

APPENDIX F: PAVEMENT CONDITION INDEX AND PAVEMENT MANAGEMENT ANALYSIS – HAMPSHIRE COUNTY

Pavement inventory and distress data was collected by PVPC staff during the month of November 2006. This data was applied to the pavement management software package, "The Road Manager." The Road Manager generates a pavement condition index (PCI) for each inventoried roadway segment of Route 112 using distress data collected by PVPC staff. Deduct values assigned to each type of distress based on severity and extents were applied to generate a PCI for each roadway segment. The PCI is measured from 0 to 100, with 100 being an excellent condition and zero being poor condition. The PCI values generated are grouped into PCI category ranges which are defined by the user depending on the type and functional class of each segment.

PCI Listing of Roadway Segments in Ascending Order of PCI

| Community | Roadway Name | Segment Starting Point | Length | Segment Ending Point | PCI |
|-------------|----------------------|---------------------------|--------|----------------------|-----|
| Cummington | GROUT ROAD | 0.06 MILES | 2270 | WEST CUMMINGTON ROAD | 41 |
| Cummington | BRYANT ROAD | MARINE CORPS LEAGUE HIGHW | 5386 | GROUT ROAD | 44 |
| Cummington | WEST CUMMINGTON ROAD | GROUT ROAD | 3802 | HOUSE 338 | 47 |
| Huntington | WORTHINGTON ROAD | RUSSELL ROAD | 845 | FISKE AVENUE | 47 |
| Huntington | WORTHINGTON ROAD | MONTGOMERY ROAD | 9926 | HOUSE #191 | 49 |
| Worthington | DINGLE ROAD | CUMMINGTON ROAD | 6283 | CLARK ROAD | 51 |
| Cummington | WEST CUMMINGTON ROAD | HOUSE 338 | 7234 | WORTHINGTON T.L. | 55 |
| Worthington | CLARK ROAD | DINGLE ROAD | 3696 | WILLIAMSBURG ROAD | 59 |
| Cummington | GROUT ROAD | BRYANT ROAD | 317 | 0.06 MILES | 61 |
| Huntington | WORTHINGTON ROAD | POND BROOK ROAD | 9029 | 1.7 MILES | 61 |
| Cummington | MARINE CORPS | GOSHEN T.L. | 15946 | THAYER CORNER ROAD | 64 |
| Goshen | MARINE CORPS HWY | SEARS ROAD | 6706 | CUMMINGTON T.L. | 64 |
| Worthington | CUMMINGTON | CUMMINGTON T.L. | 1056 | DINGLE ROAD | 64 |
| Huntington | WORTHINGTON ROAD | 1.7 MILES | 17318 | WORTHINGTON T.L. | 66 |
| Worthington | WILLIAMSBURG | CLARK ROAD | 3960 | ELDERBERRY LANE | 74 |
| Goshen | CAPE STREET | MOLLISON HILL ROAD | 370 | .07 MILES | 75 |
| Goshen | CAPE STREET | .07 MILES | 211 | .04 MILES | 75 |
| Goshen | CAPE STREET | .04 MILES | 739 | .14 MILES | 75 |
| Goshen | CAPE STREET | .14 MILES | 581 | .11 MILES | 75 |
| Goshen | CAPE STREET | .11 MILES | 4330 | .82 MILES | 75 |
| Goshen | CAPE STREET | .82 MILES | 1003 | .19 MILES | 75 |
| Goshen | CAPE STREET | .19 MILES | 2112 | ASHFIELD T.L. | 75 |
| Huntington | WORTHINGTON ROAD | PLEASANT STREET | 3221 | HOUSE #46 | 76 |
| Cummington | MARINE CORPS | MAIN STREET | 5333 | BRYANT ROAD | 80 |
| Worthington | WILLIAMSBURG | ELDERBERRY LANE | 792 | OLD NORTH ROAD | 80 |
| Goshen | MARINE CORPS HWY | CAPE STREET | 7762 | SEARS ROAD | 81 |
| Cummington | MARINE CORPS | THAYER CORNER ROAD | 1478 | MAIN STREET | 83 |
| Huntington | WORTHINGTON ROAD | HOUSE #46 | 3274 | MONTGOMERY ROAD | 85 |
| Huntington | WORTHINGTON ROAD | HOUSE #191 | 792 | POND BROOK ROAD | 87 |
| Huntington | WORTHINGTON ROAD | FISKE AVENUE | 475 | PLEASANT STREET | 89 |
| Goshen | CAPE STREET | MARINE CORPS LEAGUE | 322 | WILLIAMS DRIVE | 95 |
| Goshen | CAPE STREET | WILLIAMS DRIVE | 522 | MOLLISON HILL ROAD | 95 |
| Worthington | HUNTINGTON ROAD | WILLIAMSBURG ROAD | 31310 | HUNTINGTON T.L. | 100 |

