CORRIDOR BRIEFING

INTERSTATE 84

CONGESTION MANAGEMENT PROCESS

Prepared by: Western Connecticut Council of Governments

What is CMP

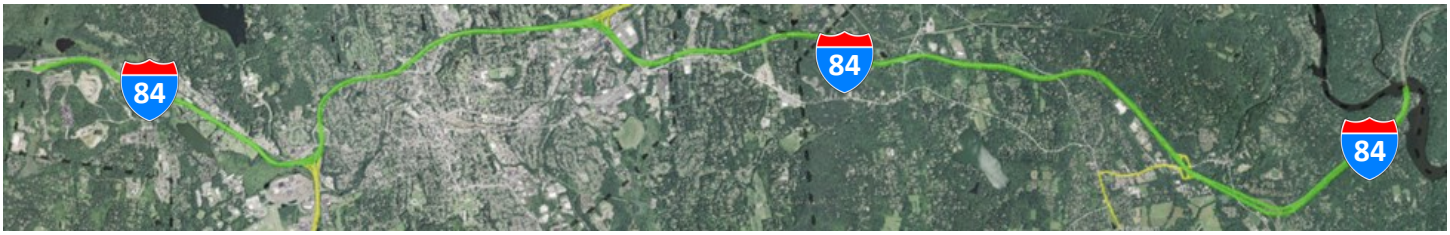
The **Congestion Management Process** (CMP) is a federal requirement that evaluates the performance of the transportation system in the Western Connecticut Council of Governments (WestCOG) region.

Traffic congestion, slow speeds, and delays are a common complaint and have been recognized as a drain on the region's economy. Improving mobility within the region, particularly along congested corridors, can enhance economic opportunities.

The purpose of the 2015 CMP Report is to analyze, evaluate, and mitigate congestion within the transportation system. The results can inform and help in the development of priorities for the Long Range Transportation Plan. These efforts are conducted in coordination with the State of Connecticut and the Federal Highway Administration; the report is intended for planning purposes only.

The CMP serves as a tool for evaluating deficiencies within the system and the effectiveness of transportation improvement projects over time.

Interstate 84 Corridor



Interstate 84 provides an east-west connection through in Connecticut and spans 18.5 miles within the WestCOG region between Danbury and Newtown. This highway is a critical corridor for commuters traveling east towards Waterbury, west into the New York region, as well as to the Danbury area which is a major employment center along the corridor. I-84 is also an important route for freight movement between the local region and the transcontinental interstate system.

2015 Quick Facts:

- Average travel speeds decreased by at least **10 mph** for westbound vehicles through Bethel
- Average eastbound speed in 2015 was **53.1 mph**
- In the afternoon peak, eastbound vehicles near Exit 5 in Danbury recorded an average speed of **28.7 mph**

Results

The CMP data reflects unweighted, midweek speeds averaged over a 24 hour period. Since 2014, the average westbound speed on I-84 decreased from 57.6 mph to 56.1 mph; eastbound speeds also decreased from 56.8 mph to 53.8 mph. This indicates congestion has grown on the corridor. The most notable change in congestion since 2014 is for eastbound traffic in the greater Danbury area during the afternoon and evening periods.

Westbound Traffic:

The average speed for westbound traffic is 56.1 mph; within the WestCOG region, the speed limit on I-84 is posted at 55 mph and 65 mph. Slower westbound speeds may be attributed to changing employment trends as well as construction activities.

During the morning peak period, vehicles traveling westbound on I-84 experience congestion in the

Figure 1. Average travel speeds for eastbound and westbound traffic. Time periods: Early Morning (midnight to 6:00am); Morning Peak (6:00-9:00am); Midday (9:00am-4:00pm); Afternoon Peak (4:00-7:00pm); Evening (7:00pm-midnight). *Source: National Performance Management Research Data Set; 2015.*

Newtown area, particularly between exits 10 and 13. The average westbound speed near exit 11 in Newtown is 41.8 mph during this time. Vehicle speeds gradually increase until the Bethel and Brookfield area where there is a pocket of congestion near exit 8.

Some segments of the corridor experience average speeds as low as 6.5 mph.

A major change from 2014 is the congestion found in the Bethel and Brookfield area. While there are periods of congestion throughout the morning peak and midday, there is a significant increase during the evening period heading west toward the Danbury area. Average speeds in 2015 decreased by about 10 mph through the Bethel area.

Eastbound Traffic:

The average speed for eastbound traffic is 53.2 mph over a 24 hour period. This is slightly lower than the posted speed limit.

