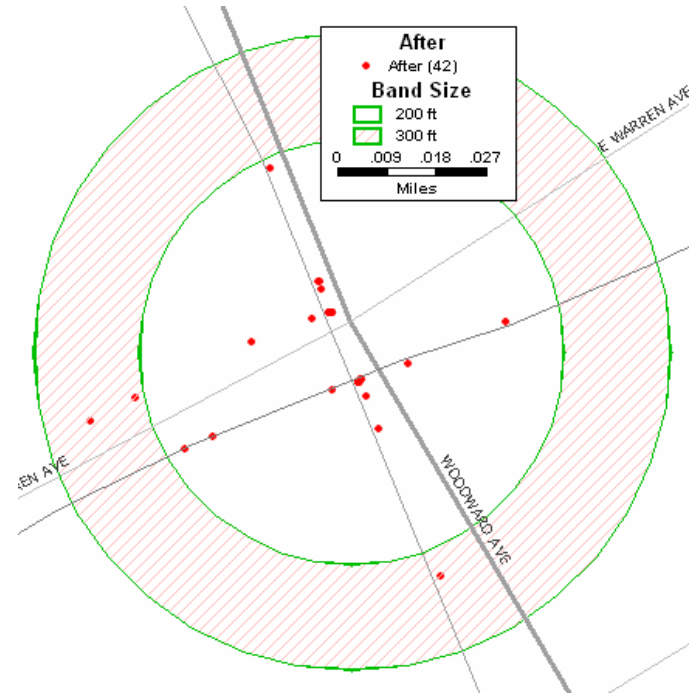
| Crash Type     | Before | %     | After | %     |
|----------------|--------|-------|-------|-------|
| Single vehicle | 4      | 8.5   | 0     | 0.0   |
| Head-on        | 2      | 4.3   | 0     | 0.0   |
| Angle          | 5      | 10.6  | 3     | 33.3  |
| Rear-end       | 5      | 10.6  | 2     | 22.2  |
| Sideswipe      | 19     | 40.4  | 0     | 0.0   |
| Other/unknown  | 12     | 25.5  | 4     | 44.4  |
| Total          | 47     | 100.0 | 9     | 100.0 |

### M1 (Woodward Avenue) and Warren Avenue

Date of Signal Optimization: September 17, 2004



1,356 days before



470 days after

| Injury Severity | Before | %     | After | %     |
|-----------------|--------|-------|-------|-------|
| Fatal           | 0      | 0.0   | 0     | 0.0   |
| A-Injury        | 1      | 0.7   | 0     | 0.0   |
| B-Injury        | 1      | 0.7   | 3     | 7.1   |
| C-Injury        | 23     | 16.1  | 3     | 7.1   |
| O-Injury        | 118    | 82.5  | 36    | 85.7  |
| Total           | 143    | 100.0 | 42    | 100.0 |

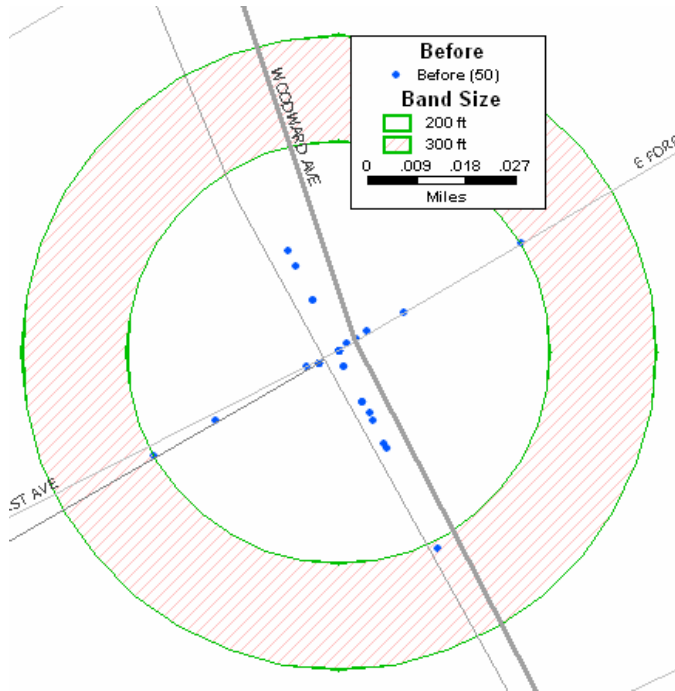
| Time of Day   | Before | %     | After | %     |
|---------------|--------|-------|-------|-------|
| 6am - 9:59am  | 26     | 18.2  | 4     | 9.5   |
| 10am - 3:59pm | 55     | 38.5  | 19    | 45.2  |
| 4pm - 7:59pm  | 42     | 29.4  | 16    | 38.1  |
| 8pm - 5:59am  | 13     | 9.1   | 3     | 7.1   |
| Unknown       | 7      | 4.9   | 0     | 0.0   |
| Total         | 143    | 100.0 | 42    | 100.0 |

| Day of Week | Before | %     | After | %     |
|-------------|--------|-------|-------|-------|
| Sunday      | 8      | 5.6   | 1     | 2.4   |
| Monday      | 20     | 14.0  | 6     | 14.3  |
| Tuesday     | 21     | 14.7  | 8     | 19.0  |
| Wednesday   | 28     | 19.6  | 10    | 23.8  |
| Thursday    | 23     | 16.1  | 7     | 16.7  |
| Friday      | 29     | 20.3  | 5     | 11.9  |
| Saturday    | 14     | 9.8   | 5     | 11.9  |
| Total       | 143    | 100.0 | 42    | 100.0 |

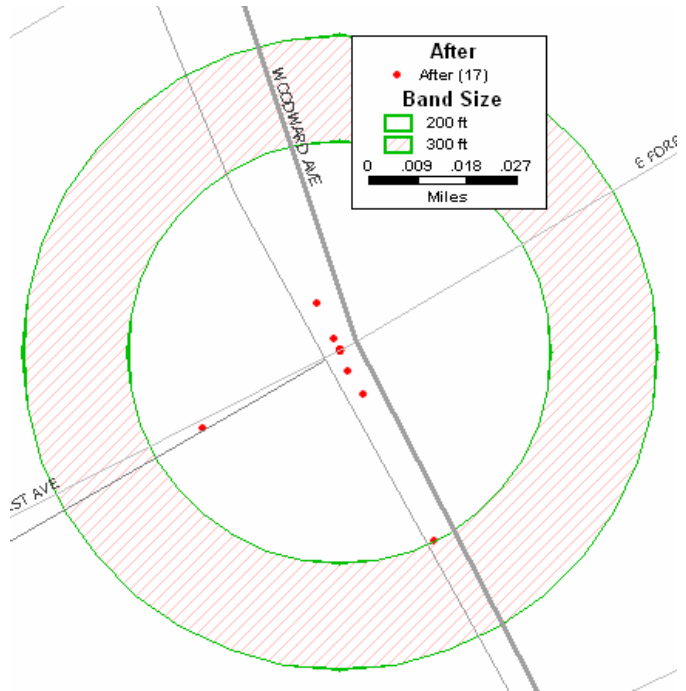
| Crash Type     | Before | %     | After | %     |
|----------------|--------|-------|-------|-------|
| Single vehicle | 3      | 2.1   | 2     | 4.8   |
| Head-on        | 11     | 7.7   | 4     | 9.5   |
| Angle          | 32     | 22.4  | 13    | 31.0  |
| Rear-end       | 31     | 21.7  | 9     | 21.4  |
| Sideswipe      | 45     | 31.5  | 7     | 16.7  |
| Other/unknown  | 21     | 14.7  | 7     | 16.7  |
| Total          | 143    | 100.0 | 42    | 100.0 |

**M1 (Woodward Avenue) and Forest Avenue**

Date of Signal Optimization: September 17, 2004



1,356 days before



470 days after

| Injury Severity | Before | %     | After | %     |
|-----------------|--------|-------|-------|-------|
| Fatal           | 0      | 0.0   | 0     | 0.0   |
| A-Injury        | 2      | 4.0   | 0     | 0.0   |
| B-Injury        | 0      | 0.0   | 1     | 5.9   |
| C-Injury        | 6      | 12.0  | 4     | 23.5  |
| O-Injury        | 42     | 84.0  | 12    | 70.6  |
| Total           | 50     | 100.0 | 17    | 100.0 |

