

APPENDIX H: ROADWAY CAPACITY ANALYSIS – HAMPSHIRE COUNTY

The capacity of a roadway is defined as the maximum number of vehicles that can pass a point on a roadway per hour. For two-lane highways the capacity has been determined to be 3,200 vehicles per hour in both directions. To determine how close to capacity a roadway is, the peak hour volume is divided by the capacity to produce the volume/capacity or “v/c” ratio. A v/c ratio equal to 1.00 indicates a roadway operating at maximum performing capacity. In general, a lower v/c ratio reflects a less congested roadway and therefore a more enjoyable route to drive. The v/c ratio for Route 112 in Hampshire County is described in Table 6.8.

Volume/Capacity Ratio in Hampshire County

| Street Name | Starting Point | Ending Point | Volume/Capacity Ratio |
|----------------------------------|----------------------------------|----------------------------|--------------------------|
| Cape street | Ashfield Town Line | Route 9 (USMC HWY) | 0.05 |
| USMC League HWY | Cape Street Goshen | Westfield River Bridge | 0.1 |
| Berkshire Trail | Westfield River Bridge | Bryant road | 0.09 |
| Grout Road/Bryant Road | Route 9 (Berkshire Trail) | Five Corners (Bryant Road) | 0.01 |
| Clark Road / W. Cummington Road | Five Corners (Cummington) | Williamsburg Road | 0.01 |
| Huntington Road | Clark Road (Route 143/112 Split) | Kinnie Brook Road | 0.03 |
| Worthington Road/Huntington Road | Kinnie Brook Road (Worthington) | Route 66 (Pond Brook Road) | 0.05 |
| Worthington Road | Route 66 (Pond Brook Road) | Montgomery Road | 0.06 |
| Worthington Road | Montgomery Road | Route 20 (Huntington) | 0.07 |

Source: PVPC

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