Slower speeds appear during the midday period and become significantly slower into the afternoon peak and evening periods. This congestion is primarily concentrated in the Danbury area during the afternoon and evening periods. During the afternoon peak, the average eastbound speed near exit 5 is 28.7 mph. Most of this congestion begins to clear and vehicle speeds increase east of exit 8.

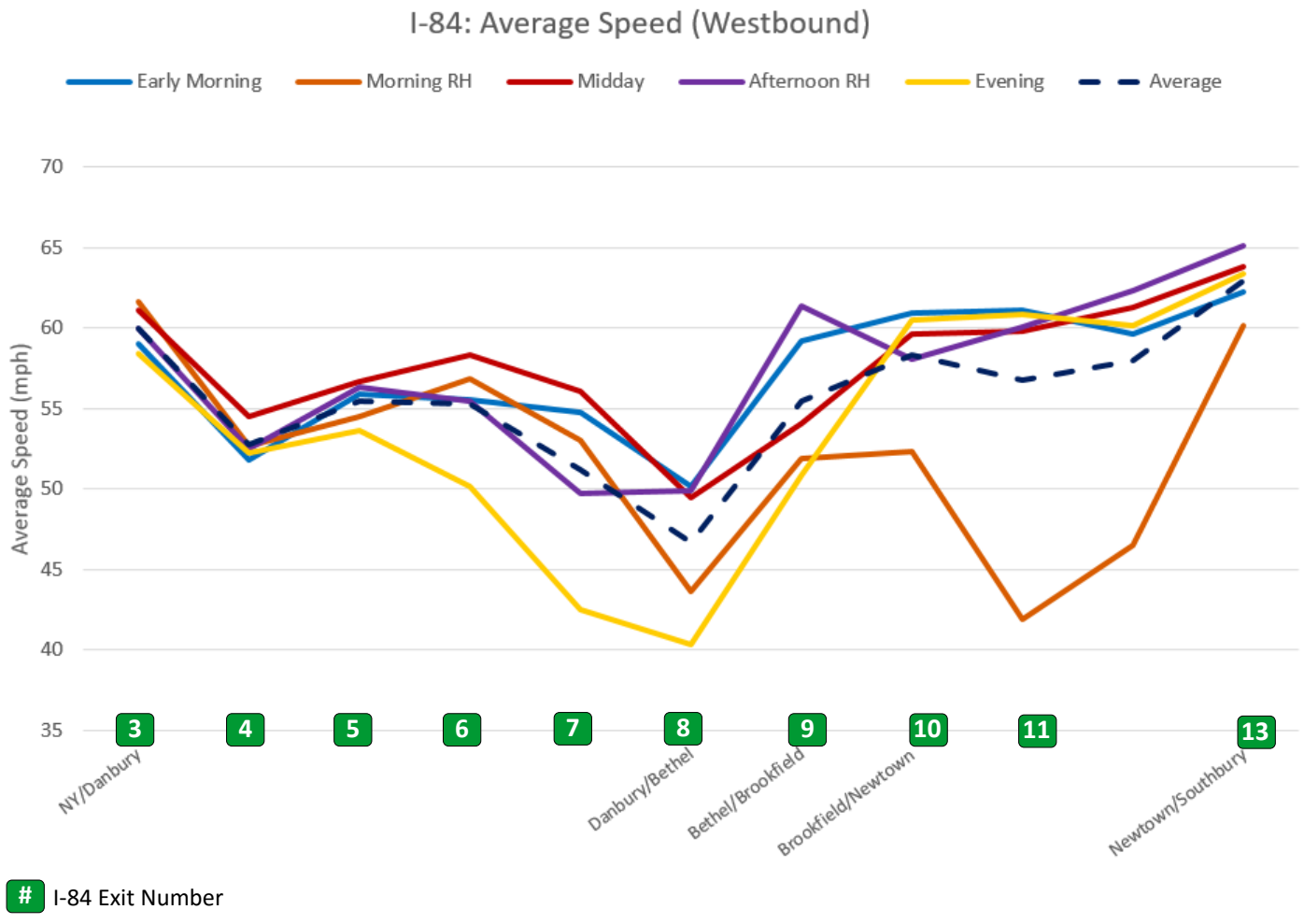


Figure 2. Average travel speeds for westbound during each time period. *Source: National Performance Management Research Data Set; 2015.*