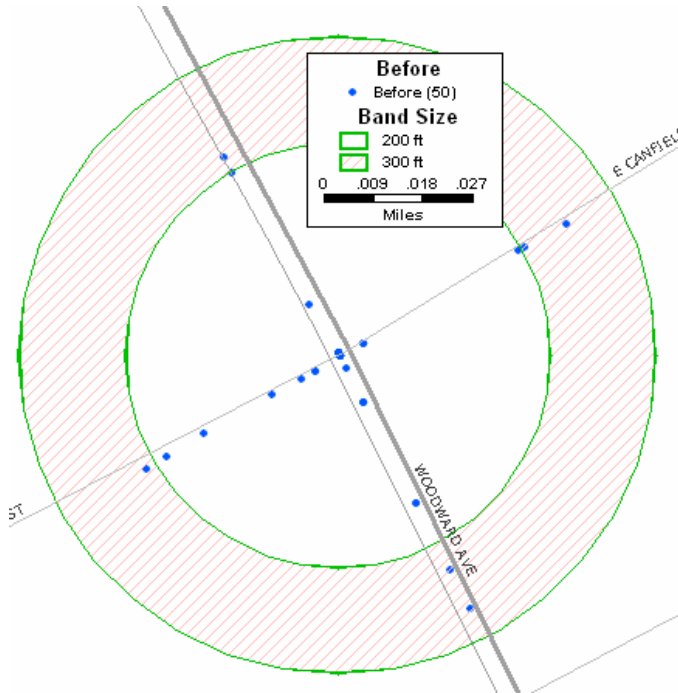
| Time of Day   | Before | %     | After | %     |
|---------------|--------|-------|-------|-------|
| 6am - 9:59am  | 9      | 18.0  | 4     | 23.5  |
| 10am - 3:59pm | 23     | 46.0  | 5     | 29.4  |
| 4pm - 7:59pm  | 7      | 14.0  | 5     | 29.4  |
| 8pm - 5:59am  | 7      | 14.0  | 3     | 17.6  |
| Unknown       | 4      | 8.0   | 0     | 0.0   |
| Total         | 50     | 100.0 | 17    | 100.0 |

| Day of Week | Before | %     | After | %     |
|-------------|--------|-------|-------|-------|
| Sunday      | 6      | 12.0  | 1     | 5.9   |
| Monday      | 7      | 14.0  | 4     | 23.5  |
| Tuesday     | 4      | 8.0   | 4     | 23.5  |
| Wednesday   | 10     | 20.0  | 3     | 17.6  |
| Thursday    | 4      | 8.0   | 1     | 5.9   |
| Friday      | 11     | 22.0  | 2     | 11.8  |
| Saturday    | 8      | 16.0  | 2     | 11.8  |
| Total       | 50     | 100.0 | 17    | 100.0 |

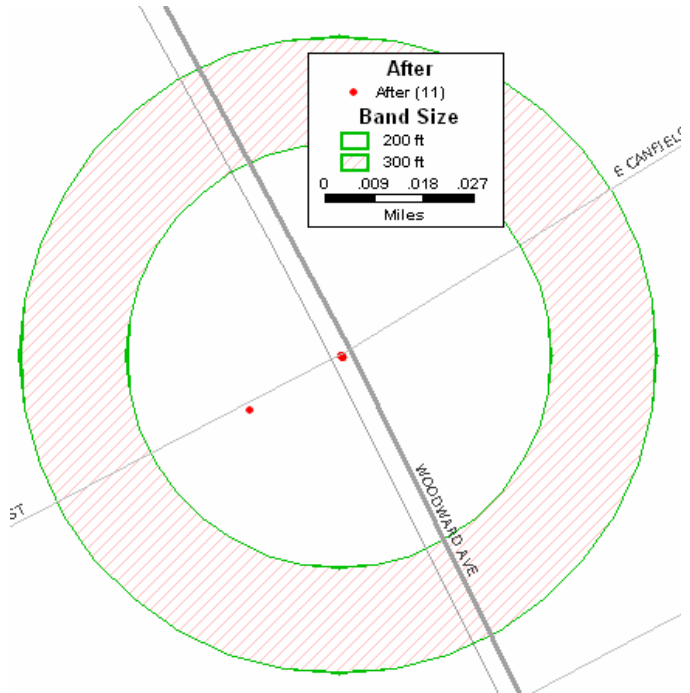
| Crash Type     | Before | %     | After | %     |
|----------------|--------|-------|-------|-------|
| Single vehicle | 0      | 0.0   | 2     | 11.8  |
| Head-on        | 1      | 2.0   | 0     | 0.0   |
| Angle          | 13     | 26.0  | 6     | 35.3  |
| Rear-end       | 14     | 28.0  | 4     | 23.5  |
| Sideswipe      | 14     | 28.0  | 3     | 17.6  |
| Other/unknown  | 8      | 16.0  | 2     | 11.8  |
| Total          | 50     | 100.0 | 17    | 100.0 |

### M1 (Woodward Avenue) and Canfield Street

Date of Signal Optimization: September 17, 2004



1,356 days before



470 days after

| Injury Severity | Before    | %            | After     | %            |
|-----------------|-----------|--------------|-----------|--------------|
| Fatal           | 0         | 0.0          | 0         | 0.0          |
| A-Injury        | 0         | 0.0          | 0         | 0.0          |
| B-Injury        | 1         | 2.0          | 0         | 0.0          |
| C-Injury        | 5         | 10.0         | 1         | 9.1          |
| O-Injury        | 44        | 88.0         | 10        | 90.9         |
| <b>Total</b>    | <b>50</b> | <b>100.0</b> | <b>11</b> | <b>100.0</b> |

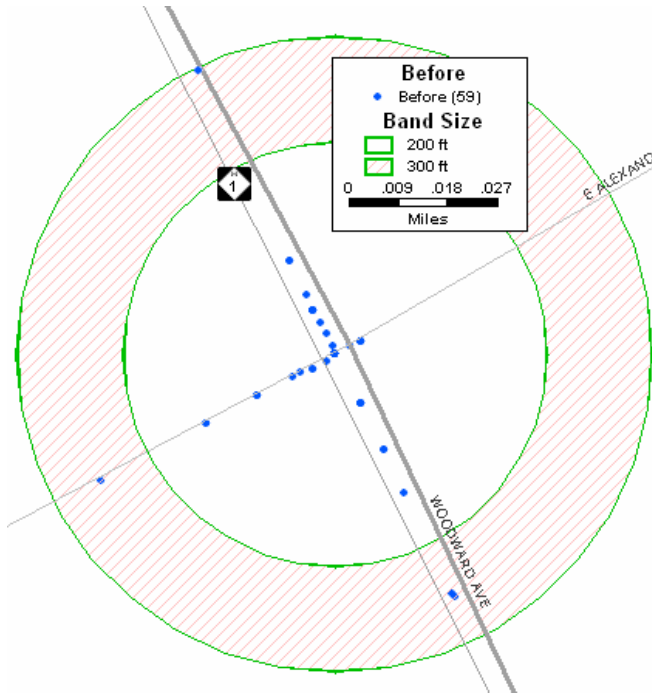
| Time of Day   | Before    | %            | After     | %            |
|---------------|-----------|--------------|-----------|--------------|
| 6am - 9:59am  | 7         | 14.0         | 3         | 27.3         |
| 10am - 3:59pm | 20        | 40.0         | 6         | 54.5         |
| 4pm - 7:59pm  | 12        | 24.0         | 1         | 9.1          |
| 8pm - 5:59am  | 9         | 18.0         | 0         | 0.0          |
| Unknown       | 2         | 4.0          | 1         | 9.1          |
| <b>Total</b>  | <b>50</b> | <b>100.0</b> | <b>11</b> | <b>100.0</b> |

| Day of Week  | Before    | %            | After     | %            |
|--------------|-----------|--------------|-----------|--------------|
| Sunday       | 1         | 2.0          | 3         | 27.3         |
| Monday       | 11        | 22.0         | 0         | 0.0          |
| Tuesday      | 9         | 18.0         | 2         | 18.2         |
| Wednesday    | 6         | 12.0         | 3         | 27.3         |
| Thursday     | 9         | 18.0         | 2         | 18.2         |
| Friday       | 6         | 12.0         | 1         | 9.1          |
| Saturday     | 8         | 16.0         | 0         | 0.0          |
| <b>Total</b> | <b>50</b> | <b>100.0</b> | <b>11</b> | <b>100.0</b> |

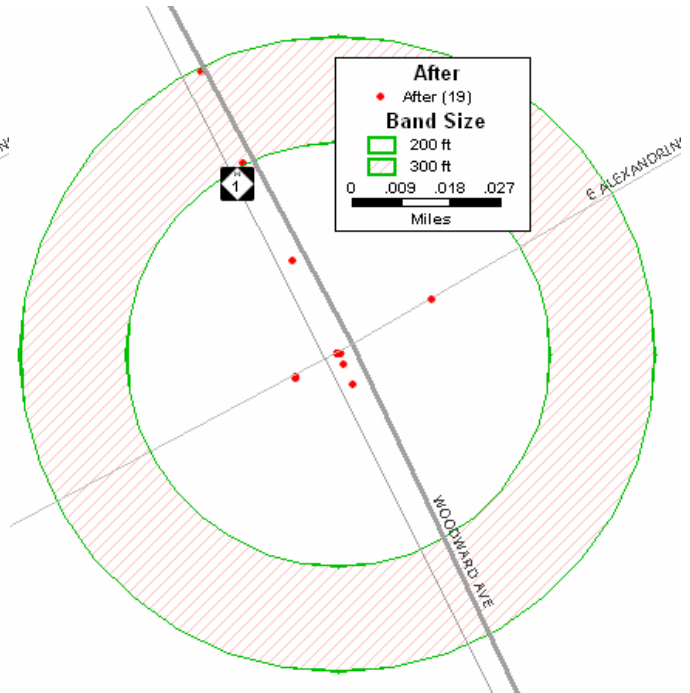
| Crash Type     | Before    | %            | After     | %            |
|----------------|-----------|--------------|-----------|--------------|
| Single vehicle | 3         | 6.0          | 0         | 0.0          |
| Head-on        | 2         | 4.0          | 1         | 9.1          |
| Angle          | 14        | 28.0         | 2         | 18.2         |
| Rear-end       | 10        | 20.0         | 4         | 36.4         |
| Sideswipe      | 14        | 28.0         | 3         | 27.3         |
| Other/unknown  | 7         | 14.0         | 1         | 9.1          |
| <b>Total</b>   | <b>50</b> | <b>100.0</b> | <b>11</b> | <b>100.0</b> |

