CIP 19: Loudon Road Corridor Improvements Project X-A003(689) NHDOT #28053

City of Concord Engineering Services Division July 2016

| | Alternative Comparison Matrix | | |
|-------------------------------------|--|--|---|
| | 4-Lane Repave Only | 4-Lane Access Management (HSIP) | 3-Lane Conversion (HSIP) |
| Comparative Factors | Repave only | Repave existing pavement and add: select sidewalk and crosswalk improvements; select driveway closures or narrowing | Repave existing pavement and restripe to three lanes, one in each direction with central left turn lane and shoulders (Alternative as approved 2/11/2014) |
| Safety (Primary Project Purpose) | | | |
| High Vehicle Crash Rate | High vehicle crash rate | High vehicle crash rate No significant improvement | Significant improvement |
| Elevated Speeds/Weaving Traffic | No change | No change | Reduced high-end speeds; No weaving |
| Pedestrians Crossing Multiple Lanes | No change | No change | Single lane crossings |
| Frequent Bicycle Sidewalk Use | No change | No change | Added bike lane |
| Separation: Vehicle-to-vehicle | No change | No change | Significant increase |
| Separation: Vehicle-to-bicycle | No change | No change | Significant increase |
| Separation: Vehicle-to-pedestrian | No change | No change | Significant increase |
| Traffic Operational Factors | | | |
| Corridor Capacity | No change: at/over capacity at intersections | No change: at/over capacity at intersections | No change: at/over capacity at intersections |
| Delays - Through traffic | No change | No change | No significant change |
| Delays - Left turn driveway traffic | No change | No change | No change |
| Delays - Intersections | No change | No change | No change |
| Overall Speeds | No change | No change | Slight decrease |
| Complete Streets Compatible | No | No | Yes |
| | | | |
| Consistent with Master Plan | No | No | Yes |
| Liveability | No change | No change | Increased separation between vehicles, pedestrians and bicycles; controlled speeds; reduced noise |
| Aesthetics | No change | Small improvement for pedestrians | Small improvement for pedestrians and bicyclists |
| Property Impacts | None | Minor Sidewalk and driveway work | Minor sidewalk and driveway work; bus pullouts |
| Business Driveway Access | No change | No significant change | No significant change |
| Implementation Feasibility | Simple repaving | Minor work near property frontages | Minor work near property frontages |
| Implementation Cost | | | |
| Implementation Cost | \$4 200 000 | \$1.450.000 | \$1,000,000 |
| Total Cost | \$1,200,000 | \$1,450,000 \$120,000 | \$1,600,000 |
| HSIP funding potential | \$0 | \$120,000 | \$1,440,000 |
| Available Funds | \$70,000 \$1,120,000 | \$160,000 \$1,170,000 | \$160,000 |
| Additional Funding Needed | \$1,130,000 | \$1,170,000 | \$0 |
| Schedule | Fall 2016 | Spring 2017 | Spring 2017 |

Notes

HSIP - Highway Safety Improvement Program (90% Federal/10% Local Match)

| Very Positive | |
|---------------|--|
| Positive | |
| Neutral | |
| Negative | |
| Very Negative | |