

Concept 6 Summary: Interchange 3 and 4 - Segar St Ramp Eastbound

DESCRIPTION

Concept 6 seeks to provide improvements at Interchanges 3 and 4 on I-84 in the eastbound direction with a new off-ramp to Segar Street. Currently, the I-84 traffic in the eastbound direction uses Lake Avenue which creates a weaving condition with the Route 7 northbound traffic that merges onto I-84 eastbound. In this concept, with a new off-ramp to Segar Street, a median barrier will be installed to prohibit I-84 eastbound traffic to use the Lake Avenue exit (Interchange 4), thereby eliminating the weaving condition. This will also allow Route 7 northbound traffic to travel past Interchange 4 and merge with I-84 in the eastbound direction. Elements of Concept 6 include:

- New I-84 off-ramp at Interchange 3 will be provided to Segar Street in the eastbound direction. This off-ramp will begin at the existing off-ramp to Route 7 southbound and end at Segar Street.
- New median barrier will be installed between I-84 and Route 7 to prohibit weaving of I-84 traffic to Interchange 4 - Lake Avenue.
- Traffic from Lake Avenue will merge with Route 7 northbound traffic prior to entering I-84.
- Acceleration and deceleration lane lengths will be improved at the Lake Avenue ramps to meet design standards.
- 3 new bridges and 2 existing bridges will be replaced.



PROS

- Peak hour delay will be reduced on I-84 eastbound at Interchange 3 and 4.
- Vehicle queues are eliminated on I-84 eastbound at Interchanges 3 and 4 during peak periods.
- Vehicle queues are eliminated on Route 7 northbound at Interchange 3 during peak periods.
- Weaving will be eliminated between I-84 and Lake Avenue in the eastbound direction.
- Acceleration and deceleration lane lengths at Interchange 4 will meet design standards.
- Minimal ROW impact.
- Typical construction methods could be used.

CONS

- Results in increased congestion on I-84 eastbound between interchanges 3 and 7 during the PM peak period.
- Does not address lane continuity on I-84.
- Does not address the left-hand entrance and exit ramps in the I-84 corridor.
- Lacks consistent design speed throughout the I-84 corridor.
- Does not propose changes to the existing interfaces to local streets at interchanges 1, 2, 5, 6, 7, and 8.
- Interchange 6 remains a partial interchange.
- Does not improve access to the Danbury Hospital.

RECOMMENDATION

This concept reduces travel time and delays within the limits of the proposed improvement, but it pushes the congestion from one end of the project corridor to the other. This concept is feasible from an engineering and constructability standpoint. This concept has a low probability of causing significant or irreparable harm to the natural or human environment.

It is recommended that this concept be combined with a concept that addresses resulting congestion and mobility adjacent to the highway.