## New Quiet Zone Crossing Improvement Costs New Quiet Zones Not Yet Established

|  | Installation of Flashing Lights and Gates |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Number of Installations | Cost of Installations | Annual Maintenance | Total Annual Cost |
| Year 1 | 29.3 | \$4,106,667 | \$0 | \$4,106,667 |
| Year 2 | 29.3 | \$4,106,667 | \$73,333 | \$4,180,000 |
| Year 3 | 29.3 | \$4,106,667 | \$146,667 | \$4,253,333 |
| Year 4 | 0.0 | \$0 | \$220,000 | \$220,000 |
| Year 5 | 0.0 | \$0 | \$220,000 | \$220,000 |
| Year 6 | 0.0 | \$0 | \$220,000 | \$220,000 |
| Year 7 | 0.0 | \$0 | \$220,000 | \$220,000 |
| Year 8 | 0.0 | \$0 | \$220,000 | \$220,000 |
| Year 9 | 0.0 | \$0 | \$220,000 | \$220,000 |
| Year 10 | 0.0 | \$0 | \$220,000 | \$220,000 |
| Year 11 | 0.0 | \$0 | \$220,000 | \$220,000 |
| Year 12 | 0.0 | \$0 | \$220,000 | \$220,000 |
| Year 13 | 0.0 | \$0 | \$220,000 | \$220,000 |
| Year 14 | 0.0 | \$0 | \$220,000 | \$220,000 |
| Year 15 | 0.0 | \$0 | \$220,000 | \$220,000 |
| Year 16 | 0.0 | \$0 | \$220,000 | \$220,000 |
| Year 17 | 0.0 | \$0 | \$220,000 | \$220,000 |
| Year 18 | 0.0 | \$0 | \$220,000 | \$220,000 |
| Year 19 | 0.0 | \$0 | \$220,000 | \$220,000 |
| Year 20 | 0.0 | \$0 | \$220,000 | \$220,000 |
| NPV 20 | 88.0 | \$10,777,191 | \$1,937,109 | \$12,714,301 |

New Quiet Zone Crossing Improvement Costs
New Quiet Zones Not Yet Established

| Adding Gates to Flashing Lights |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Number of Installations | Cost of Installations | nnual Maintenance | tal Annual ost |
| Year 1 | 36.3 | \$1,453,333 | \$0 | \$1,453,333 |
| Year 2 | 36.3 | \$1,453,333 | \$18,167 | \$1,471,500 |
| Year 3 | 36.3 | \$1,453,333 | \$36,333 | \$1,489,667 |
| Year 4 | 0.0 | \$0 | \$54,500 | \$54,500 |
| Year 5 | 0.0 | \$0 | \$54,500 | \$54,500 |
| Year 6 | 0.0 | \$0 | \$54,500 | \$54,500 |
| Year 7 | 0.0 | \$0 | \$54,500 | \$54,500 |
| Year 8 | 0.0 | \$0 | \$54,500 | \$54,500 |
| Year 9 | 0.0 | \$0 | \$54,500 | \$54,500 |
| Year 10 | 0.0 | \$0 | \$54,500 | \$54,500 |
| Year 11 | 0.0 | \$0 | \$54,500 | \$54,500 |
| Year 12 | 0.0 | \$0 | \$54,500 | \$54,500 |
| Year 13 | 0.0 | \$0 | \$54,500 | \$54,500 |
| Year 14 | 0.0 | \$0 | \$54,500 | \$54,500 |
| Year 15 | 0.0 | \$0 | \$54,500 | \$54,500 |
| Year 16 | 0.0 | \$0 | \$54,500 | \$54,500 |
| Year 17 | 0.0 | \$0 | \$54,500 | \$54,500 |
| Year 18 | 0.0 | \$0 | \$54,500 | \$54,500 |
| Year 19 | 0.0 | \$0 | \$54,500 | \$54,500 |
| Year 20 | 0.0 | \$0 | \$54,500 | \$54,500 |
| NPV 20 | 109 | \$3,814,006 | \$479,875 | \$4,293,881 |

