U.S. Department of Transportation
Federal Highway Administration

I-84 HARTFORD PROJECT
HARTFORD, CONNECTICUT
SAFETEA-LU SECTION 6002
AGENCY COORDINATION PLAN

Version 4

October 2016

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I-84 Hartford Project
Hartford, Connecticut
SAFETEA-LU Section 6002
Agency Coordination Plan

1. Introduction

The Connecticut Department of Transportation (CTDOT) is investigating the need to rehabilitate, reconstruct or replace Interstate 84 (I-84) through downtown Hartford. CTDOT has initiated the environmental review process as required by the National Environmental Policy Act (NEPA) of 1969 and has begun coordination with the Federal Highway Administration (FHWA) in accordance with Section 6002 of the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU, as codified in 23 U.S.C. §139) for the **I-84 Hartford Project**. FHWA is serving as the lead federal agency for this project, and CTDOT is serving as a joint lead agency. The Environmental Impact Statement (EIS) being prepared for this project will meet the requirements of both NEPA and the Connecticut Environmental Policy Act (CEPA).

1.1 Purpose of Agency Coordination Plan

In an effort to provide for more efficient environmental reviews for project decision-making, Section 6002 of Public Law 104-59, SAFETEA-LU, enacted on August 10, 2005, requires lead agencies to develop and implement a plan for coordinating public and agency involvement during the environmental review process, particularly when the environmental review process requires an EIS. As noted above, this plan is being prepared per those requirements as requested by the FHWA.

The purpose of this plan is to define the process by which CTDOT and FHWA will communicate information about the **I-84 Hartford Project**. The process described herein will guide the CTDOT and the FHWA in their communications with each other, additional agencies involved in the project, and the public. Using guidance from NEPA, the following principles will promote better decision-making:

- A full set of reasonable alternatives will be evaluated;
- Impacts (and to whom they accrue) from each potential alternative will be analyzed and understood before decisions are made; and
- If any impacts are identified, they will be avoided, minimized or mitigated.

This Agency Coordination Plan establishes the framework for regular communication among all of the agencies involved in the environmental review process and ensures an interdisciplinary approach in planning and decision-making for any action that potentially impacts the environment. Elements of this plan include identification of the participating and cooperating agencies for the project and their responsibilities: major coordination points and tasks; impact assessment methodologies; methods for involving the public; and a schedule for the project. This Agency Coordination Plan addresses the development of the EIS in compliance with NEPA, as well as CEPA. The plan is a living document and can be modified throughout the progression of the environmental review process. A separate Public Involvement Plan has been developed in conjunction with the Agency Coordination Plan to define the process of interaction with the public and stakeholders and is summarized in Section 3. The full document is also available online at the project website.

1.2 Project Background

I-84 bisects the City of Hartford, and within Connecticut serves as a critical east-west transportation link between New York and Massachusetts. It provides connectivity to and from Interstate 91 (I-91) in Hartford and Route 2 in East Hartford. Locally, commuters use I-84 and its interchanges to access Hartford's business districts, State Capitol, and downtown areas. The I-84 corridor in Hartford is the most heavily traveled section of highway in the State, with traffic volumes in excess of 175,000 vehicles per day. The **I-84 Hartford Project** study area extends from Flatbush Avenue (Interchange 45) on the west, to the I-91 Interchange in downtown Hartford on the east (Interchange 51/52) and include the Sisson Avenue, Sigourney Street, Asylum Street/Capitol Avenue interchanges. Figure 1 illustrates the project corridor and the surrounding area.

