

Concept 18 Summary: I-84 Realigned with Collector – Distributor (CD) Road Eastbound - East

DESCRIPTION

Concept 18 seeks to realign I-84 in the east section to improve the horizontal curvature and achieve a higher design speed. A CD Road is provided in the eastbound direction between Interchanges 7 and 8 to eliminate the weaving condition. Specific elements of Concept 18 include:

- The Route 7 interchange (Interchange 7) will be shifted to the south and the U.S. Route 6 / Newtown Road interchange (Interchange 8) will be shifted north to achieve the desired horizontal curvature.
- I-84 will be three travel lanes and a CD Road in the eastbound direction and three lanes in the westbound direction between Interchanges 7 and 8.
- CD Road runs parallel to I-84 and will consist of one travel lane in the eastbound direction.
- CD Road is approximately 1.0 mile in length in the eastbound direction and will begin at the off ramp from I-84 to Route 7 (Interchange 7) and end at the on-ramp to I-84 near Interchange 8.
- Existing left-hand ramps to/from Route 7 will be replaced with right-hand ramps at Interchange 7.
- Acceleration and deceleration lanes will be designed to meet standards on I-84 at Interchanges 7 and 8.
- Shoulder improvements will be made along the mainline between Interchanges 7 and 8 (i.e. widen shoulder and upgrade guide rails).
- Local street improvements are proposed on Newtown Road (SR 806) and U.S. Route 6 to accommodate the realignment of I-84.
- 8 new bridges and remove 10 bridges.



PROS

- Peak hour delay will be reduced on I-84 and Route 7 within the limits of the concept.
- Addresses weaving between Interchanges 7 and 8 in the eastbound direction.
- Consistent design speed can be achieved within the limits of the concept.
- Lane continuity is maintained within the study limits.
- Left-hand ramps are replaced with right-hand ramps at Interchange 7.
- Construction can occur while maintaining existing traffic on I-84.
- Acceleration and deceleration lane lengths are improved at Interchanges 7 and 8.
- Typical construction methods could be used.
- Pedestrian and bicycle travel opportunities can be provided on Newtown Road.
- There are no anticipated impacts to known historic resources.
- There are no anticipated impacts to known 4(f) properties.
- There are no anticipated impacts to cemetery properties.

CONS

- Does not address weaving between Interchanges 7 and 8 in the westbound direction.
- Does not propose changes to the existing interfaces to local streets at interchanges 1, 2, 3, 4, 5, and 6.
- Multiple stages of construction will be required involving closures to local streets.
- Construction will occur within a tight corridor.
- Significant property impacts.
- Does not improve access to the Danbury Hospital and downtown.
- Anticipated impacts to noise, aesthetic, and community cohesion due to the proposed realignment.
- Disturbs a large hydrologic area, including the streams and drainage features that parallel or cross the highway such as Beaver Brook, and Still River.
- Potential impacts to the natural gas transmission pipeline in the vicinity of Great Plain Road and Carolyn Avenue.

RECOMMENDATION

This concept 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 helps achieve a consistent design speed in the east section of the project corridor. However, this concept will have constructability challenges and will impact multiple properties. Impacts associated with this concept are anticipated to be disruptive to large, established commercial and residential areas where the concept deviates from the existing I-84 alignment. Concept has a high probability of causing significant and/or irreparable harm to the natural and human environment.

Therefore, it is recommended that this concept be dismissed from further consideration based on constructability, environmental impacts, and potential impacts to multiple properties.