### M1 (Woodward Avenue) and Alexandrine Street

Date of Signal Optimization: September 17, 2004



1,356 days before



470 days after

| Injury Severity | Before | %     | After | %     |
|-----------------|--------|-------|-------|-------|
| Fatal           | 0      | 0.0   | 0     | 0.0   |
| A-Injury        | 2      | 3.4   | 1     | 5.3   |
| B-Injury        | 4      | 6.8   | 0     | 0.0   |
| C-Injury        | 8      | 13.6  | 4     | 21.1  |
| O-Injury        | 45     | 76.3  | 14    | 73.7  |
| Total           | 59     | 100.0 | 19    | 100.0 |

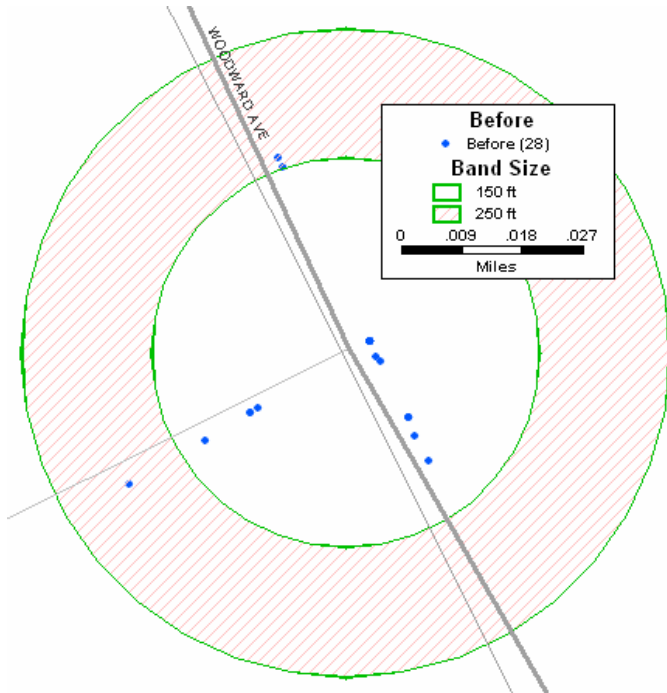
| Time of Day   | Before | %     | After | %     |
|---------------|--------|-------|-------|-------|
| 6am - 9:59am  | 7      | 11.9  | 1     | 5.3   |
| 10am - 3:59pm | 16     | 27.1  | 10    | 52.6  |
| 4pm - 7:59pm  | 13     | 22.0  | 4     | 21.1  |
| 8pm - 5:59am  | 18     | 30.5  | 4     | 21.1  |
| Unknown       | 5      | 8.5   | 0     | 0.0   |
| Total         | 59     | 100.0 | 19    | 100.0 |

| Day of Week | Before | %     | After | %     |
|-------------|--------|-------|-------|-------|
| Sunday      | 10     | 16.9  | 1     | 5.3   |
| Monday      | 6      | 10.2  | 5     | 26.3  |
| Tuesday     | 8      | 13.6  | 3     | 15.8  |
| Wednesday   | 6      | 10.2  | 6     | 31.6  |
| Thursday    | 11     | 18.6  | 0     | 0.0   |
| Friday      | 11     | 18.6  | 3     | 15.8  |
| Saturday    | 7      | 11.9  | 1     | 5.3   |
| Total       | 59     | 100.0 | 19    | 100.0 |

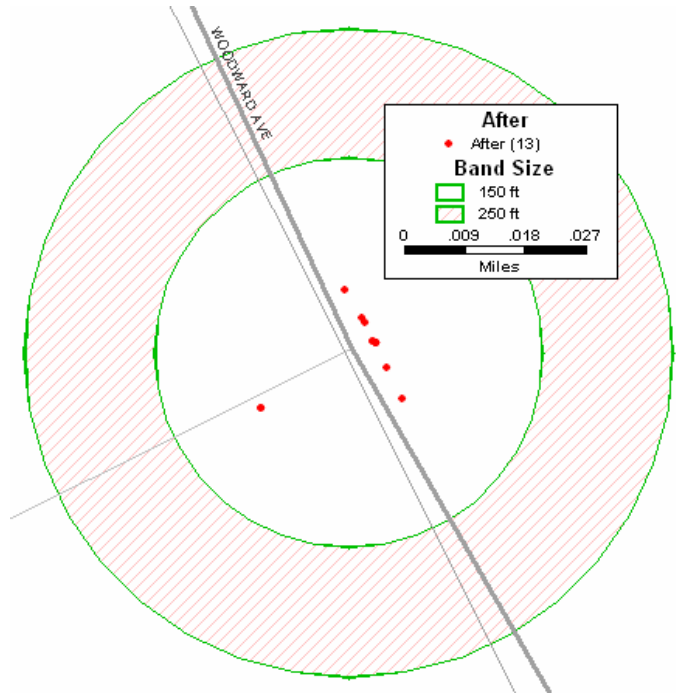
| Crash Type     | Before | %     | After | %     |
|----------------|--------|-------|-------|-------|
| Single vehicle | 5      | 8.5   | 0     | 0.0   |
| Head-on        | 3      | 5.1   | 1     | 5.3   |
| Angle          | 17     | 28.8  | 6     | 31.6  |
| Rear-end       | 11     | 18.6  | 8     | 42.1  |
| Sideswipe      | 15     | 25.4  | 1     | 5.3   |
| Other/unknown  | 8      | 13.6  | 3     | 15.8  |
| Total          | 59     | 100.0 | 19    | 100.0 |

**M1 (Woodward Avenue) and Parsons Street**

Date of Signal Optimization: September 17, 2004



1,356 days before



470 days after

| Injury Severity | Before | %     | After | %     |
|-----------------|--------|-------|-------|-------|
| Fatal           | 1      | 3.6   | 0     | 0.0   |
| A-Injury        | 0      | 0.0   | 0     | 0.0   |
| B-Injury        | 1      | 3.6   | 0     | 0.0   |
| C-Injury        | 4      | 14.3  | 2     | 15.4  |
| O-Injury        | 22     | 78.6  | 11    | 84.6  |
| Total           | 28     | 100.0 | 13    | 100.0 |

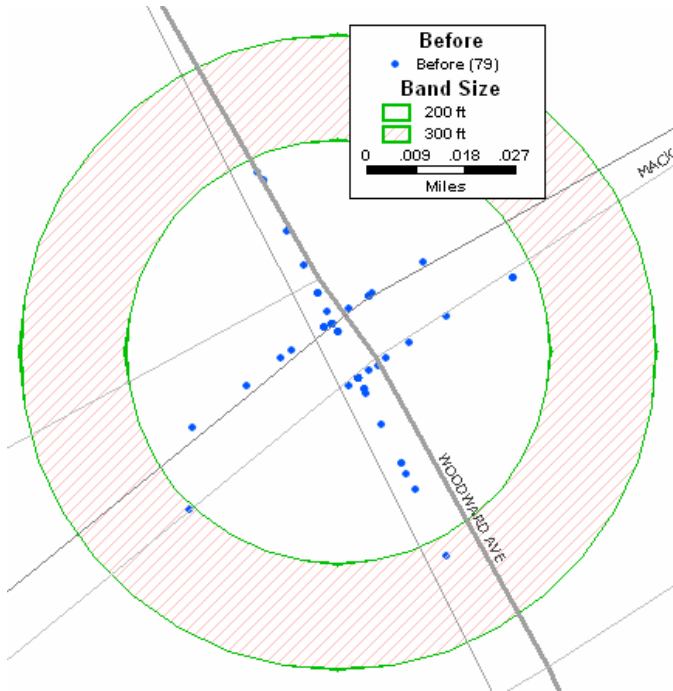
| Time of Day   | Before | %     | After | %     |
|---------------|--------|-------|-------|-------|
| 6am - 9:59am  | 5      | 17.9  | 0     | 0.0   |
| 10am - 3:59pm | 10     | 35.7  | 7     | 53.8  |
| 4pm - 7:59pm  | 6      | 21.4  | 2     | 15.4  |
| 8pm - 5:59am  | 6      | 21.4  | 2     | 15.4  |
| Unknown       | 1      | 3.6   | 2     | 15.4  |
| Total         | 28     | 100.0 | 13    | 100.0 |

| Day of Week | Before | %     | After | %     |
|-------------|--------|-------|-------|-------|
| Sunday      | 1      | 3.6   | 1     | 7.7   |
| Monday      | 4      | 14.3  | 2     | 15.4  |
| Tuesday     | 8      | 28.6  | 1     | 7.7   |
| Wednesday   | 4      | 14.3  | 2     | 15.4  |
| Thursday    | 2      | 7.1   | 3     | 23.1  |
| Friday      | 5      | 17.9  | 3     | 23.1  |
| Saturday    | 4      | 14.3  | 1     | 7.7   |
| Total       | 28     | 100.0 | 13    | 100.0 |

