

Concept 3 Summary: Hospital Access – Tamarack Ave and Great Plains Rd - Center

DESCRIPTION

Concept 3 seeks to improve access to Danbury Hospital and Downtown through a series of improvements in the center section of the corridor. There are six variations of Concept 3, named C3-1 through C3-6. Elements of Concept 3 include:

Description	C3-1	C3-2	C3-3	C3-4	C3-5	C3-6
Eliminates existing Interchange 6 (North Street)	Yes	Yes	Yes	Yes	Yes	Yes
Provides full access to Tamarack Avenue	Yes	Yes	Yes	No	Yes	Yes
Provides full access to Great Plains Road	No	No	No	Yes	No	No
Number of mainline lanes on I-84	3	3	3	3	4	3
Shifts I-84 Alignment	No	Yes	No	No	No	No
Interchange configuration						
<i>Eastbound</i>	Diamond	Diamond	Cloverleaf	Diamond	Diamond	Diamond
<i>Westbound</i>	Diamond	Diamond	Diamond	Cloverleaf	Diamond	Diamond
Extends acceleration lane lengths on I-84 at new interchange	Yes	Yes	Yes	Yes	Yes	Yes
Extends deceleration lane lengths on I-84 at new interchange	Yes	Yes	Yes	Yes	Yes	Yes
Number of bridges						
<i>New</i>	0	0	1	0	0	0
<i>Replacements</i>	2	3	2	2	9	2
Shifts Tamarack Avenue	No	No	No	No	No	Yes

PROS AND CONS

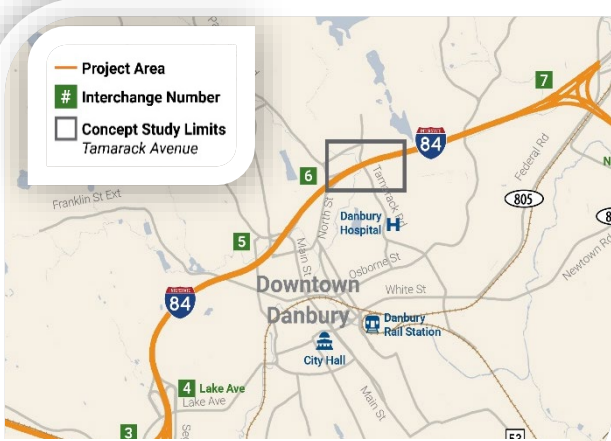
Description	C3-1	C3-2	C3-3	C3-5	C3-6	C3-4
Improves connection to Danbury Hospital and downtown	●	●	●	●	●	Not evaluated. Eliminated during the engineering assessment.
Provides full access to Tamarack Avenue	●	●	●	●	●	
Provides opportunity to enhance pedestrian, bicycle, and transit use	●	●	●	●	●	
Enables typical construction methods	●	●	●	●	●	
Causes no direct impacts to known historic Section 4(f) resources	●	●	●	●	●	
Reduces congestion and mobility to I-84 and Route 7	○	○	○	○	○	
Addresses lane continuity on I-84	○	○	○	○	○	
Addresses left hand entrance and exit ramps on I-84	○	○	○	○	○	
Removal of North Street ramps impacts businesses	○	○	○	○	○	
Improvements occur in the vicinity of the gas transmission line	○	○	○	○	○	
Causes Impact to FEMA 100-year floodplain associated with Padanaram Brook	○	○	○	○	○	
Minimizes number of full takes	●	●	○	●	○	
Requires acquisition of Ford Avenue Neighborhood	●	●	○	●	○	
Causes impact to FEMA floodway associated with Padanaram Brook	●	●	○	●	●	
Causes impact to Lutheran Church Cemetery	○	○	○	○	●	

Key

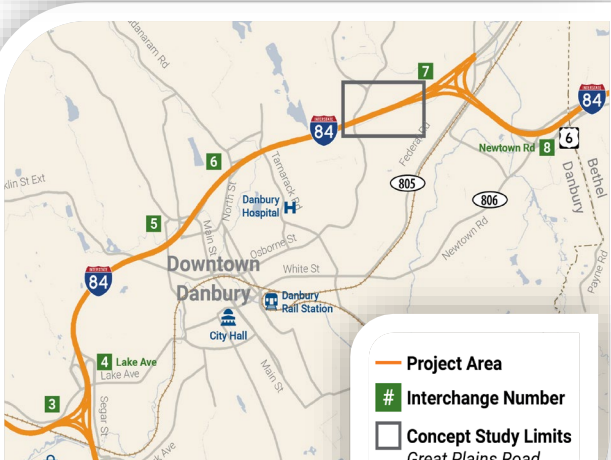
● = Sub-concept Has Positive Effect (Pro)

○ = Sub-concept Has Negative Effect (Con)

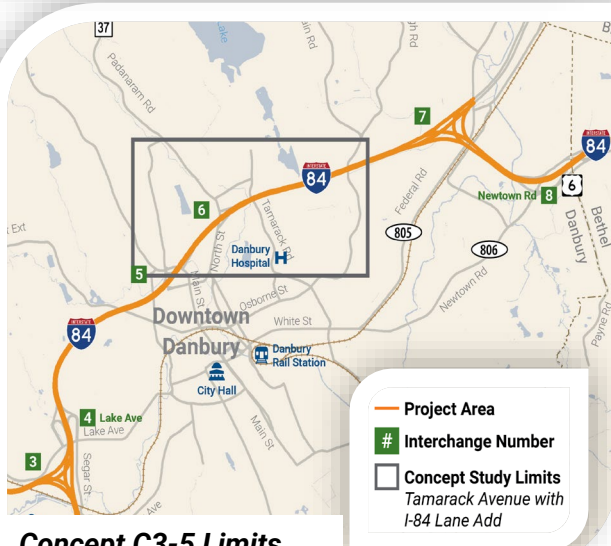
CONCEPT LIMITS



Concepts C3-1, C3-2, C3-3, and C3-6 Limits



Concept C3-4 Limits



Concept C3-5 Limits

RECOMMENDATION

All C3 concepts except for C3-4 provide a partial solution. They improve access to the hospital and downtown via Tamarack Avenue, but do not address congestion and mobility on the highway. These concepts can be constructed using typical methods. C3-4 was considered infeasible based on design standards for interchange spacing and was dismissed from further consideration.

The level of environmental impact varies between the C3 concepts. C3-1, C3-2, C3-3, and C3-5 have a high probability of disturbing active burial sites, requiring relocation of the remains and above-ground headstones and footstones at the Immanuel Lutheran Church Cemetery. However, C3-6 has no impact to the Immanuel Lutheran Church Cemetery and has a low probability of causing significant or irreparable harm to the natural or human environment.

As a result, C3-6 is considered the best performing concept and it is recommended that C3-6 be combined with a concept that addresses congestion and mobility on the highway.