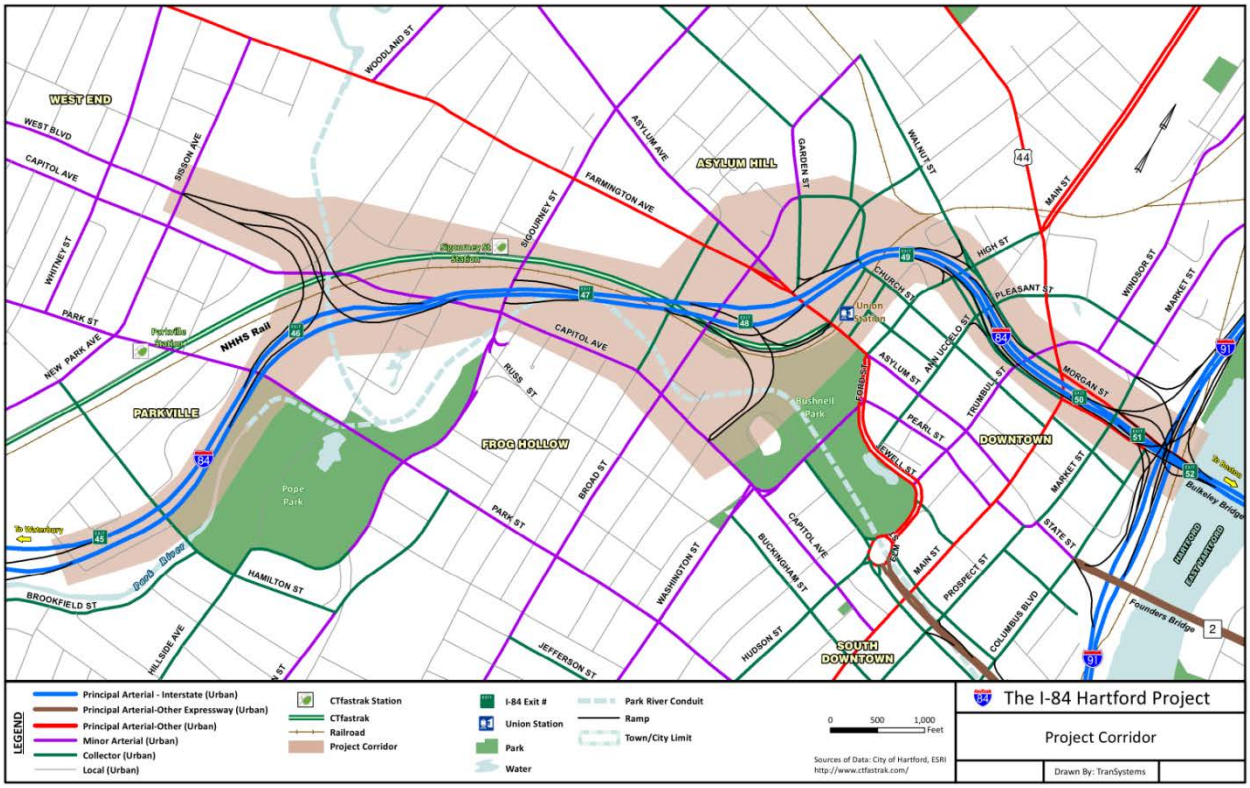


Figure 1: Project Corridor

The purpose of the **I-84 Hartford Project** is to address the structural deficiencies of the existing highway, improve traffic operations and safety conditions, and improve mobility on the I-84 mainline and its interchanges within the project corridor. The project is needed to address three major deficiencies:

- Bridge Structure Deficiencies – The bridge spans within this section of the highway are reaching the end of their intended life. While safe to drive over today, they are in a state of continuous deterioration. CTDOT has spent over $60 million on repairs since 2004 and will need to continue to repair and ultimately replace them.

- Traffic Operational and Safety Deficiencies – This stretch of I-84 has higher daily vehicle use than any other stretch of highway in the State, with approximately 175,000 vehicles a day, far in

excess of the initial design capacity of 50,000 vehicles a day. Left-hand on- and off-ramps, weaving traffic and eight interchanges in less than three miles contributes to traffic jams stretching six to seven miles. The accident rate within the project corridor is four times the state average, with nearly two accidents per day.

