

# Concept 13 Summary: Great Plains Road - Center

## **DESCRIPTION**

Concept 13 seeks to provide a new partial interchange on I-84 at Great Plains Road in the center section of the corridor. The Great Plains Road interchange will improve access between I-84 and the Danbury Hospital for points west of the Hospital.

### Elements of C13 include:

- New partial interchange on Great Plains Road for points west of the Danbury Hospital.
- No changes in horizontal alignment to I-84.
- I-84 is raised in elevation to meet vertical clearance standards over Great Plains Road.
- I-84 has three lanes in each direction within the concept limits.
- The ramps to and from I-84 and Great Plains Road are in a diamond configuration.
- The existing interchange 6 (North Street) remains and provides access between I-84 and the Danbury Hospital for points east of the Hospital.
- Acceleration and deceleration lane lengths will be provided to meet design standards at the Great Plains Road interchange with I-84.
- 1 existing bridge will be replaced.





### **PROS**

- The size of the impact area is small and largely occurs within properties along one street.
- No full takes would be necessary to implement this concept.
- The concept largely occurs within the existing highway right-of-way.
- There are no impacts to known historic resources.
- There are no impacts to known 4(f) properties.
- No direct impacts to wetlands, watercourses, or flood zones.
- Improves connection to the Danbury Hospital.
- Improves connection to downtown.
- Provides an opportunity for pedestrian and bicycle travel where there is none today.
- Provides an opportunity to enhance public transit use.
- Typical construction methods.

### **CONS**

- The improvements in this concept are located in close proximity to the natural gas transmission pipeline in the vicinity of Great Plains Road and Carolyn Avenue.
- The highway will be closer to certain residential properties as compared to existing conditions, thus potentially impacting aesthetics and noise.
- Does not reduce congestion and improve mobility on I-84 during the weekday A.M. peak hour in the westbound direction.
- Does not reduce congestion and improve mobility on Route 7 during the weekday P.M. peak hour in the eastbound direction.
- Does not meet driver expectation because North Street and Great Plains Road are split interchanges.
- 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 other local street interchanges.
- Increases traffic volumes on Great Plains Road.

### RECOMMENDATION

Anticipated impacts associated with the C13 option are minor, with no full property takes. As long as impacts to the natural gas pipelines can be avoided, this concept has a low probability of causing significant or irreparable harm to the natural or human environment.