

Concept 2 Summary: Collector Distributor Road - Center

DESCRIPTION

Concept 2 seeks to improve congestion and mobility by constructing eastbound and westbound collector distributor (CD) roads in the center section of the corridor. Elements of Concept 2 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 two travel lanes in each direction.
- CD Road will be grade separated at Madison Avenue, but ramps will be provided to/from the CD Road and 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.
- The existing interchanges on I-84 i.e. Interchange 5 (Main Street) and Interchange 6 (North Street) will be eliminated.
- Acceleration and deceleration lane lengths will be provided to meet design standards at the CD Road interchanges with I-84.
- Replace 7 existing bridges and remove 1 bridge.

C2-1 will include base improvements plus:

CD Road will be farther from the I-84 mainline alignment.

C2-2 will include the baseline improvements plus:

CD Road will be closer to the I-84 mainline alignment than C2-1.

CONCEPT LIMITS

Dombury Rell Station City Hall Danbury Rell Station City Hall Project Area # Interchange Number Concept Study Limits Center Section

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
- There are no impacts to known historic resources.



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.
- Construction phasing is difficult and challenging.
- Significant right-of-way 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 are 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.

RECOMMENDATION

This concept provides a <u>partial solution</u>. It reduces congestion and improves mobility within the extent of improvements but 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 moderate, with mitigation alternatives available to offset most impacts. Impacts under C2-1 are anticipated to be greater than impacts under C2-2.

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