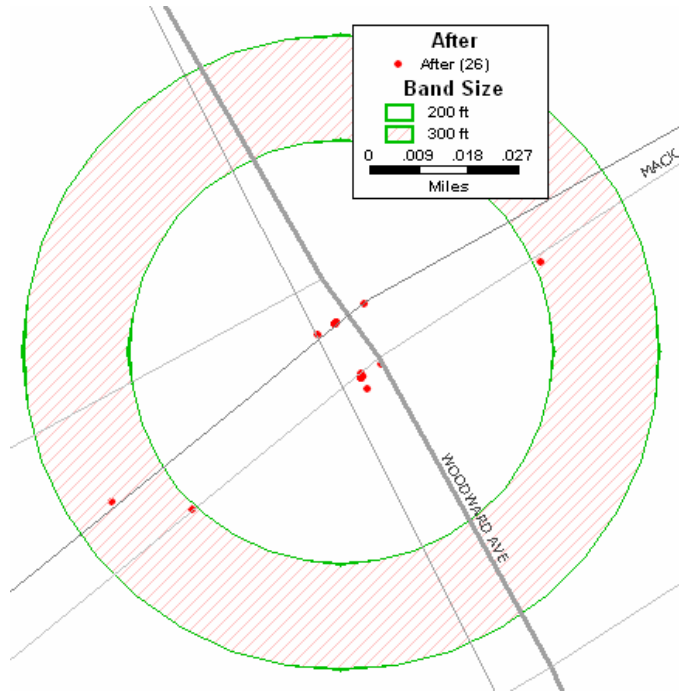
| Crash Type     | Before | %     | After | %     |
|----------------|--------|-------|-------|-------|
| Single vehicle | 1      | 3.6   | 0     | 0.0   |
| Head-on        | 0      | 0.0   | 2     | 15.4  |
| Angle          | 6      | 21.4  | 1     | 7.7   |
| Rear-end       | 9      | 32.1  | 1     | 7.7   |
| Sideswipe      | 5      | 17.9  | 6     | 46.2  |
| Other/unknown  | 7      | 25.0  | 3     | 23.1  |
| Total          | 28     | 100.0 | 13    | 100.0 |

### M1 (Woodward Avenue) and Martin Luther King Jr Blvd and Mack Ave

Date of Signal Optimization: September 17, 2004



1,356 days before



470 days after

| Injury Severity | Before | %     | After | %     |
|-----------------|--------|-------|-------|-------|
| Fatal           | 0      | 0.0   | 0     | 0.0   |
| A-Injury        | 1      | 1.3   | 0     | 0.0   |
| B-Injury        | 2      | 2.5   | 0     | 0.0   |
| C-Injury        | 14     | 17.7  | 5     | 19.2  |
| O-Injury        | 62     | 78.5  | 21    | 80.8  |
| Total           | 79     | 100.0 | 26    | 100.0 |

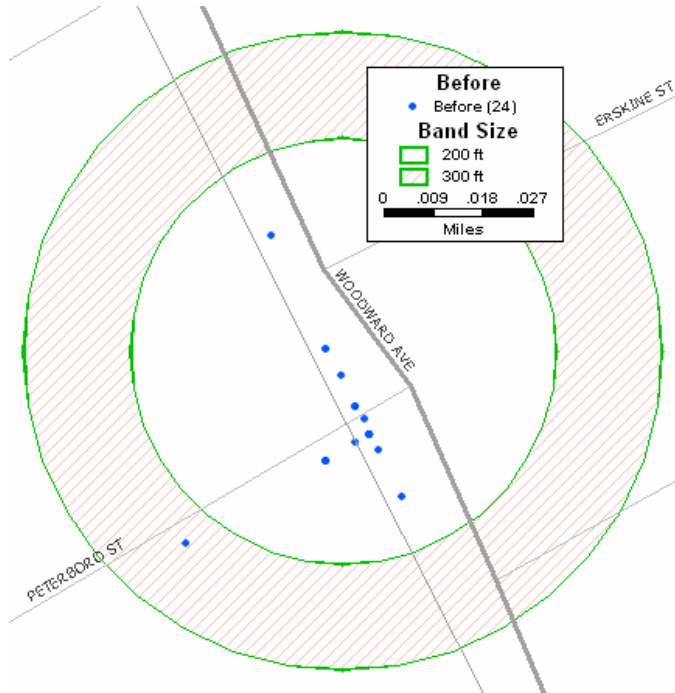
| Time of Day   | Before | %     | After | %     |
|---------------|--------|-------|-------|-------|
| 6am - 9:59am  | 11     | 13.9  | 6     | 23.1  |
| 10am - 3:59pm | 27     | 34.2  | 11    | 42.3  |
| 4pm - 7:59pm  | 19     | 24.1  | 4     | 15.4  |
| 8pm - 5:59am  | 16     | 20.3  | 5     | 19.2  |
| Unknown       | 6      | 7.6   | 0     | 0.0   |
| Total         | 79     | 100.0 | 26    | 100.0 |

| Day of Week | Before | %     | After | %     |
|-------------|--------|-------|-------|-------|
| Sunday      | 7      | 8.9   | 2     | 7.7   |
| Monday      | 13     | 16.5  | 4     | 15.4  |
| Tuesday     | 11     | 13.9  | 6     | 23.1  |
| Wednesday   | 16     | 20.3  | 1     | 3.8   |
| Thursday    | 9      | 11.4  | 3     | 11.5  |
| Friday      | 16     | 20.3  | 8     | 30.8  |
| Saturday    | 7      | 8.9   | 2     | 7.7   |
| Total       | 79     | 100.0 | 26    | 100.0 |

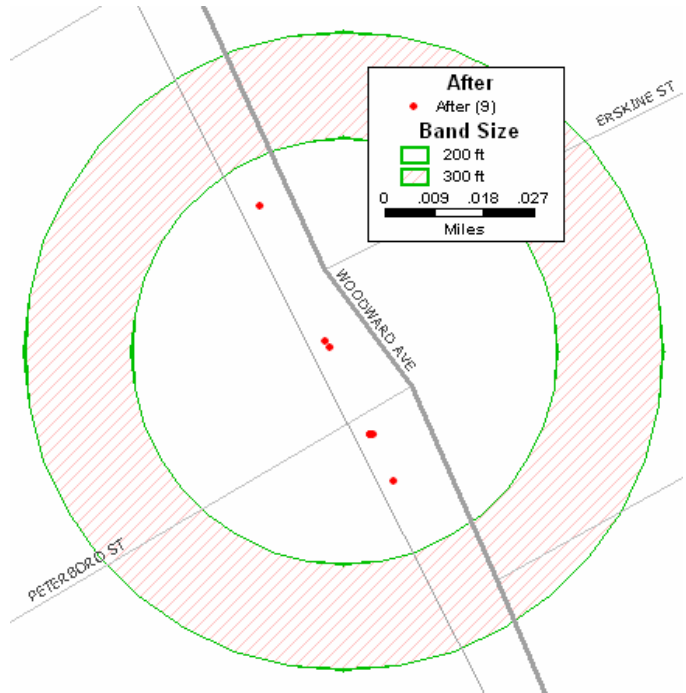
| Crash Type     | Before | %     | After | %     |
|----------------|--------|-------|-------|-------|
| Single vehicle | 3      | 3.8   | 0     | 0.0   |
| Head-on        | 8      | 10.1  | 9     | 34.6  |
| Angle          | 23     | 29.1  | 9     | 34.6  |
| Rear-end       | 20     | 25.3  | 5     | 19.2  |
| Sideswipe      | 20     | 25.3  | 1     | 3.8   |
| Other/unknown  | 5      | 6.3   | 2     | 7.7   |
| Total          | 79     | 100.0 | 26    | 100.0 |

### M1 (Woodward Avenue) and Peterboro and Erskine Street

Date of Signal Optimization: September 17, 2004



1,356 days before



470 days after

| Injury Severity | Before | %     | After | %     |
|-----------------|--------|-------|-------|-------|
| Fatal           | 0      | 0.0   | 0     | 0.0   |
| A-Injury        | 0      | 0.0   | 1     | 11.1  |
| B-Injury        | 1      | 4.2   | 0     | 0.0   |
| C-Injury        | 3      | 12.5  | 1     | 11.1  |
| O-Injury        | 20     | 83.3  | 7     | 77.8  |
| Total           | 24     | 100.0 | 9     | 100.0 |

| Time of Day   | Before | %     | After | %     |
|---------------|--------|-------|-------|-------|
| 6am - 9:59am  | 4      | 16.7  | 3     | 33.3  |
| 10am - 3:59pm | 9      | 37.5  | 4     | 44.4  |
| 4pm - 7:59pm  | 5      | 20.8  | 1     | 11.1  |
| 8pm - 5:59am  | 5      | 20.8  | 1     | 11.1  |
| Unknown       | 1      | 4.2   | 0     | 0.0   |
| Total         | 24     | 100.0 | 9     | 100.0 |

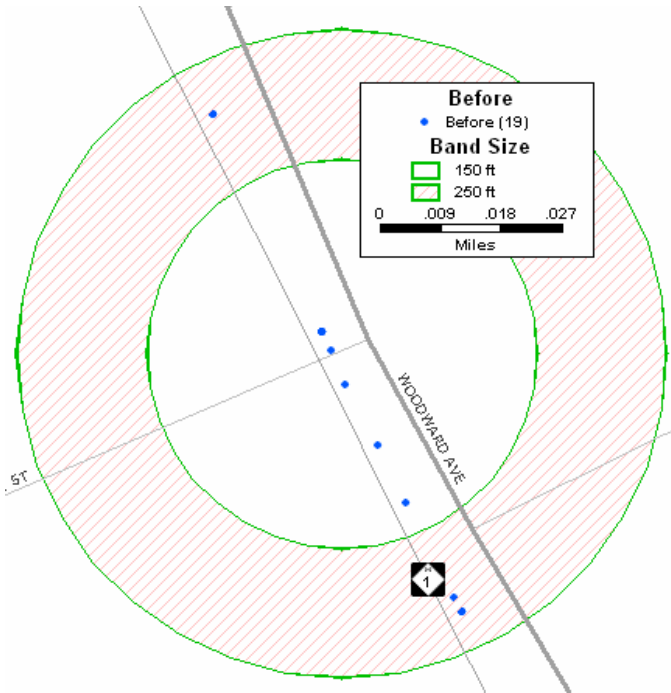
| Day of Week | Before | %     | After | %     |
|-------------|--------|-------|-------|-------|
| Sunday      | 0      | 0.0   | 1     | 11.1  |
| Monday      | 4      | 16.7  | 1     | 11.1  |
| Tuesday     | 1      | 4.2   | 1     | 11.1  |
| Wednesday   | 3      | 12.5  | 2     | 22.2  |
| Thursday    | 8      | 33.3  | 2     | 22.2  |
| Friday      | 6      | 25.0  | 1     | 11.1  |
| Saturday    | 2      | 8.3   | 1     | 11.1  |
| Total       | 24     | 100.0 | 9     | 100.0 |

| Crash Type     | Before | %     | After | %     |
|----------------|--------|-------|-------|-------|
| Single vehicle | 2      | 8.3   | 0     | 0.0   |
| Head-on        | 1      | 4.2   | 0     | 0.0   |
| Angle          | 3      | 12.5  | 2     | 22.2  |
| Rear-end       | 5      | 20.8  | 2     | 22.2  |
| Sideswipe      | 7      | 29.2  | 2     | 22.2  |
| Other/unknown  | 6      | 25.0  | 3     | 33.3  |
| Total          | 24     | 100.0 | 9     | 100.0 |