## New Quiet Zone Crossing Improvement Costs New Quiet Zones Not Yet Established

| Mountable Curbs w/ Frangible Delineators |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Number of Installations | Cost of Installations | Annual Maintenance | Total Annua Cost |
| Year 1 | 7.3 | \$95,333 | \$0 | \$95,333 |
| Year 2 | 7.3 | \$95,333 | \$3,667 | \$99,000 |
| Year 3 | 7.3 | \$95,333 | \$7,333 | \$102,667 |
| Year 4 | 0.0 | \$0 | \$11,000 | \$11,000 |
| Year 5 | 0.0 | \$0 | \$11,000 | \$11,000 |
| Year 6 | 0.0 | \$0 | \$11,000 | \$11,000 |
| Year 7 | 0.0 | \$0 | \$11,000 | \$11,000 |
| Year 8 | 0.0 | \$0 | \$11,000 | \$11,000 |
| Year 9 | 0.0 | \$0 | \$11,000 | \$11,000 |
| Year 10 | 0.0 | \$0 | \$11,000 | \$11,000 |
| Year 11 | 0.0 | \$0 | \$11,000 | \$11,000 |
| Year 12 | 0.0 | \$0 | \$11,000 | \$11,000 |
| Year 13 | 0.0 | \$0 | \$11,000 | \$11,000 |
| Year 14 | 0.0 | \$0 | \$11,000 | \$11,000 |
| Year 15 | 0.0 | \$0 | \$11,000 | \$11,000 |
| Year 16 | 0.0 | \$0 | \$11,000 | \$11,000 |
| Year 17 | 0.0 | \$0 | \$11,000 | \$11,000 |
| Year 18 | 0.0 | \$0 | \$11,000 | \$11,000 |
| Year 19 | 0.0 | \$0 | \$11,000 | \$11,000 |
| Year 20 | 0.0 | \$0 | \$11,000 | \$11,000 |
| NPV 20 | 22 | \$250,185 | \$96,855 | \$347,040 |


| New Quiet Zone Crossing Improvement Costs New Quiet Zones Not yet Established |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Photo-Enforcement |  |  |  |  |
|  | Number of Installations | Installations and Baseline | Annual Maintenance | Total Annual Cost |
| Year 1 | 0.7 | \$31,667 | \$0 | \$31,667 |
| Year 2 | 0.7 | \$31,667 | \$10,267 | \$41,933 |
| Year 3 | 0.7 | \$31,667 | \$20,533 | \$52,200 |
| Year 4 | 0.0 | \$0 | \$30,800 | \$30,800 |
| Year 5 | 0.0 | \$0 | \$30,800 | \$30,800 |
| Year 6 | 0.0 | \$0 | \$29,800 | \$29,800 |
| Year 7 | 0.0 | \$0 | \$28,800 | \$28,800 |
| Year 8 | 0.0 | \$0 | \$27,800 | \$27,800 |
| Year 9 | 0.0 | \$0 | \$27,800 | \$27,800 |
| Year 10 | 0.0 | \$0 | \$27,800 | \$27,800 |
| Year 11 | 0.0 | \$0 | \$27,800 | \$27,800 |
| Year 12 | 0.0 | \$0 | \$27,800 | \$27,800 |
| Year 13 | 0.0 | \$0 | \$27,800 | \$27,800 |
| Year 14 | 0.0 | \$0 | \$27,800 | \$27,800 |
| Year 15 | 0.0 | \$0 | \$27,800 | \$27,800 |
| Year 16 | 0.0 | \$0 | \$27,800 | \$27,800 |
| Year 17 | 0.0 | \$0 | \$27,800 | \$27,800 |
| Year 18 | 0.0 | \$0 | \$27,800 | \$27,800 |
| Year 19 | 0.0 | \$0 | \$27,800 | \$27,800 |
| Year 20 | 0.0 | \$0 | \$27,800 | \$27,800 |
| NPV 20 | 2.0 | \$83,103 | \$253,669 | \$336,773 |