- Mobility Deficiencies – On adjacent streets, the original downtown grid is impacted physically and visually by constrained connectivity between the north and south sides of the highway. In addition, there is poor pedestrian and bike accessibility on the adjacent local streets.

Goals and objectives for the project have been developed and will be considered in evaluating and screening alternatives, and eventually supporting the recommendation for a preferred alternative. While it may not be possible to satisfy all of the goals listed below, it is the intent of the alternatives development process to address as many as possible. The overarching goals of the **I-84 Hartford Project** are:

- Ensure the long-term serviceability of the corridor;
- Maximize the public investment in the corridor; and
- Ensure better integration of the interstate with the urban environment.

The full text of the Draft Purpose and Need Statement is included in Appendix A.

The **I-84 Hartford Project** alternatives development and screening process will be closely tied to the program's Purpose and Need Statement and its associated Goals and Objectives. The alternatives will address structural, operational, mobility, and safety deficiencies while striving to meet current design standards including design speed, shoulder widths, lane widths, and median widths. There are four preliminary alternatives currently being considered – No-Build, Elevated Highway *(existing railroad alignment)*, Lowered Highway *(relocated railroad alignment)*, and Tunneled Highway *(relocated railroad alignment)*.

1.3 Key Resources

The EIS for the **I-84 Hartford Project** will contain an analysis of the project's potential impacts on a wide range of social, environmental, and economic considerations, generally characterized by the following:

- Traffic patterns;
- Right-of-way (property) needs;
- Environmental concerns such as air quality, water quality, noise impacts, and impacts to cultural and historic resources;
- Economic considerations including the potential for impacts to local and regional businesses; and
- Construction-related impacts.

1.4 Project Initiation

When this project was initiated, the significance of potential impacts in the corridor was not clearly established. At the time, CTDOT recommended an Environmental Assessment (EA) be prepared for the proposed project per, 23 CFR 771.115(c), to determine the appropriate environmental document required. The agency coordination requirements found in Section 6002 of SAFETEA-LU, which are required for an EIS, were followed so that if significant impacts were identified during the environmental review process, the anticipated Cooperating and Participating Agencies would have already been involved in the project in accordance with the requirements, resulting in minimal delay to the overall project schedule. As the alternatives analysis process has progressed, it has emerged that significant

environmental impacts will occur and that this project will be classified as an EIS. The scoping process carried out in 2015 will meet the EIS requirements for scoping. In addition to complying with NEPA requirements, the environmental documentation for the **I-84 Hartford Project** will comply with CEPA. Please see Appendix B for CTDOT's NEPA Initiation Letter dated September 30, 2014, and FHWA's response dated October 24, 2014. It is expected that FHWA will soon issue a Notice of Intent (NOI) to prepare an EIS, which will be published in the Federal Register.

As the NEPA requirement for an EIS for scoping has already been met, there will not be another formal public or agency scoping meeting as was conducted in January 2015. There are, however, extensive public meeting opportunities for the **I-84 Hartford Project** on a monthly basis.

1.5 Project Scoping

While agency and public outreach has been ongoing for nearly two years, December 18, 2014, marked the "official" start of the NEPA/CEPA public scoping process. A Scoping Initiation Packet was made available in December 2014 and an Agency Scoping Meeting was conducted on January 20, 2015, followed by a Public Scoping Meeting on January 21, 2015. The official scoping comment period was open from December 18, 2014, to February 20, 2015. A Scoping Summary Report documenting the scoping process, scoping comments, and responses and next steps was completed in October 2015. As mentioned above, the project was scoped in accordance with SAFETEA-LU in the event that the project classification would be an EIS, no time would be lost.

2. Agency Coordination

2.1 List of Agencies, Roles and Responsibilities

2.1.1 Project Team

The **I-84 Hartford Project Team** consists of the FHWA, CTDOT, the Environmental Team (ET) represented by AECOM, and the Program Management Team (PMT) represented by TranSystems. In addition, the team is receiving regular updates about related ongoing studies and projects such as the *CT Congestion Relief Study* (Value Pricing Study), the *New Haven-Hartford-Springfield High Speed Rail Project: Hartford Rail Alternatives Analysis* (Rail Relocation Study), the *New Haven-Hartford-Springfield (NHHS) Rail Program*, as well as many other local and regional projects. Coordination with the team shall be maintained through regular meetings with CTDOT throughout the duration of the project.