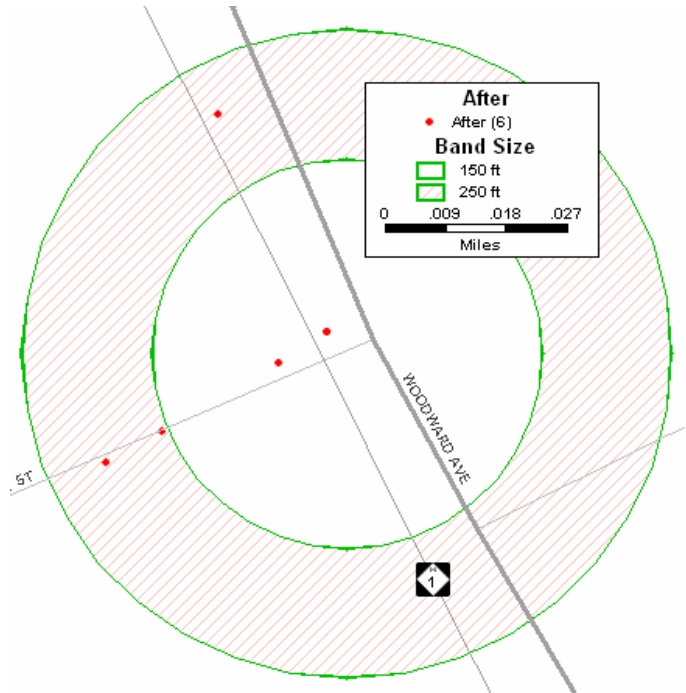


**M1 (Woodward Avenue) and Charlotte Street**

Date of Signal Optimization: September 17, 2004



1,356 days before



470 days after

| Injury Severity | Before | %     | After | %     |
|-----------------|--------|-------|-------|-------|
| Fatal           | 1      | 5.3   | 0     | 0.0   |
| A-Injury        | 0      | 0.0   | 0     | 0.0   |
| B-Injury        | 0      | 0.0   | 0     | 0.0   |
| C-Injury        | 4      | 21.1  | 1     | 16.7  |
| O-Injury        | 14     | 73.7  | 5     | 83.3  |
| Total           | 19     | 100.0 | 6     | 100.0 |

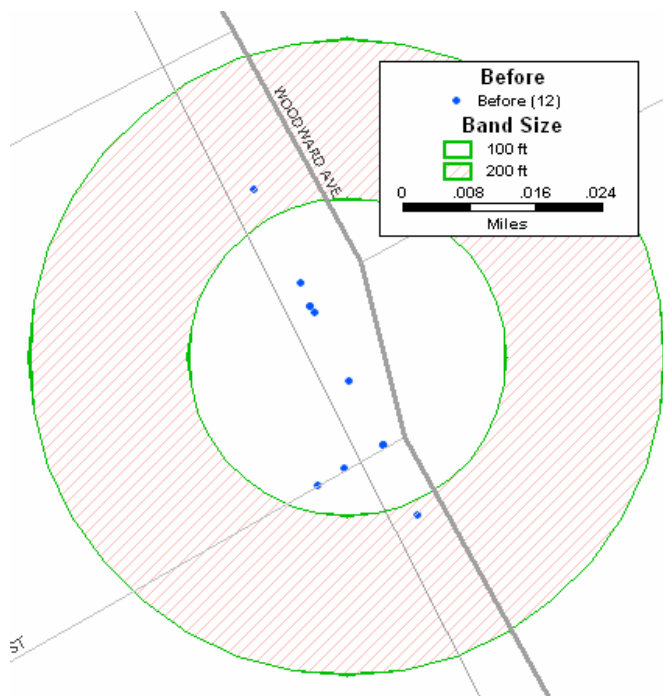
| Time of Day   | Before | %     | After | %     |
|---------------|--------|-------|-------|-------|
| 6am - 9:59am  | 0      | 0.0   | 2     | 33.3  |
| 10am - 3:59pm | 6      | 31.6  | 2     | 33.3  |
| 4pm - 7:59pm  | 4      | 21.1  | 1     | 16.7  |
| 8pm - 5:59am  | 7      | 36.8  | 1     | 16.7  |
| Unknown       | 2      | 10.5  | 0     | 0.0   |
| Total         | 19     | 100.0 | 6     | 100.0 |

| Day of Week | Before | %     | After | %     |
|-------------|--------|-------|-------|-------|
| Sunday      | 2      | 10.5  | 0     | 0.0   |
| Monday      | 1      | 5.3   | 0     | 0.0   |
| Tuesday     | 1      | 5.3   | 2     | 33.3  |
| Wednesday   | 4      | 21.1  | 1     | 16.7  |
| Thursday    | 5      | 26.3  | 0     | 0.0   |
| Friday      | 3      | 15.8  | 2     | 33.3  |
| Saturday    | 3      | 15.8  | 1     | 16.7  |
| Total       | 19     | 100.0 | 6     | 100.0 |

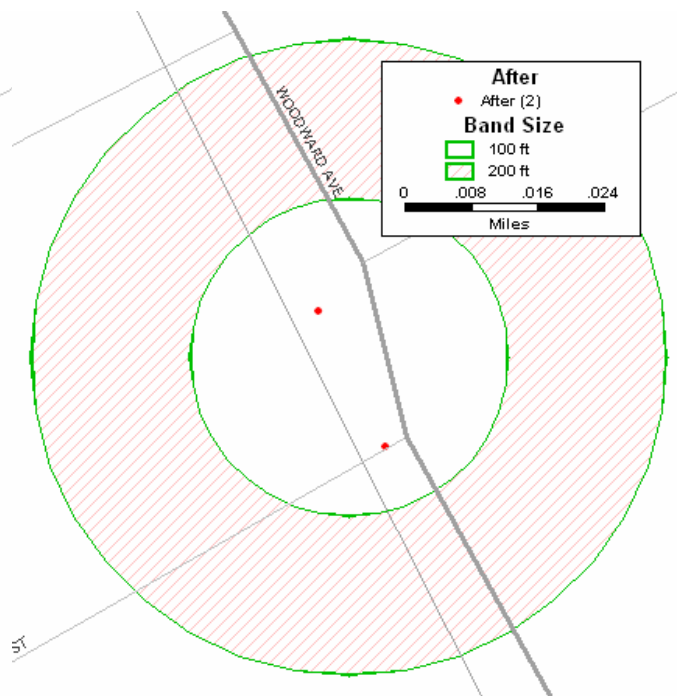
| Crash Type     | Before | %     | After | %     |
|----------------|--------|-------|-------|-------|
| Single vehicle | 3      | 15.8  | 0     | 0.0   |
| Head-on        | 1      | 5.3   | 2     | 33.3  |
| Angle          | 3      | 15.8  | 1     | 16.7  |
| Rear-end       | 6      | 31.6  | 2     | 33.3  |
| Sideswipe      | 4      | 21.1  | 1     | 16.7  |
| Other/unknown  | 2      | 10.5  | 0     | 0.0   |
| Total          | 19     | 100.0 | 6     | 100.0 |

### M1 (Woodward Avenue) and Adelaide and Sibley Street

Date of Signal Optimization: September 17, 2004



1,356 days before



470 days after

| Injury Severity | Before | %     | After | %     |
|-----------------|--------|-------|-------|-------|
| Fatal           | 0      | 0.0   | 0     | 0.0   |
| A-Injury        | 0      | 0.0   | 0     | 0.0   |
| B-Injury        | 3      | 25.0  | 0     | 0.0   |
| C-Injury        | 1      | 8.3   | 0     | 0.0   |
| O-Injury        | 8      | 66.7  | 2     | 100.0 |
| Total           | 12     | 100.0 | 2     | 100.0 |

