



## **DRAFT: Alternative 13 / Combined Alternative: TDM, Interstate-Local-Regional-Bus, Land Use**

This Combined Alternative includes several individual alternatives that were examined separately as part of the Portland Area Mainline Study. This Combined Alternative includes the following individual alternatives:

- Alternative 2 – New/Expanded Transportation Demand Management (TDM) Programs
- Alternative 4 – Public Transportation: New or Improved Interstate Bus Service
- Alternative 5a – Public Transportation: Improved Regional Bus Service
- Alternative 5b – Public Transportation: New or Improved Local Bus Service
- Alternative 8 – Land Use

Transportation Demand Management (TDM) programs provide tools to commuting travelers to reduce the demand for transportation, i.e., reduce the number of vehicles on the road. These tools include ride share programs, park and ride lots, and work from home opportunities.

The primary interstate bus providers in the study area are Concord Coach Lines and Greyhound. Both Concord Coach Lines and Greyhound provide interstate bus service from Maine to Boston and New York. In this alternative, practicable system improvements were made including increased service and additional transit infrastructure (including buses and parking).

Regional bus providers included in this alternative are the ZOOM Bus (Biddeford - Portland) and the METRO Breez (Portland - Brunswick). In this alternative, improvements including more frequent service, and implementation of a bus rapid transit type system along key corridors were included.

Local bus providers included in this alternative are Greater Portland METRO and City of South Portland Bus Service. In this alternative, more frequent service and implementation of a bus rapid transit type system along key corridors were included.

An alternative land use pattern of growth and development that was originally identified and quantified under the Gorham East-West Corridor Study<sup>1</sup> was used. This land use provided allocation of current population and employment forecasts into specific growth areas within the Portland Area Comprehensive Transportation System (PACTS) region<sup>2</sup>. These allocations were based on a modified distribution of population and employment growth designated as the Urban and Rural form.

This Combined Alternative was evaluated to determine the following:

---

<sup>1</sup> Maine Turnpike Authority, *Gorham East-West Corridor Feasibility Study*, (HNTB, March 2010)

<sup>2</sup> Ibid.

- Changes to overall transit ridership based on the combined effect of the aforementioned alternatives; and
- Change in vehicular demand on the Maine Turnpike in the Portland Area.
- Estimates of reduced travel demand from alternative land use.

**Findings:** The estimated number of vehicles that could be reduced from the peak hour traffic on the Maine Turnpike in the Portland area with the Combined Alternative is 107. With this reduction, the volume to capacity ratio would still be greater than one in 2040 (1.34). Therefore, this alternative does not address identified capacity issues on the Maine Turnpike.

This alternative was evaluated against several Measures of Effectiveness (MOEs), which are summarized in the Alternatives Evaluation Matrix dated May 31, 2018. The key findings from that matrix for this alternative are as follows:

**Key Benefits:** The key benefits of Alternative 13 / Combined Alternative are the following:

- Anticipated crash rate reduction of 2.1% on the Maine Turnpike;
- An expected reduction of approximately 107 vehicles during the peak hour;
- 4.6% reduction in regional vehicle miles traveled;
- 4.7% reduction in regional vehicle hours traveled;
- Increases Portland area transit ridership by an estimated 416 trips; and
- A reduction of 60.3 miles of roadway in the region that are near or over capacity;

**Key Impacts:** The key impacts and challenges of Alternative 13 / Combined Alternative are the following:

- Has potential wetland impacts;
- Has a volume to capacity ratio (v/c) that is still greater than one (1.34) on the Maine Turnpike;
- Potential for lost revenue on Maine Turnpike; and
- Timeframe to fully implement is unknown. Local municipalities would need to adopt aggressive land use and zoning changes.