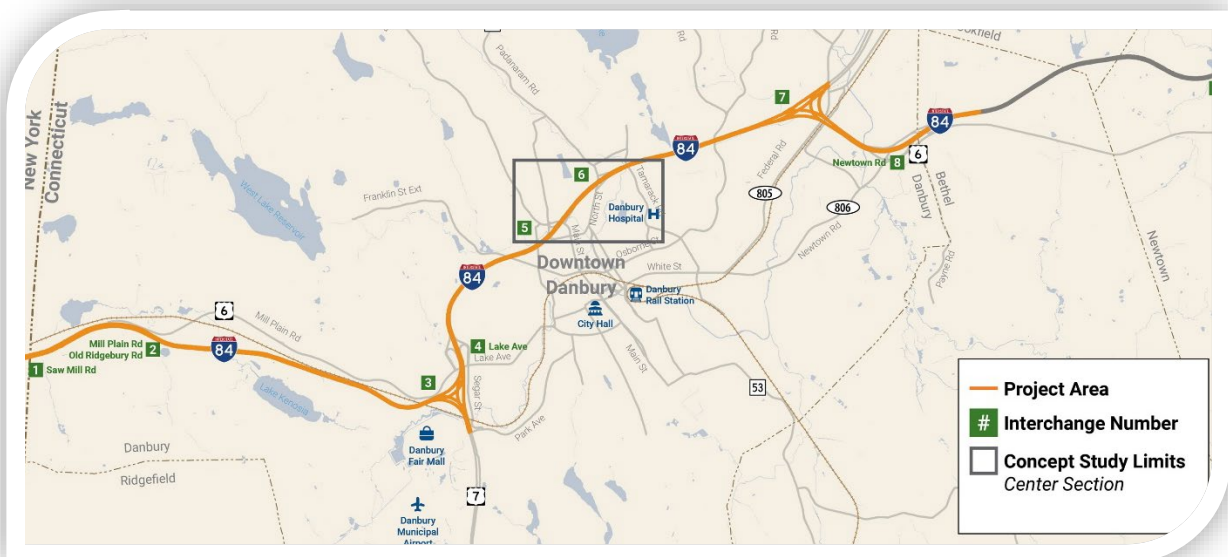


Concept 24 Summary: Starr Avenue Interchange 5 - Center

DESCRIPTION

Concept 24 seeks to provide improvements in the center section of I-84 within the project corridor. In the eastbound direction, a Collector – Distributor (CD) Road is provided between Main Street (existing Interchange 5) and North Street (Interchange 6). In the westbound direction, the existing westbound ramps at Interchange 5 (Main Street) are eliminated and a new, full Interchange 5 is proposed on Starr Avenue. Additionally, a new on-ramp is introduced at North Street in the westbound direction, which makes Interchange 6 on North Street a full interchange. Specific elements of Concept 24 include:

- CD Road is approximately 0.9 miles in length in the eastbound direction and will begin at the Starr Avenue underpass and end east of North Street to merge onto I-84.
- CD Road will be a one-way roadway parallel to I-84 and will consist of two travel lanes in the eastbound direction.
- CD Road will have at-grade intersections with Main Street and North Street in the eastbound direction.
- The westbound on and off ramps will intersect with the new interchange on Starr Avenue at a new signalized intersection. A bypass off-ramp is provided for the Main Street traffic headed towards downtown.
- Starr Avenue will have two lanes in each direction between the Main Street intersection and the I-84 overpass.
- I-84 will be reconstructed and have four lanes in each direction between the Starr Avenue underpass and Tamarack Avenue.
- Acceleration and deceleration lane lengths will be provided to meet design standards at Interchange 5 (Starr Avenue/CD Road) and Interchange 6 (North Street).
- 1 new bridge and replace 7 existing bridges.



PROS

- Improves connection to the Danbury Hospital.
- Improves connection to downtown.
- North Street has full access to I-84.
- Typical construction methods could be used.
- Provides an opportunity for pedestrian and bicycle travel where there is none today.
- Provides an opportunity to enhance public transit use.
- There are no known impacts to historic, or 4(f) properties.

CONS

- Does not reduce congestion or improve mobility on I-84 and Route 7.
- CD Road will experience some congestion and delay.
- Creates a weaving movement between the North Street on-ramp and the Starr Avenue off-ramp in the westbound direction.
- Does not address lane continuity on I-84.
- Does not address the left-hand entrance and exit ramps in the I-84 corridor.
- Steep grade on Main Street approaching the Starr Avenue intersection.
- Lacks consistent design speed throughout the I-84 corridor.
- Does not propose changes to the existing interfaces to local streets at interchanges 1, 2, 3, 4, 7, and 8.
- Several stages of construction involving closures to local streets will be required.
- Significant property impacts.
- Interchange 5 and the Eastbound CD Road to Interchange 6 would largely be constructed outside of the existing highway right-of-way, thus impacting areas not previously developed or otherwise impacted.
- Implementation of this concept would result in impacts to an environmental justice community.
- Construction of this concept would disrupt community cohesion, including dead ending of 8 local streets.
- Increases in noise levels are likely to occur at some locations.
- There would be potential impacts to cemetery property along Main Street.
- Water resource impacts are anticipated near stream crossings associated with bridge modifications and replacements.
- Direct impacts to Kohanza Brook and associated wetland.

RECOMMENDATION

This concept provides a partial solution. 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.

This concept should be evaluated further to demonstrate if the potential benefits outweigh the environmental impacts.