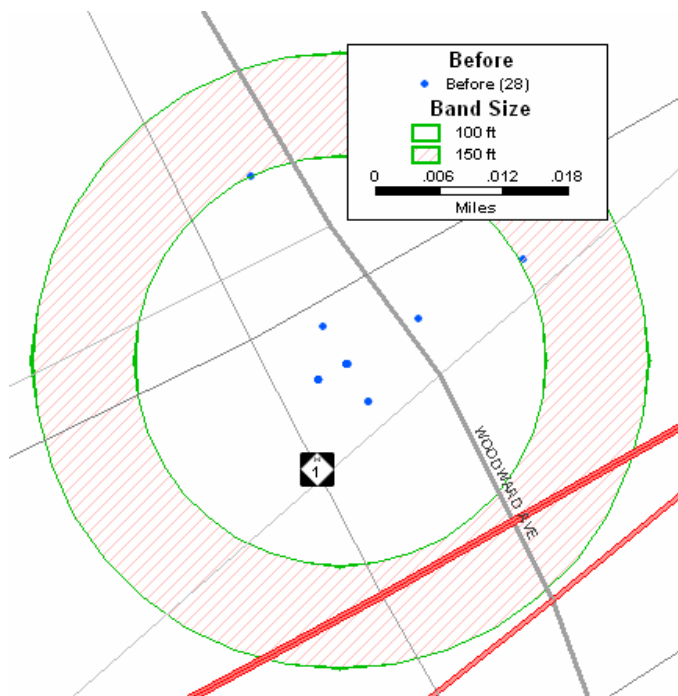
| Time of Day   | Before | %     | After | %     |
|---------------|--------|-------|-------|-------|
| 6am - 9:59am  | 0      | 0.0   | 0     | 0.0   |
| 10am - 3:59pm | 5      | 41.7  | 1     | 50.0  |
| 4pm - 7:59pm  | 4      | 33.3  | 0     | 0.0   |
| 8pm - 5:59am  | 2      | 16.7  | 1     | 50.0  |
| Unknown       | 1      | 8.3   | 0     | 0.0   |
| Total         | 12     | 100.0 | 2     | 100.0 |

| Day of Week | Before | %     | After | %     |
|-------------|--------|-------|-------|-------|
| Sunday      | 1      | 8.3   | 0     | 0.0   |
| Monday      | 2      | 16.7  | 0     | 0.0   |
| Tuesday     | 0      | 0.0   | 2     | 100.0 |
| Wednesday   | 1      | 8.3   | 0     | 0.0   |
| Thursday    | 1      | 8.3   | 0     | 0.0   |
| Friday      | 3      | 25.0  | 0     | 0.0   |
| Saturday    | 4      | 33.3  | 0     | 0.0   |
| Total       | 12     | 100.0 | 2     | 100.0 |

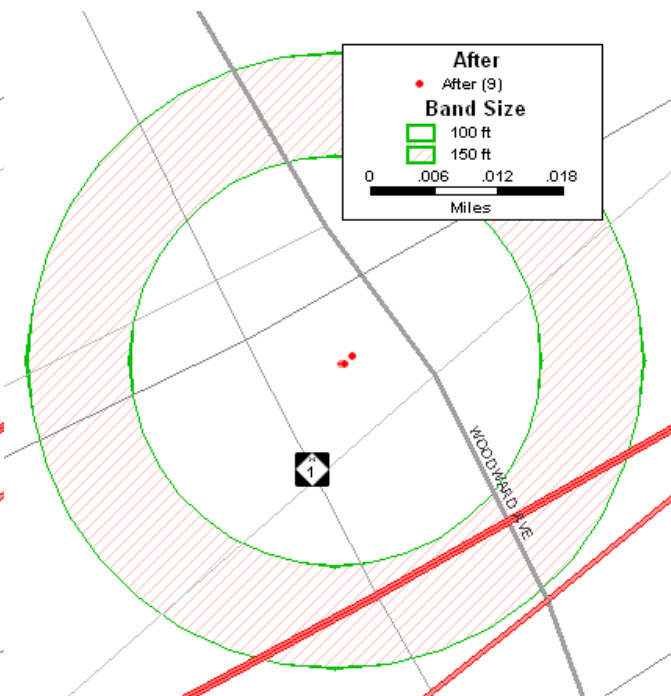
| Crash Type     | Before | %     | After | %     |
|----------------|--------|-------|-------|-------|
| Single vehicle | 1      | 8.3   | 0     | 0.0   |
| Head-on        | 2      | 16.7  | 1     | 50.0  |
| Angle          | 4      | 33.3  | 0     | 0.0   |
| Rear-end       | 3      | 25.0  | 1     | 50.0  |
| Sideswipe      | 2      | 16.7  | 0     | 0.0   |
| Other/unknown  | 0      | 0.0   | 0     | 0.0   |
| Total          | 12     | 100.0 | 2     | 100.0 |

### M1 (Woodward Avenue) and I75 Southbound

Date of Signal Optimization: September 17, 2004



1,356 days before



470 days after

| Injury Severity | Before | %     | After | %     |
|-----------------|--------|-------|-------|-------|
| Fatal           | 0      | 0.0   | 0     | 0.0   |
| A-Injury        | 0      | 0.0   | 0     | 0.0   |
| B-Injury        | 1      | 3.6   | 0     | 0.0   |
| C-Injury        | 4      | 14.3  | 0     | 0.0   |
| O-Injury        | 23     | 82.1  | 9     | 100.0 |
| Total           | 28     | 100.0 | 9     | 100.0 |

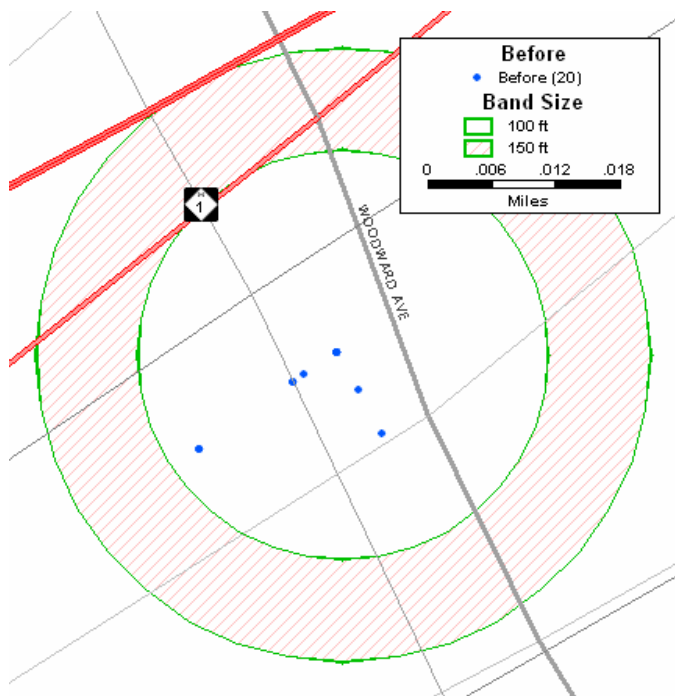
| Time of Day   | Before | %     | After | %     |
|---------------|--------|-------|-------|-------|
| 6am - 9:59am  | 6      | 21.4  | 1     | 11.1  |
| 10am - 3:59pm | 7      | 25.0  | 1     | 11.1  |
| 4pm - 7:59pm  | 8      | 28.6  | 6     | 66.7  |
| 8pm - 5:59am  | 6      | 21.4  | 1     | 11.1  |
| Unknown       | 1      | 3.6   | 0     | 0.0   |
| Total         | 28     | 100.0 | 9     | 100.0 |

| Day of Week | Before | %     | After | %     |
|-------------|--------|-------|-------|-------|
| Sunday      | 2      | 7.1   | 0     | 0.0   |
| Monday      | 3      | 10.7  | 1     | 11.1  |
| Tuesday     | 5      | 17.9  | 1     | 11.1  |
| Wednesday   | 2      | 7.1   | 2     | 22.2  |
| Thursday    | 7      | 25.0  | 0     | 0.0   |
| Friday      | 5      | 17.9  | 2     | 22.2  |
| Saturday    | 4      | 14.3  | 3     | 33.3  |
| Total       | 28     | 100.0 | 9     | 100.0 |

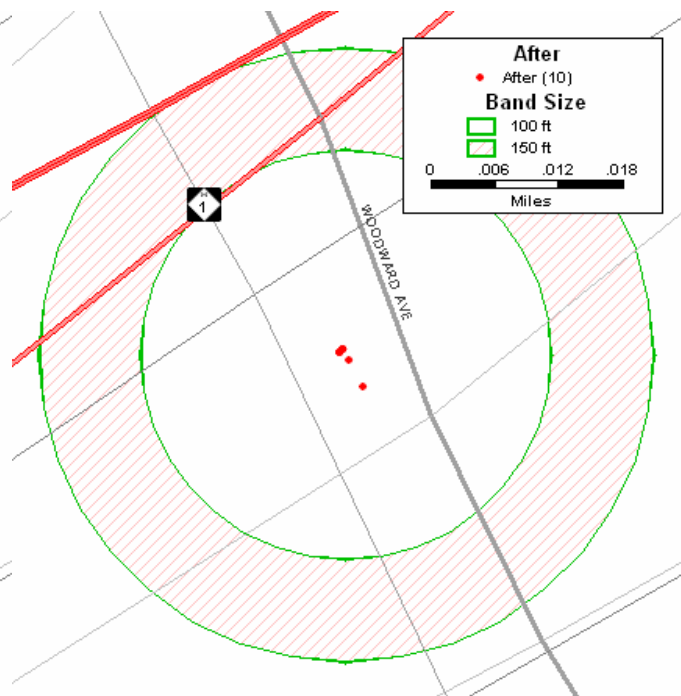
| Crash Type     | Before | %     | After | %     |
|----------------|--------|-------|-------|-------|
| Single vehicle | 1      | 3.6   | 0     | 0.0   |
| Head-on        | 0      | 0.0   | 0     | 0.0   |
| Angle          | 11     | 39.3  | 4     | 44.4  |
| Rear-end       | 7      | 25.0  | 2     | 22.2  |
| Sideswipe      | 8      | 28.6  | 2     | 22.2  |
| Other/unknown  | 1      | 3.6   | 1     | 11.1  |
| Total          | 28     | 100.0 | 9     | 100.0 |