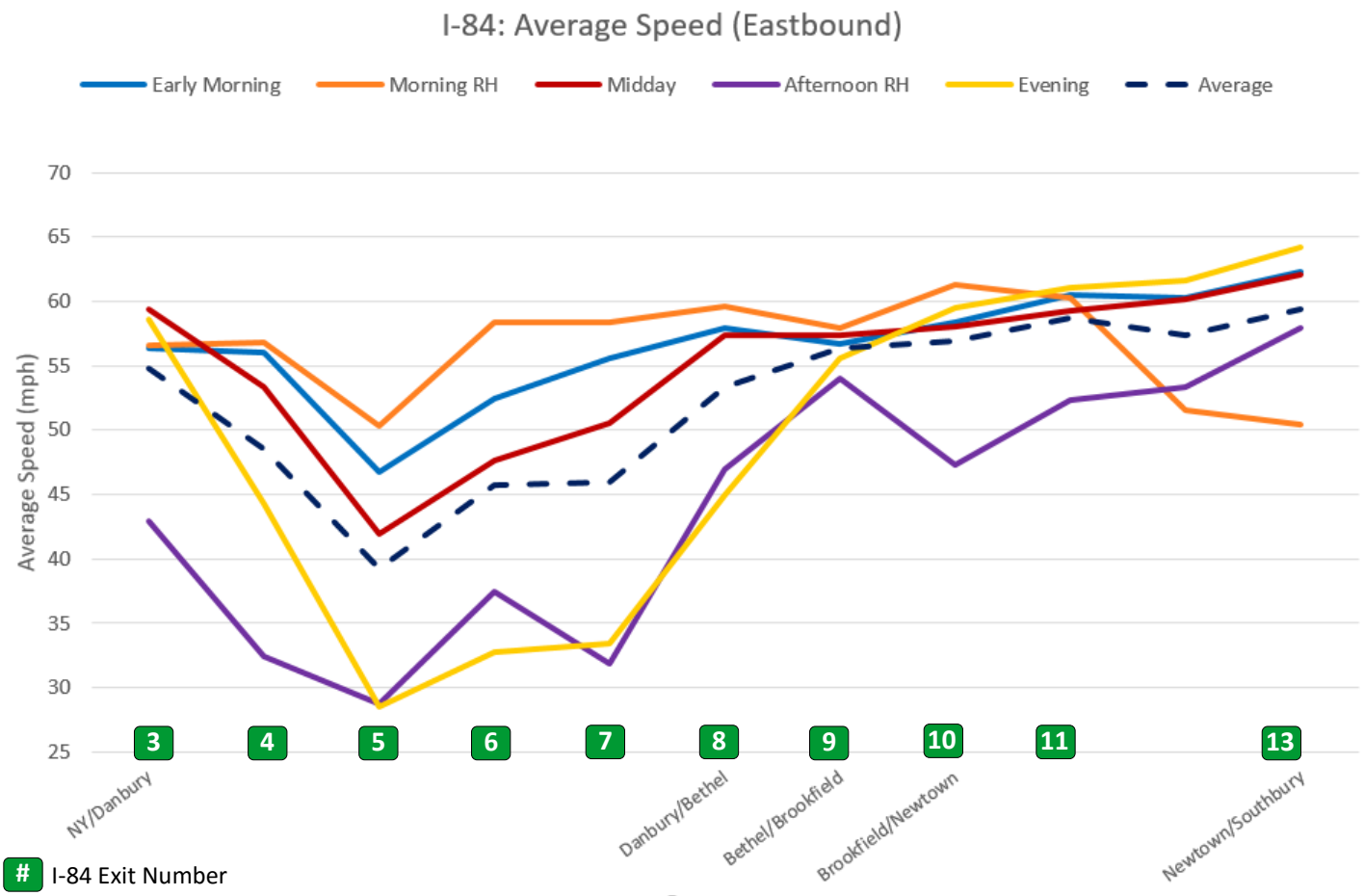


Figure 3. Average travel speeds for eastbound during each time period. *Source: National Performance Management Research Data Set; 2015.*

In Danbury, the average daily eastbound speed near exit 5 is 39.2 mph.

Construction:

While the CMP data does not evaluate short term congestion related to an isolated incident, such as a vehicle crash, it does reflect speed changes caused by long-term factors, such as construction projects. Construction projects on I-84 adversely impact traffic conditions throughout the year. Major activities in 2015 included nighttime milling and resurfacing between exits 3 and 8 in Danbury as well as reconstruction of interchanges 5 and 6. This may account for some of the lower speeds recorded in the same area during the early morning and evening periods.

WestCOG Transportation and GIS Departments

The Transportation and GIS departments at WestCOG provide technical assistance to support efforts to mitigate congestion in the region.

For more information on how WestCOG can offer assistance, please contact Francis Pickering, Executive Director, at fpickering@westcog.org.

Cover Photo: Michael Duffy

WestCOG Technical Support:

- System wide analyses
- Grant support
- Concept designs & engineering services
- Site level corridor analyses & visualizations
- GIS Services