2.1.2 Lead Agencies

FHWA is the Lead Federal Agency for this project. As the Lead Federal Agency pursuant to NEPA and the Section 6002 of SAFETEA-LU process, FHWA is responsible for making certain decisions as specified in those federal regulations. In addition, FHWA has an overall responsibility for facilitating the expeditious completion of the environmental review process, reviewing and accepting the EIS, and ensuring that CTDOT complies with all federal and state requirements. CTDOT will act as joint lead agency for this project and ensure compliance with all CEPA requirements.

In preparing an EIS, the Lead Agencies must perform their functions in accordance with general and specific regulations in the Code of Federal Regulations (CFR) including 23 CFR part 771 and 40 CFR parts 1500-1508. In addition, the Lead Agencies must identify and involve Cooperating and Participating Agencies; develop coordination plans; provide opportunities for public and Participating Agency involvement in defining the Purpose and Need and determining the range of alternatives; and collaborate with Cooperating Agencies in determining methodologies and the level of detail for the analysis of the

alternatives. In addition, Lead Agencies must provide increased oversight in managing the process and resolving issues.

FHWA is committed to complying with all aspects of NEPA and its implementing regulations, and has made the commitment to administration of NEPA in accordance with the following key goals:

- To the fullest extent possible, all environmental investigations, reviews, and consultations will be coordinated as a single process, and compliance with all applicable environmental requirements will be reflected in the EIS.
- Alternative courses of action will be evaluated and decisions made in the best overall public interest based upon a balanced consideration of the need for safe and efficient transportation; of the social, economic, and environmental impacts of the proposed transportation improvement; and of national, state, and local environmental protection goals.
- Public involvement and a systematic interdisciplinary approach will be essential parts of the development process for proposed actions.
- Measures necessary to mitigate adverse impacts will be incorporated into the action, when feasibly possible.

2.1.3 Cooperating and Participating Agencies

According to Council on Environmental Quality (CEQ) regulations (40 CFR 1508.5), a "Cooperating Agency" is any federal agency, other than a Lead Agency, that has jurisdiction by law or special expertise with respect to any environmental impact involved in a proposed project or project alternative. A state or local agency of similar qualifications or, when the effects are on lands of tribal interest, a Tribal Nation may, by agreement with the Lead Agencies, also become a Cooperating Agency.

A “Participating Agency” is any agency with an interest in the project. The standard for Participating Agency status is more encompassing than the standard for Cooperating Agency status. Therefore, Cooperating Agencies are, by definition, Participating Agencies, but not all Participating Agencies are Cooperating Agencies. The Lead Agencies have considered the standards in deciding whether to invite an agency to serve as a Cooperating/Participating Agency or only as a Participating Agency.

The roles and responsibilities of Cooperating and Participating Agencies are similar, but Cooperating Agencies have a higher degree of authority, responsibility, and involvement in the environmental review process. A distinguishing feature of a Cooperating Agency is that the CEQ regulations (40 CFR Section 1501.6) permit a Cooperating Agency to, at the request of the Lead Agency, assume responsibility for developing information and preparing environmental analyses, including portions of the EIS, for which the Cooperating Agency has special expertise. An additional distinction is that, pursuant to 40 CFR 1506.3, if the Classification of Action for the project is an EIS, "a Cooperating Agency may adopt without re-circulating the environmental impact statement of a Lead Agency when, after an independent review of the statement, the Cooperating Agency concludes that its comments and suggestions have been satisfied."