### M1 (Woodward Avenue) and I75 Northbound

Date of Signal Optimization: September 17, 2004



1,356 days before



470 days after

| Injury Severity | Before | %     | After | %     |
|-----------------|--------|-------|-------|-------|
| Fatal           | 0      | 0.0   | 0     | 0.0   |
| A-Injury        | 0      | 0.0   | 0     | 0.0   |
| B-Injury        | 5      | 25.0  | 0     | 0.0   |
| C-Injury        | 2      | 10.0  | 1     | 10.0  |
| O-Injury        | 13     | 65.0  | 9     | 90.0  |
| Total           | 20     | 100.0 | 10    | 100.0 |

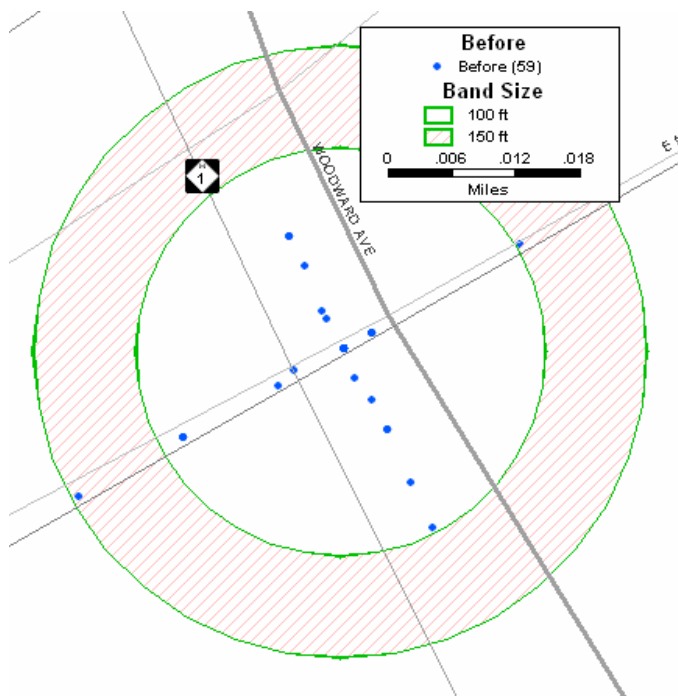
| Time of Day   | Before | %     | After | %     |
|---------------|--------|-------|-------|-------|
| 6am - 9:59am  | 1      | 5.0   | 2     | 20.0  |
| 10am - 3:59pm | 10     | 50.0  | 2     | 20.0  |
| 4pm - 7:59pm  | 3      | 15.0  | 4     | 40.0  |
| 8pm - 5:59am  | 5      | 25.0  | 2     | 20.0  |
| Unknown       | 1      | 5.0   | 0     | 0.0   |
| Total         | 20     | 100.0 | 10    | 100.0 |

| Day of Week | Before | %     | After | %     |
|-------------|--------|-------|-------|-------|
| Sunday      | 2      | 10.0  | 2     | 20.0  |
| Monday      | 3      | 15.0  | 0     | 0.0   |
| Tuesday     | 2      | 10.0  | 2     | 20.0  |
| Wednesday   | 2      | 10.0  | 1     | 10.0  |
| Thursday    | 4      | 20.0  | 1     | 10.0  |
| Friday      | 4      | 20.0  | 3     | 30.0  |
| Saturday    | 3      | 15.0  | 1     | 10.0  |
| Total       | 20     | 100.0 | 10    | 100.0 |

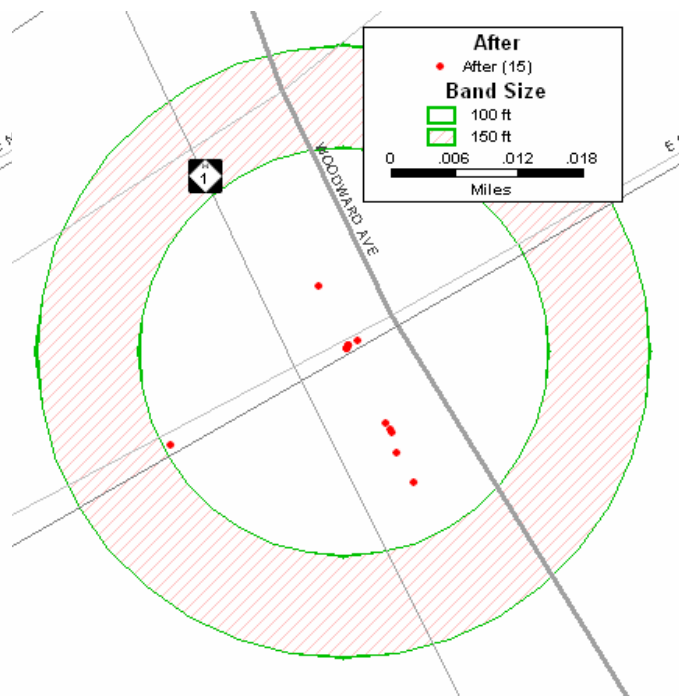
| Crash Type     | Before | %     | After | %     |
|----------------|--------|-------|-------|-------|
| Single vehicle | 1      | 5.0   | 0     | 0.0   |
| Head-on        | 0      | 0.0   | 1     | 10.0  |
| Angle          | 4      | 20.0  | 2     | 20.0  |
| Rear-end       | 8      | 40.0  | 5     | 50.0  |
| Sideswipe      | 5      | 25.0  | 1     | 10.0  |
| Other/unknown  | 2      | 10.0  | 1     | 10.0  |
| Total          | 20     | 100.0 | 10    | 100.0 |

**M1 (Woodward Avenue) and Montcalm Street**

Date of Signal Optimization: September 17, 2004



1,356 days before



470 days after

| Injury Severity | Before | %     | After | %     |
|-----------------|--------|-------|-------|-------|
| Fatal           | 0      | 0.0   | 0     | 0.0   |
| A-Injury        | 0      | 0.0   | 0     | 0.0   |
| B-Injury        | 3      | 5.1   | 1     | 6.7   |
| C-Injury        | 12     | 20.3  | 1     | 6.7   |
| O-Injury        | 44     | 74.6  | 13    | 86.7  |
| Total           | 59     | 100.0 | 15    | 100.0 |

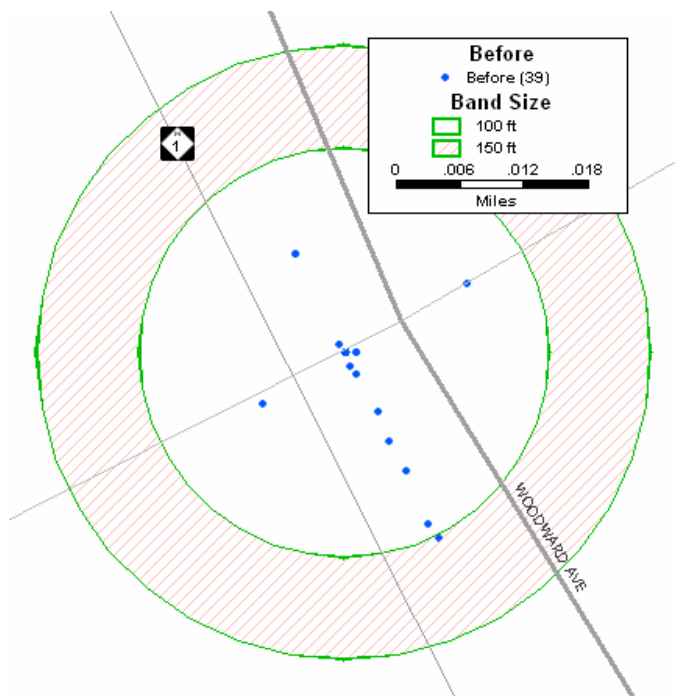
| Time of Day   | Before | %     | After | %     |
|---------------|--------|-------|-------|-------|
| 6am - 9:59am  | 6      | 10.2  | 0     | 0.0   |
| 10am - 3:59pm | 17     | 28.8  | 4     | 26.7  |
| 4pm - 7:59pm  | 14     | 23.7  | 5     | 33.3  |
| 8pm - 5:59am  | 19     | 32.2  | 6     | 40.0  |
| Unknown       | 3      | 5.1   | 0     | 0.0   |
| Total         | 59     | 100.0 | 15    | 100.0 |

| Day of Week | Before | %     | After | %     |
|-------------|--------|-------|-------|-------|
| Sunday      | 12     | 20.3  | 5     | 33.3  |
| Monday      | 6      | 10.2  | 1     | 6.7   |
| Tuesday     | 7      | 11.9  | 2     | 13.3  |
| Wednesday   | 9      | 15.3  | 3     | 20.0  |
| Thursday    | 6      | 10.2  | 1     | 6.7   |
| Friday      | 6      | 10.2  | 2     | 13.3  |
| Saturday    | 13     | 22.0  | 1     | 6.7   |
| Total       | 59     | 100.0 | 15    | 100.0 |

