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GORHAM

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Comparison of Transportation effects between Alternatives carried forward in the ACOE Phase I signoff. Alternatives 1c, 1e, 6d (Preferred Alternative) and No Build for the LEDPA Determination

The ACOE “basic project purpose of the project is to improve traffic movements through the Town of Gorham along Routes 4, 25, 114, and 202 in order to improve public safety and relieve traffic congestion. Improvements will accommodate current and future traffic volumes.”

Additional detailed analysis of some of the categories in Table 2-1 of the EA has been undertaken to support Alternative 6d as the Least Environmentally Damaging Practicable Alternative for satisfying the ACOE basic project purpose and to show that Alternatives 1c and 1e (the southwesterly bypass alternatives) and the No Build do not perform satisfactorily for meeting the ACOE basic project purpose.

Revised, new or added information in Table 2-1 (attached) are shown in red. The cells highlighted in yellow in Table 2-1 will be the principal categories for comparing the transportation benefits between the Alternatives.

The Phase I sign-off carried the following alternatives forward for LEDPA determination: the No-Build Alternative and build alternatives 1c, 1e and 6d.

The No-Build Alternative would not satisfy the ACOE basic project purpose for improving public safety and relieving traffic congestion in the Gorham Village area for the current or future traffic. The No Build has a current and future LOS of F at the Route 25/114 intersection, does not improve any of the high crash locations and therefore should not be considered a LEDPA candidate.

Although Alternative 1c would reduce current and future traffic congestion in the Gorham Village area, the level of service at the Routes 25/114 intersection would degrade from the present LOS E to LOS F. Alternative 1c would also have significant impacts to numerous new homes recently constructed, discovered through a recent field review, in the Hartwood Subdivision adjacent to the Route 114 connection of Alternative 1c { 4 new homes with one constructed this past summer plus the loss of approximately 18 house lots in a recently approved subdivisioin}. Because Alternative 1c would not achieve an acceptable level of service in the design year and its significant impact to newly constructed homes in the Hartwood Subdivision, it does not satisfy the ACOE basic project purpose and should be dismissed and no longer considered a viable LEDPA candidate.

Alternative 1e reduces current and future traffic congestion in the Gorham Village area as compared to the No Build Alternative and reduces the crash frequency at 10 of the 12 High Crash Locations (HCLs). The amount of future traffic that would remain at the Routes 25/114 intersection from Alternative 1e would result in an unacceptable LOS of F with the incorporation of Transportation Systems Management (TSM) options that are consistent with the Town of Gorham's Downtown Master Plan. Alternative 1e would reduce the crash rate at 10 of the 12 HCLs by approximately 11% over the No Build Alternative. Because Alternative 1e would not achieve an acceptable level of service in the design year, it does not satisfy the ACOE basic project purpose and should be dismissed and no longer considered a viable LEDPA candidate.

Alternative 6d reduces current and future traffic congestion in the Gorham Village area and reduces the crash frequency at 10 of the 12 HCLs. In comparing Alternative 1e to Alternative 6d, Alternative 6d diverts 12,570 vehicles per day (including 585 trucks) as compared to 5,690 vehicles (including 265 trucks) for Alternative 1e from the Gorham Village; in the design year Alternative 6d has a LOS D with TSM as compared to a LOS F with TSM for Alt. 1e for the Route 25/114 intersection; and Alternative 6d is superior at reducing the crash frequency, 25% reduction, over Alternative 1e, 11% reduction at the same 10 High Crash Locations.

Therefore Alternative 6d does satisfy the ACOE basic project purpose for accommodating current and future traffic volumes (LOS D vs. LOS F), is better at relieving traffic congestion in the Gorham Village area (diverts 12,570 vehicles vs. 5,690 vehicles), is a better performer in reducing crash frequency (25% reduction vs. 11% reduction) and diverting large trucks (585 trucks vs. 265 trucks), thereby improving public safety and should therefore be identified as the LEDPA alternative for the Gorham Bypass Study.