According to SAFETEA-LU Section 6002, Participating Agencies are defined as any federal, state, or local agency or Tribal Nation that has an interest in the project. As Participating Agencies, they will be responsible for the following items:

- Participate in the NEPA/CEPA scoping and environmental review process by attending meetings with the public and reviewing draft documents;

- Provide comments on the Project's Purpose and Need, Goals and Objectives and range of alternatives, methodologies, and the level of detail for the analysis of alternatives;
- Identify, as early as practicable, any issues of concern regarding the project's potential environmental or socioeconomic impacts. Participating agencies may also participate in the issue resolution process;
- Participate in coordination meetings, conference calls, and joint field reviews, as appropriate; and
- Review and comment on sections of the pre-draft or pre-final EIS to communicate any agency-specific concerns on the adequacy of the document, the alternatives considered, and the anticipated impacts and mitigation.

In addition to the above roles, Cooperating Agencies have the additional responsibility for the following items:

- Assist in the development of a project coordination plan, including a project schedule;
- Provide (on request of the lead agency) information and assist with the preparation of environmental analyses including portions of the NEPA/CEPA documents relevant to the agency's jurisdiction or area of special expertise;
- Provide staff support at the lead agency's request to enhance the latter's interdisciplinary capability;
- Identify, as early as practicable, any issues that could substantially delay or prevent an agency from granting a permit or other approval that is needed for the transportation project; and
- Provide a review of the NEPA/CEPA documents prepared for this project.

Table 1 identifies Lead, Cooperating and Participating Agencies that have been invited to be involved in the environmental review process for the proposed project. As the project evolves, additional agencies may be identified and invited to be Cooperating or Participating Agencies. The contact information for individuals within each agency is identified as available.

Table 1: List of Lead, Cooperating and Participating Agencies

AGENCY	CONTACT	PROJECT ROLE
FEDERAL AGENCIES		
FHWA – Federal Highway Administration	Michelle Hilary Phone: (860) 494-7571 Email: michelle.hilary@dot.gov	Lead Agency
USACE – Army Corps of Engineers	Susan Lee Phone: (978) 318-8494 Email: susan.k.lee@usace.army.mil	Cooperating Agency Invited 12/12/14 **Accepted 01/09/15**
FRA – Federal Railroad Administration	Michael Johnsen Phone: (202) 493-1310 Email: michael.johnsen@dot.gov Day-to-Day Contact: Amishi Castelli Phone: (617) 431-0416 Email: amishi.castelli@dot.gov	Cooperating Agency Invited 12/12/14 **Accepted 01/07/15**
FTA – Federal Transit Administration	Mary Beth Mello Phone: (617) 494-1784 Email: mary.mello@dot.gov Day-to-Day Contact: Leah Sirmin Phone: (617) 494-2459 Email: leah.sirmin@dot.gov	Cooperating Agency Invited 12/12/14 **Accepted 01/06/15**
HUD – U.S. Department of Housing and Urban Development	Suzanne Piacentini Phone: (860) 240-9702 Email: suzanne.piacentini@hud.gov Day-to-Day Contact: Martha Curran Phone: (617) 994-8363 Email: martha.a.curran@hud.gov	Participating Agency Invited 12/12/14 **Accepted 02/12/15**
U.S. EPA – Environmental Protection Agency	Timothy Timmermann Phone: (617) 918-1025 Email: timmermann.timothy@epa.gov Alternate Contact: Bill Walsh-Rogalski Phone: (617) 918-1035 Email: walshrogalski.william@epa.gov	Participating Agency Invited 12/12/14 **Accepted 02/20/15**
STATE AGENCIES		
CTDOT – Connecticut Department of Transportation (Project Sponsor and Joint Lead Agency)	Richard Armstrong Phone: (860) 594-3191 Email: richard.armstrong@ct.gov	Joint Lead Agency – Project Sponsor
SHPO – State Historic Preservation Office	Kristina Newman-Scott Phone: (860) 256-2753 Email: kristina.newmanscott@ct.gov Staff Archaeologist:	Cooperating Agency Invited 12/12/14 **Accepted 01/08/15**

