

Concept 19 Summary: I-84 Realigned with Collector – Distributor (CD) Road - East

DESCRIPTION

Concept 19 seeks realign I-84 in the east section to improve the horizontal curvature and achieve a higher design speed. CD Roads are provided in each direction between Interchanges 7 and 8 to eliminate the weaving condition. Specific elements of Concept 19 include:

- The Route 7 interchange (Interchange 7) will be shifted slightly to the south and the U.S. Route 6 / Newtown Road interchange (Interchange 8) will be shifted farther north to achieve desired horizontal curvature.
- I-84 will be three travel lanes and a CD Road in each direction between Interchanges 7 and 8.
- The existing weaving movement on I-84 between Interchanges 7 and 8 is eliminated in both directions.
- CD Road will be a one-way pair parallel to I-84 and will consist of one travel lane in each direction.
- CD Road is approximately 1.5 miles in length between Route 7 (Interchange 7) and the Newtown Road interchange (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).
- The Newtown Road interchange (Interchange 8) is proposed as a diamond interchange.
- Local street improvements are proposed on Newtown Road (SR 806) and U.S. Route 6 including construction of two roundabouts along Newtown Road.
- 7 new bridges and remove 11 bridges.



PROS

- Peak hour delay will be reduced on I-84 and Route 7 within the limits of the concept.
- Addresses traffic weaving between Interchanges 7 and 8 in both directions.
- Consistent design speed can be achieved within the limits of the concept.
- Lane continuity is maintained within the limits of the concept.
- Left-hand ramps are replaced with right-hand ramps at Interchange 7.
- Construction can occur while maintaining existing travel patterns.
- Acceleration and deceleration lane lengths are improved on I-84 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 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 impacts 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, as well as near Old Brookfield Road just north of Route 7.

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 highly disruptive to large, established commercial and residential areas where the concept deviates from the existing I-84 alignment. This concept has a high probability to cause 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.