

## REPORT OF MEETING

Date and Time: Thursday March 9, 2023, 12:30 – 1:30 PM

Location: Microsoft Team Virtual Meeting

Subject: Project Advisory Committee Meeting #13

### 1. Attendees

NAME	ORGANIZATION	EMAIL ADDRESS
<b>PROJECT ADVISORY COMMITTEE MEMBERS</b>		
Tom Altermatt	City of Danbury	<a href="mailto:t.altermatt@danbury-ct.gov">t.altermatt@danbury-ct.gov</a>
Sharon Calitro	City of Danbury	<a href="mailto:s.calitro@danbury-ct.gov">s.calitro@danbury-ct.gov</a>
Matt Cassavechia	Danbury Hospital	<a href="mailto:Matthew.cassavechia@nuvancehealth.org">Matthew.cassavechia@nuvancehealth.org</a>
Todd Fontanella	Western Connecticut Council of Governments	<a href="mailto:tfontanella@westcog.org">tfontanella@westcog.org</a>
John Gentile	Danbury Commission for Persons with disAbilities	<a href="mailto:jmgrs1550@aol.com">jmgrs1550@aol.com</a>
David McCollum	Town of Bethel	<a href="mailto:mccollumd@bethel-ct.gov">mccollumd@bethel-ct.gov</a>
Ali Mohseni	New York Metropolitan Transportation Council	<a href="mailto:Ali.Mohseni@dot.ny.gov">Ali.Mohseni@dot.ny.gov</a>
Francis Pickering	Western Connecticut Council of Governments	<a href="mailto:fpickering@westcog.org">fpickering@westcog.org</a>
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One phone in attendee		

<b>OTHER ATTENDEES</b>		
<b>DEPARTMENT OF TRANSPORTATION</b>		
Jennifer Carrier	Federal Highway Administration	<a href="mailto:jennifer.carrier@dot.gov">jennifer.carrier@dot.gov</a>
Krishalyn Macrohon	Connecticut Department of Transportation (CTDOT)	<a href="mailto:krishalyn.macrohon@ct.gov">krishalyn.macrohon@ct.gov</a>
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<b>CONSULTANT TEAM</b>		
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Marcy Miller	FHI Studio	<a href="mailto:mmiller@fhistudio.com">mmiller@fhistudio.com</a>

## 2. [Welcome](#)

The Connecticut Department of Transportation (CTDOT) hosted its 13<sup>th</sup> Project Advisory Committee meeting (PAC) for the I-84 Danbury Project on Thursday, March 9, 2023, from 12:30 – 1:30 PM. The meeting was virtual via Microsoft Teams. Marcy Miller, of FHI Studio, welcomed attendees to the PAC meeting and provided an overview of the Microsoft Teams virtual meeting platform. She handed the presentation to Krishalyn Macrohon, of CTDOT. K. Macrohon reviewed the agenda and relayed that the purpose of the meeting was to continue the discussion on the screening of concept combinations as well as discuss the potential early-action / break-out projects. She added that the team would present next steps and leave ample time for discussion and questions from the PAC.

K. Macrohon presented several items that the project team has been working on since the previous PAC meeting on December 14, 2022. She said that since that date, the project team hosted a public information meeting and presented the deficiencies of the corridor and concepts that can improve it. In addition, the analysis of all 26 concepts is complete and posted on the project website. She stated that the team continues to update social media and work on the draft PEL report.

## 3. [Presentation](#)

Rick Black, of SLR Consulting, provided an overview of the screening of the 26 concepts as previously presented in the past PAC meetings. He stated that two concepts in the mainline, one concept in the west section, three concepts in the center section, and three concepts in the east section were removed in the concept screening process for further analysis because each had a fatal flaw. Two concepts, 4 and 23, of the mainline segment moved directly into the potential early action project. Moving to the next level of screening, four of the remaining concepts that made through the fatal flaw analysis, two in the center section and two in the east section, were removed because they were redundant to others. Finally, in screening matrix analysis, three additional concepts, two in the mainline and one in the center section, were removed in the concept screening process for their considerable environmental impacts. As a result, a total of 8 concepts (1 concept in Mainline Segment, 2 concepts in West segment, 3 concepts in Center Segment and 2 concepts in East Segment) successfully made it through the concept screening process and produced 12 concept combinations.

### [Concept Combination Screening](#)

R. Black presented information on the 12 concept combinations to assess and compare with another. Moving forward, Concept 1, being the only remaining mainline alternative (add one lane on I-84 in each direction), has the largest footprint. This concept has been combined with others in the east, west, and center segments.

R. Black discussed the concept combination screening. The concept combinations that advance through the screening will ultimately be recommended as reasonable range of alternatives and will require further detailed environmental analyses.

Under fatal flaw analysis, R. Black said that all 12 concept combinations met the Purpose and Need to reduce congestion and improve mobility. They were feasible from a construction and funding perspective. In addition, none had excessive or disproportionate environmental impacts.

R. Black explained the next level of screening: redundancy. He noted that where concept combinations serve similar functions, the ones that have less functional advantage or more disproportionate impacts were screened out.

Trent Toler, of SLR Consulting, discussed travel time reliability indices. He explained how travel time and buffer time are typically combined to produce a more accurate planning metric. He said that the buffer time accounts for the additional time due to unexpected delays and can have an impact on efficiency for each concept combination. R. Black added that the morning and evening commutes are significantly affected by these indices. The indices are determined by running the traffic model for all concept combinations using the software called VISSIM.

R. Black presented the results of the planning, buffer and travel indices for concept combinations as analyzed for redundancy. He explained that there are no significant differentiators among the concept combinations for travel and planning indices. He noted the difference in the buffer time during the PM period on Route 7.