| New Quiet Zone Crossing Improvement Costs New Quiet Zones Not yet Established |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Medians OR Four-Quadrant Gates |  |  |  |  |
|  | Number of Installations | Installations and Baseline | Annual Maintenance | Total Annual Cost |
| Year 1 | 4.7 | \$296,333 | \$0 | \$296,333 |
| Year 2 | 4.7 | \$296,333 | \$7,000 | \$303,333 |
| Year 3 | 4.7 | \$296,333 | \$14,000 | \$310,333 |
| Year 4 | 0.0 | \$0 | \$21,000 | \$21,000 |
| Year 5 | 0.0 | \$0 | \$21,000 | \$21,000 |
| Year 6 | 0.0 | \$0 | \$21,000 | \$21,000 |
| Year 7 | 0.0 | \$0 | \$21,000 | \$21,000 |
| Year 8 | 0.0 | \$0 | \$21,000 | \$21,000 |
| Year 9 | 0.0 | \$0 | \$21,000 | \$21,000 |
| Year 10 | 0.0 | \$0 | \$21,000 | \$21,000 |
| Year 11 | 0.0 | \$0 | \$21,000 | \$21,000 |
| Year 12 | 0.0 | \$0 | \$21,000 | \$21,000 |
| Year 13 | 0.0 | \$0 | \$21,000 | \$21,000 |
| Year 14 | 0.0 | \$0 | \$21,000 | \$21,000 |
| Year 15 | 0.0 | \$0 | \$21,000 | \$21,000 |
| Year 16 | 0.0 | \$0 | \$21,000 | \$21,000 |
| Year 17 | 0.0 | \$0 | \$21,000 | \$21,000 |
| Year 18 | 0.0 | \$0 | \$21,000 | \$21,000 |
| Year 19 | 0.0 | \$0 | \$21,000 | \$21,000 |
| Year 20 | 0.0 | \$0 | \$21,000 | \$21,000 |
| NPV 20 | 14.0 | \$777,672 | \$184,906 | \$962,578 |

## New Quiet Zone Crossing Improvement Costs New Quiet Zones Established Post October 9, 1996

## Adding Gates to Flashing Lights

|  | Number of Installations | Cost of Installations | Annual <br> Maintenance | Total Annual Cost |
| :---: | :---: | :---: | :---: | :---: |
| Year 1 | 16.3 | \$653,333 | \$0 | \$653,333 |
| Year 2 | 16.3 | \$653,333 | \$8,167 | \$661,500 |
| Year 3 | 16.3 | \$653,333 | \$16,333 | \$669,667 |
| Year 4 | 0.0 | \$0 | \$24,500 | \$24,500 |
| Year 5 | 0.0 | \$0 | \$24,500 | \$24,500 |
| Year 6 | 0.0 | \$0 | \$24,500 | \$24,500 |
| Year 7 | 0.0 | \$0 | \$24,500 | \$24,500 |
| Year 8 | 0.0 | \$0 | \$24,500 | \$24,500 |
| Year 9 | 0.0 | \$0 | \$24,500 | \$24,500 |
| Year 10 | 0.0 | \$0 | \$24,500 | \$24,500 |
| Year 11 | 0.0 | \$0 | \$24,500 | \$24,500 |
| Year 12 | 0.0 | \$0 | \$24,500 | \$24,500 |
| Year 13 | 0.0 | \$0 | \$24,500 | \$24,500 |
| Year 14 | 0.0 | \$0 | \$24,500 | \$24,500 |
| Year 15 | 0.0 | \$0 | \$24,500 | \$24,500 |
| Year 16 | 0.0 | \$0 | \$24,500 | \$24,500 |
| Year 17 | 0.0 | \$0 | \$24,500 | \$24,500 |
| Year 18 | 0.0 | \$0 | \$24,500 | \$24,500 |
| Year 19 | 0.0 | \$0 | \$24,500 | \$24,500 |
| Year 20 | 0.0 | \$0 | \$24,500 | \$24,500 |
| NPV 20 | 49 | \$1,714,553 | \$215,724 | \$1,930,277 |