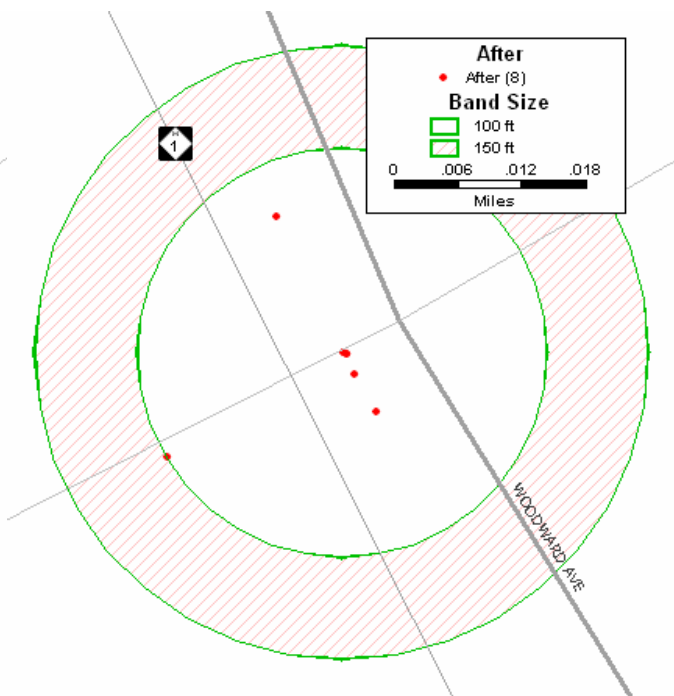
| Crash Type     | Before | %     | After | %     |
|----------------|--------|-------|-------|-------|
| Single vehicle | 2      | 3.4   | 0     | 0.0   |
| Head-on        | 2      | 3.4   | 0     | 0.0   |
| Angle          | 7      | 11.9  | 1     | 6.7   |
| Rear-end       | 27     | 45.8  | 9     | 60.0  |
| Sideswipe      | 15     | 25.4  | 4     | 26.7  |
| Other/unknown  | 6      | 10.2  | 1     | 6.7   |
| Total          | 59     | 100.0 | 15    | 100.0 |

**M1 (Woodward Avenue) and Elizabeth Street**

Date of Signal Optimization: September 17, 2004



1,356 days before



470 days after

| Injury Severity | Before | %     | After | %     |
|-----------------|--------|-------|-------|-------|
| Fatal           | 0      | 0.0   | 0     | 0.0   |
| A-Injury        | 1      | 2.6   | 0     | 0.0   |
| B-Injury        | 3      | 7.7   | 0     | 0.0   |
| C-Injury        | 6      | 15.4  | 0     | 0.0   |
| O-Injury        | 29     | 74.4  | 8     | 100.0 |
| Total           | 39     | 100.0 | 8     | 100.0 |

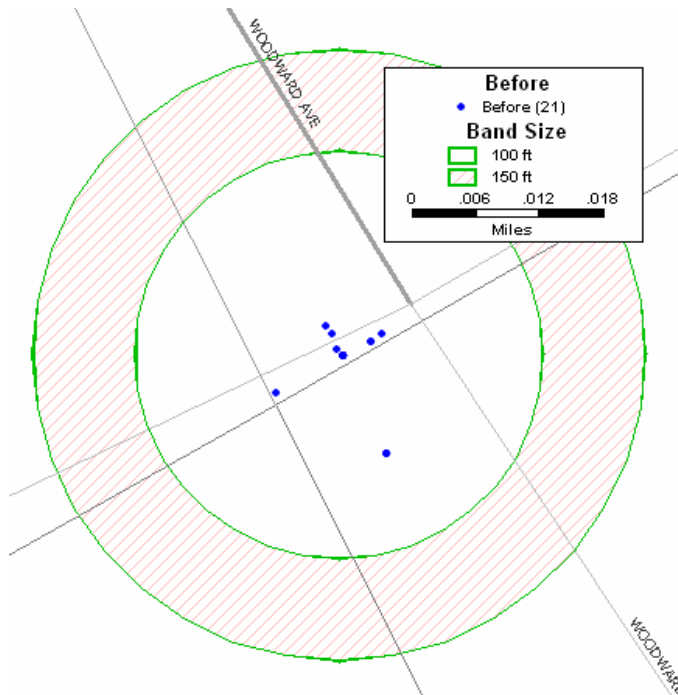
| Time of Day   | Before | %     | After | %     |
|---------------|--------|-------|-------|-------|
| 6am - 9:59am  | 5      | 12.8  | 1     | 12.5  |
| 10am - 3:59pm | 12     | 30.8  | 3     | 37.5  |
| 4pm - 7:59pm  | 8      | 20.5  | 1     | 12.5  |
| 8pm - 5:59am  | 13     | 33.3  | 3     | 37.5  |
| Unknown       | 1      | 2.6   | 0     | 0.0   |
| Total         | 39     | 100.0 | 8     | 100.0 |

| Day of Week | Before | %     | After | %     |
|-------------|--------|-------|-------|-------|
| Sunday      | 6      | 15.4  | 1     | 12.5  |
| Monday      | 2      | 5.1   | 0     | 0.0   |
| Tuesday     | 4      | 10.3  | 0     | 0.0   |
| Wednesday   | 7      | 17.9  | 2     | 25.0  |
| Thursday    | 5      | 12.8  | 2     | 25.0  |
| Friday      | 14     | 35.9  | 2     | 25.0  |
| Saturday    | 1      | 2.6   | 1     | 12.5  |
| Total       | 39     | 100.0 | 8     | 100.0 |

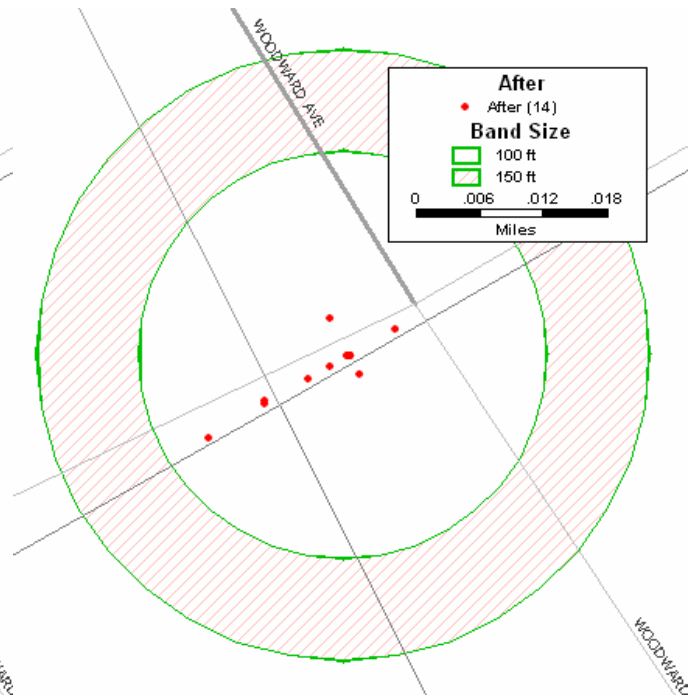
| Crash Type     | Before | %     | After | %     |
|----------------|--------|-------|-------|-------|
| Single vehicle | 2      | 5.1   | 0     | 0.0   |
| Head-on        | 1      | 2.6   | 0     | 0.0   |
| Angle          | 7      | 17.9  | 2     | 25.0  |
| Rear-end       | 18     | 46.2  | 4     | 50.0  |
| Sideswipe      | 8      | 20.5  | 1     | 12.5  |
| Other/unknown  | 3      | 7.7   | 1     | 12.5  |
| Total          | 39     | 100.0 | 8     | 100.0 |

### M1 (Woodward Avenue) and Adams Avenue

Date of Signal Optimization: September 17, 2004



1,356 days before



470 days after

| Injury Severity | Before | %     | After | %     |
|-----------------|--------|-------|-------|-------|
| Fatal           | 0      | 0.0   | 0     | 0.0   |
| A-Injury        | 2      | 9.5   | 0     | 0.0   |
| B-Injury        | 3      | 14.3  | 0     | 0.0   |
| C-Injury        | 5      | 23.8  | 3     | 21.4  |
| O-Injury        | 11     | 52.4  | 11    | 78.6  |
| Total           | 21     | 100.0 | 14    | 100.0 |

| Time of Day   | Before | %     | After | %     |
|---------------|--------|-------|-------|-------|
| 6am - 9:59am  | 2      | 9.5   | 0     | 0.0   |
| 10am - 3:59pm | 7      | 33.3  | 2     | 14.3  |
| 4pm - 7:59pm  | 3      | 14.3  | 6     | 42.9  |
| 8pm - 5:59am  | 9      | 42.9  | 6     | 42.9  |
| Unknown       | 0      | 0.0   | 0     | 0.0   |
| Total         | 21     | 100.0 | 14    | 100.0 |

| Day of Week | Before | %     | After | %     |
|-------------|--------|-------|-------|-------|
| Sunday      | 5      | 23.8  | 0     | 0.0   |
| Monday      | 3      | 14.3  | 2     | 14.3  |
| Tuesday     | 1      | 4.8   | 2     | 14.3  |
| Wednesday   | 0      | 0.0   | 6     | 42.9  |
| Thursday    | 3      | 14.3  | 2     | 14.3  |
| Friday      | 7      | 33.3  | 0     | 0.0   |
| Saturday    | 2      | 9.5   | 2     | 14.3  |
| Total       | 21     | 100.0 | 14    | 100.0 |

| Crash Type     | Before | %     | After | %     |
|----------------|--------|-------|-------|-------|
| Single vehicle | 1      | 4.8   | 1     | 7.1   |
| Head-on        | 2      | 9.5   | 0     | 0.0   |
| Angle          | 2      | 9.5   | 2     | 14.3  |
| Rear-end       | 8      | 38.1  | 2     | 14.3  |
| Sideswipe      | 4      | 19.0  | 8     | 57.1  |
| Other/unknown  | 4      | 19.0  | 1     | 7.1   |
| Total          | 21     | 100.0 | 14    | 100.0 |