R. Black discussed environmental considerations. He noted no differences between any of the concept combinations for each impact area, except for Section 4(f) impacts. He stated that, at this time, the impacts do not appear to be substantial. Thus, those combinations will remain in the analysis.

R. Black next discussed the engineering metrics and revealed the significant differences in performance for all concept combinations. He continued the screening by accessing combinations by their segments and started the screening with the east segment that included Concepts 14 and 15. Sharat Kalluri, of CDM Smith, reviewed the function of the two concepts. Concept 14 provides an eastbound collector-distributor (CD) road only between Exits 7 and 8. Concept 15 includes both eastbound and westbound CD roads. R. Black reviewed the engineering metrics for the east concepts, noting that Concept 15 performs better on its ability to correct weaving maneuvers. S. Kalluri provided the details on the maneuvers related to the weaves. R. Black said that because Concept 15 performs better, and the two otherwise serve the same function, Concept 14 was removed for redundancy. Concept combinations that contained Concept 14 were removed due to its redundancy with Concept 15 and as a result, six concept combinations moved forward in the analysis.

R. Black reviewed the western concepts, Concepts 6 and 12. S. Kalluri discussed the function of the two concepts. Concept 6 provides access to Segar Street in the eastbound direction through a proposed exit ramp. Concept 12 provides access to Exit 4 through a proposed CD road in the eastbound direction. R. Black stated that Concept 12 was screened out because both concepts provide a similar function, Concept 12 is less advantageous because of its inability to eliminate weaving maneuvers. Therefore, concept combinations that contained Concept 12 were dropped from further analysis. This allows for three concept combinations to move forward in the analysis.

R. Black evaluated the center concepts, Concepts 26, 13, and 3, related to redundancy. S. Kalluri discussed the function of the three concepts noting that all differ in function in the center area and

there is no distinct advantage or disadvantage in their function and impacts. R. Black stated that there is no redundancy in the center concepts and proposed that all three move forward in the analysis.

R. Black stated that concept combinations (CC) B, D, and F move forward through the screening matrix. There is no difference between them for the planning time index. The only difference for environmental considerations is in CC-B, where there may be potential for Section 4(f) impacts. He concluded that the team is proposing the remaining three concept combinations be recommended for reasonable range of alternatives as three separate alternatives and be evaluated in the NEPA analysis. The alternatives will include one mainline, one west, one east concept, and three center concepts.

#### *Early-action / Break-out Projects*

S. Kalluri next discussed the potential early-action / breakout projects. The first one is dynamic lane use – median. This includes the use of the left-hand shoulders of I-84 to provide travel lanes during the peak period. It allows for more capacity without widening the roadway. Other states have implemented this with success. The team is continuing the feasibility analysis on this strategy. In addition, the team is continuing to review potential improvements at the intersection of Main Street and Downs Street, and Interchange 8. The improvement at Interchange 8 is referred as the turtle back concept and creates a diverging diamond interchange. These breakout projects are smaller improvements to the study corridor and are determined independent utility meaning that each can function as stand-alone improvement and be built separately from other improvements.

S. Kalluri discussed potential early-action for non-highway including a proposed bicycle facility on Mill Plain Road and other routes. The team is reviewing these and coordinating with the City of Danbury to enhance bicycle travel. The project team is also continuing to look at potential local circulator / connector transit service to enhance access to major employers and shopping destinations in the city.

#### *Next Steps*

Kevin Burnham, of CTDOT, discussed the project's next steps. He noted that PEL has determined the reasonable range of alternatives that will move forward into the detailed environmental analysis. He stated that the project team is working to finalize the Planning and Environment Linkages (PEL) study report and is constantly coordinating with Federal Highway Administration and other agencies. He said that the team is planning a public information meeting in spring / summer 2023.

#### **4. Discussion**

David McCollum, of the Town of Bethel, asked whether all engineering considerations are equally weighted in the concept combination screening. R. Black answered that they are not being weighted in this portion of the impact analysis of the concept combination screening. Rather, these considerations were analyzed during the concept segment screening, where key considerations (e.g., impacts to natural gas pipeline) and additional considerations (e.g., wetland impacts) were looked at. Key considerations were weighted a bit more heavily and may have resulted in a concept being removed earlier in the screening process.

John Gentile, of Danbury Commission for Persons with disAbilities, asked about straightening the highway between Interchanges 2 and 9 as none of the concept combinations that moved forward for detailed environmental analysis include straightening the highway. S. Kalluri answered that the following concepts that improve the highway alignment were eliminated in the fatal flaw screening. For instance, Concept 7 was the concept that would have done this. It was screened out because of its impacts to the water treatment plant and several neighborhoods. He added that Concept 8 would also have done this by placing the highway underground. This was eliminated because it was not deemed feasible from a construction perspective. Concept 17 looked at straightening the center segment and is not feasible for its impact to Environmental Justice (EJ) neighborhood. He added that Concepts 18 and 19 would have also straightened out the alignment in the east segment but were eliminated because of right-of-way impacts.

J. Gentile questioned whether the recommended alternatives would use the existing structures. S. Kalluri answered that Concept 1, the only mainline concept that is moving forward, would shift the Route 7 ramps from the left to right side of the highway and would include slight improvements to the mainline alignment between Interchanges 3 and 7. R. Black added that during the environmental analysis, the team will continue to coordinate with the agencies and the public to ensure that the project team covers all the considerations and solutions that were missed in the PEL Study. J. Gentile stressed the importance of improving sightlines, curves, and grades in the I-84 corridor.

M. Miller encouraged the PAC members to visit the project website to review the meeting video, project newsletter, and complete list of concepts.