



August 29, 2024

Subject: Gorham Connector Project  
Summary of Traffic Forecasting Approach

Dear Reader:

Enclosed is traffic data collected as part of the Gorham Connector Project. The below summary provides additional insight into how these traffic counts are used in the development of traffic forecasts for the project.

Traffic forecasts for the current Gorham Connector alternative were developed using municipal demographic information developed as part of the Portland Area Comprehensive Transportation System (PACTS) Travel Demand Model (TDM)<sup>1</sup>. This model estimates current and future vehicular and person travel throughout the PACTS region and examines regional travel. The model reflects the geographic distribution and densities of residential, commercial, governmental, and recreational development as forecast by Greater Portland Council of Governments (GPCOG) and municipal staff. The model accounts for the factors that affect a person's choice of travel mode (either private vehicle, transit, or walking) and selection of a travel path (to avoid traffic congestion delays).

Traffic forecasts were developed for fall daily and PM peak hours for the Gorham Connector alternative to replicate peak and daily corridor conditions. Historically, fall conditions most closely represent the design hour volume, in this case most closely modeled to the 30th highest hour – an industry standard measure used for traffic volume forecasting. Similarly, PM peak hour turning movement volumes, historically representing the 30th highest hour travel conditions (also known as design hour volumes) were developed to be used for level of service analysis to support intersection and roadway design.

Available traffic data was used to support ongoing calibration and development of the traffic forecasts and analysis. Traffic counts and data were collected within the municipalities of Gorham, Scarborough, South Portland, and Westbrook, consistent with the Study Area for the Gorham Connector. The MTA authorized HNTB to gather automatic traffic recorder (ATR) and peak period turning movement count (TMC) data at the locations described on the following page.

<sup>1</sup> Data were calculated from a predictive travel demand model that was specifically developed for Connect 2045, the long-range transportation plan for the PACTS urbanized area. Any use of the model and its data does not suggest that GPCOG/PACTS has reviewed the data or assumptions therein nor does it indicate GPCOG/PACTS involvement in and/or support for a particular project.

Count Location	Count Date (2018)	Count Date (2021)	Count Date (2022)
County Rd/Burnham Rd AM	-	-	5/19/2022
County Rd/Burnham Rd PM	10/17/2018	-	5/18/2022
Rt 22 (County Rd)/Spring St AM	-	-	5/19/2022
Rt 22 (County Rd)/Spring St PM	10/25/2018	2/4/2021	5/18/2022
Cummings Rd/Running Hill Rd AM	-	10/13/2021	5/18/2022
Cummings Rd/Running Hill Rd PM	10/23/2018	10/12/2021	5/17/2022
Gannet (N) AM	-	-	5/17/2022
Gannet (N) PM	-	-	5/16/2022
Gannet (S) AM	-	-	5/17/2022
Gannet (S) PM	-	-	5/16/2022
Overlap (E) AM	-	-	5/19/2022
Overlap (E) PM	-	-	5/18/2022
Overlap (W) AM	-	-	5/17/2022
Overlap (W) PM	-	-	5/16/2022
Rt 112/ Rt 114 (Roundabout) AM	-	-	5/19/2022
Rt 112/ Rt 114 (Roundabout) PM	10/16/2018	-	5/18/2022
Rt 114 (Gorham Rd)/Payne Rd AM	-	-	5/18/2022
Rt 114 (Gorham Rd)/Payne Rd PM	10/24/2018	1/28/2021	5/17/2022
Rt 114 (Gorham Rd)/Running Hill Rd/Larrabee Farm Rd AM	-	-	5/18/2022
Rt 114 (Gorham Rd)/Running Hill Rd/Larrabee Farm Rd PM	10/23/2018	-	5/17/2022
Saco St/Rt 22 (County Rd) AM	-	-	5/17/2022
Saco St/Rt 22 (County Rd) PM	10/18/2018	-	5/16/2022
Rt 22 (County Rd)/Rt 114 (South St)/ Blue Ledge Rd AM	-	11/15/2021	-
Rt 22 (County Rd)/Rt 114 (South St)/ Blue Ledge Rd PM	10/17/2018	1/26/2021	-
Rt 22 (County Rd)/Rt 114 (Gorham Rd) PM	10/18/2018	-	-
Rt 114 (Gorham Rd)/Saco St PM	10/18/2018	-	-
Payne Rd/Cummings Rd PM	10/24/2018	-	-
Rt 22 (County Rd) Segment AM	-	10/14/2021	-
Rt 22 (County Rd) Segment PM	-	10/13/2021	-

Additional traffic data will be collected to support ongoing calibration of the PACTS TDM specifically for the Gorham Connector forecasts, and to support an update to the 2021 Traffic Forecasts and Analysis Summary Memorandum.

Respectfully,

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Acting Deputy Executive Director

Enclosure: 2018, 2021 and 2022 Traffic Count Data

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