Source: PVPC

PCI = Pavement Condition Index

Length of segment is in Feet

Estimated Improvements Costs

| Name | From | To | Length (Ft.) | Orig PCI | Repaired PCI | Benefit Value | Recommended Repair | Cost |
|--------------------|---------------------|----------------------|--------------|----------|-----------------|---------------|--------------------|------------------------------|
| Goshen | | Average PCI | | 59 | Community Total | | | |
| MARINE CORPS LEA | SEARS ROAD | CUMMINGTON T.L. | 6706 | 64 | 99 | 161 | Rehabilitation | \$1,919,888 |
| MARINE CORPS LEA | CAPE STREET | SEARS ROAD | 7762 | 81 | 99 | 100 | Preventative | \$178,827 |
| CAPE STREET | MOLLISON HILL ROAD | .07 MILES | 370 | 75 | 99 | 53 | Preventative | \$8,017 |
| CAPE STREET | .07 MILES | .04 MILES | 211 | 75 | 99 | 53 | Preventative | \$4,572 |
| CAPE STREET | .04 MILES | .14 MILES | 739 | 75 | 99 | 53 | Preventative | \$16,012 |
| CAPE STREET | .14 MILES | .11 MILES | 581 | 75 | 99 | 53 | Preventative | \$12,588 |
| CAPE STREET | .11 MILES | .82 MILES | 4330 | 75 | 99 | 53 | Preventative | \$93,817 |
| CAPE STREET | .82 MILES | .19 MILES | 1003 | 75 | 99 | 53 | Preventative | \$21,732 |
| CAPE STREET | .19 MILES | ASHFIELD T.L. | 2112 | 75 | 99 | 53 | Preventative | \$45,760 |
| CAPE STREET | MARINE CORPS LEAGUE | WILLIAMS DRIVE | 322 | 95 | 95 | 0 | No Immediate | \$0 |
| CAPE STREET | WILLIAMS DRIVE | MOLLISON HILL ROAD | 522 | 95 | 95 | 0 | No Immediate | \$0 |
| Cummington | | | | | | | | |
| GROUT ROAD | 0.06 MILES | WEST CUMMINGTON ROAD | 2270 | 41 | 99 | 171 | Reconstruction | \$166,467 |
| MARINE CORPS | GOSHEN T.L. | THAYER CORNER ROAD | 15946 | 64 | 99 | 161 | Rehabilitation | \$425,227 |
| BRYANT ROAD | MARINE CORPS LEAGUE | GROUT ROAD | 5386 | 44 | 99 | 159 | Reconstruction | \$430,880 |
| WEST CUMMINGTON | GROUT ROAD | HOUSE 338 | 3802 | 47 | 99 | 148 | Reconstruction | \$253,467 |
| WEST CUMMINGTON | HOUSE 338 | WORTHINGTON T.L. | 7234 | 55 | 99 | 126 | Reconstruction | \$482,267 |
| GROUT ROAD | BRYANT ROAD | 0.06 MILES | 317 | 61 | 99 | 113 | Reconstruction | \$25,360 |
| MARINE CORPS | MAIN STREET | BRYANT ROAD | 5333 | 80 | 99 | 101 | Preventative | \$106,660 |
| MARINE CORPS | THAYER CORNER ROAD | MAIN STREET | 1478 | 83 | 99 | 98 | Preventative | \$29,560 |
| Worthington | | Average PCI | | 70 | Community Total | | | |
| CUMMINGTON ROAD | CUMMINGTON T.L. | DINGLE ROAD | 1056 | 64 | 99 | 161 | Rehabilitation | \$23,467 |
| DINGLE ROAD | CUMMINGTON ROAD | CLARK ROAD | 6283 | 51 | 99 | 136 | Reconstruction | \$418,867 |
| CLARK ROAD | DINGLE ROAD | WILLIAMSBURG ROAD | 3696 | 59 | 99 | 117 | Reconstruction | \$246,400 |
| WILLIAMSBURG ROAD | CLARK ROAD | ELDBERRY LANE | 3960 | 74 | 99 | 108 | Preventative | \$72,600 |
| WILLIAMSBURG ROAD | ELDBERRY LANE | OLD NORTH ROAD | 792 | 80 | 99 | 100 | Preventative | \$15,840 |
| WORTHINGTON ROAD | WILLIAMSBURG ROAD | HUNTINGTON T.L. | 31310 | 100 | 95 | 0 | No Immediate | \$0 |
| Huntington | | Average PCI | | 78 | Community Total | | | |
| WORTHINGTON ROAD | 1.7 MILES | WORTHINGTON T.L. | 17318 | 66 | 99 | 159 | Rehabilitation | \$536,565 |
| WORTHINGTON ROAD | RUSSELL ROAD | FISKE AVENUE | 845 | 47 | 99 | 148 | Reconstruction | \$442,571 |
| WORTHINGTON ROAD | MONTGOMERY ROAD | HOUSE #191 | 9926 | 49 | 99 | 145 | Reconstruction | \$794,080 |
| WORTHINGTON ROAD | POND BROOK ROAD | 1.7 MILES | 9029 | 61 | 99 | 115 | Reconstruction | \$692,223 |
| WORTHINGTON ROAD | PLEASANT STREET | HOUSE #46 | 3221 | 76 | 99 | 108 | Preventative | \$59,052 |
| WORTHINGTON ROAD | HOUSE #46 | MONTGOMERY ROAD | 3274 | 85 | 99 | 95 | Preventative | \$60,023 |
| WORTHINGTON ROAD | HOUSE #191 | POND BROOK ROAD | 792 | 87 | 99 | 93 | Preventative | \$15,180 |
| WORTHINGTON ROAD | FISKE AVENUE | PLEASANT STREET | 475 | 89 | 99 | 91 | Preventative | \$9,896 |
| | | Average PCI | | 71 | Community Total | | | |
| Grand Total | | | | | | | | \$5,377,069 |
| | | | | | | | | Average PCI for the Corridor |
| | | | | | | | | 70 |