

Concept 25 Summary: Three Lane Collector – Distributor (CD) Road - Center

DESCRIPTION

Concept 25 seeks to provide improvements in the center section of I-84 within the project corridor. It features a 3-lane CD road which would improve local access to both downtown and the Danbury Hospital and would remove local traffic from I-84, thus improving congestion in the mainline. Under this concept, the existing interchanges at Main Street and North Street are eliminated and the CD Road provides connection to Main Street, North Street, and Tamarack Avenue. Specific elements of Concept 25 include:

- CD Road will be approximately 1.5 miles in length in the eastbound direction and will begin east of Interchange 4 (Lake Avenue) and end east of Tamarack Avenue to merge onto I-84.
- CD Road will be approximately 1.3 miles in the westbound direction and will begin east of Tamarack Avenue and end west of Main Street and merge onto I-84.
- CD Road will be a one-way pair parallel to I-84 and will consist of three travel lanes in each direction.
- CD Road will be closer to the I-84 mainline alignment, referred to as Collector Distributor Road Concept-Spaced.
- CD Road will have at-grade intersections with Main Street, North Street, and Tamarack Avenue.
- CD Road will be grade separated at Madison Avenue.
- I-84 will be reconstructed to build the CD Road and will remain three lanes in each direction.
- The reconstructed portion of I-84 will tie into existing I-84 past the CD Road interchanges.
- Acceleration and deceleration lane lengths will be provided to meet design standards at the CD Road interchanges with I-84.
- Replace 9 existing bridges and remove 1 bridge.





PROS

- Improves connection to the Danbury Hospital.
- Improves connection to downtown.
- North Street and Tamarack Avenue have full access to I-84.
- Provides an opportunity for east/west pedestrian and bicycle travel where there is none today.
- Provides an opportunity to enhance public transit use.
- There are no impacts to known historic resources.

RECOMMEDATIONS

This concept provides a <u>partial solution</u>. It does not address congestion or mobility outside the limits of the concept. This concept will have constructability challenges and will impact multiple properties. Anticipated impacts associated are expected to be substantial, some of which will be difficult to mitigate.

As a result of the screening process, it is recommended that this concept be dismissed for further consideration.

CONS

- Does not reduce congestion or improve mobility on I-84 during the weekday A.M. peak hour in the westbound direction.
- Does not reduce congestion or improve mobility on Route 7 during the weekday
 P.M. peak hour in the eastbound direction.
- Does not reduce congestion or improve mobility on the CD Road.
- 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, 4, 7, and 8.
- Several stages of construction involving closures to local streets will be required.
- Specialized construction techniques will be required to work within a tight corridor.
- Significant property impacts.
- Many of the property impacts would occur in designated Environmental Justice communities.
- Major roads intersecting with the CD road would need to be widened to accommodate higher traffic volumes, resulting in property impacts.
- Community cohesion would be disrupted by dead-ending several local streets.
- Improvements would be located near the natural gas transmission pipeline between Interchange 6 and Interchange 7.
- Modest increases in noise levels at some adjacent properties would be anticipated.
- The highway would be closer to certain residential properties as compared to existing conditions, thus impacting aesthetics.
- Water resource impacts are anticipated near stream crossings associated with bridge modifications and replacements.