AGENCY	CONTACT	PROJECT ROLE
	Cathy Labadia Phone: (860) 256-2764 Email: catherine.labadia@ct.gov	
CTDEEP – Connecticut Department of Energy and Environmental Protection	David Fox Phone: (860) 424-4111 Email: david.fox@ct.gov	Participating Agency Invited 12/12/14 **Accepted 01/08/15**
TRIBAL NATIONS		
Narragansett Indian Tribe	Matthew Thomas Phone: (401) 364-1100 ext. 214 Email: tcalhoun@nitribe.org (executive assistant); brwnjbb123@aol.com (John Brown, THPO) Day-to-Day Contact: Doug Harris Phone: (413) 325-7691 Email: dhnithpo@gmail.com	Participating Agency Invited 12/12/14 **Accepted 02/20/15**

2.2 Initial Coordination, Coordination Points and Responsibilities

2.2.1 Initial Coordination

Letters of invitation were sent to all potential cooperating and participating agencies on December 12, 2014. Agencies were asked to provide a written confirmation of their status as either a Cooperating or Participating Agency, or formally decline the status. A copy of the Scoping Initiation Packet was enclosed with the letter.

2.2.2 Tribal Nations Involvement and Consultation

As part of the SAFETEA-LU Section 6002 activities, Tribal Nations have and will continue to be notified about the Project Purpose and Need, alternatives being considered, and planned cultural resource investigations. They will be asked to provide input on cultural resource (historic properties) aspects to aid in determining the initial Area of Potential Effect (APE). The Tribal Nations have already been provided an opportunity to become Participating Agencies in the project. They were notified about the public scoping meeting on January 21, 2015, and will be notified about any future public information meetings or public hearings to be conducted.

2.2.3 Resource Specific Coordination

2.2.3.1 Section 4(f) / Approval Coordination

The Department of Transportation Act (DOT Act) of 1966 included a special provision, Section 4(f), which stipulated that the FHWA and other DOT agencies cannot approve the use of land from publicly owned parks, recreational areas, wildlife and waterfowl refuges, or public and private historical sites, unless the following conditions apply:

- There is no feasible or prudent alternative to the use of the land; and
- The action includes all possible planning to minimize harm to the property as a result of the proposed use.

As a result of slight modifications in the language of the Section 4(f) text, it is now possible to waive the requirements for an analysis of avoidance alternatives where it is shown that the use of the land is a *de minimis* (minimal) impact. If the U.S. Department of Transportation (USDOT) determines that a transportation use of Section 4(f) property results in a *de minimis* impact, analysis of avoidance alternatives are not required and the Section 4(f) evaluation process is complete.

2.2.3.2 Section 106 Process

Section 106 of the National Historic Preservation Act (NHPA) provides legal protection to historic preservation in federal planning, decision-making and project execution. The NHPA was developed by the National Park Service (NPS) and the Advisory Council on Historic Preservation (ACHP), an independent federal agency that promotes the preservation, enhancement, and productive use of our nation's historic resources, and advises the President and Congress on national historic preservation policy.

The Section 106 process applies to any and all federal agencies when the following conditions apply:

- There is a federal or federally licensed action, including grants, licenses, and permits; and
- The proposed action has the potential to affect properties listed in or eligible for listing in the National Register of Historic Places.

When Section 106 applies, the applicable federal agency is required to:

- Identify and assess the effects of its action on historic resources; and
- Consult with appropriate state and local officials, including the State Historic Preservation Officer (SHPO), Tribal Historic Preservation Officers (THPOs), applicants for federal assistance, and members of the public and consider their views and concerns about historic preservation issues when making final project decisions.

2.2.3.3 Section 404 Permit Coordination

The coordination process between the FHWA NEPA process and the U.S. Army Corps of Engineers (USACE) Section 404(b) (1) process for evaluating alternatives and impacts relative to dredging and filling wetlands and/or waterways is known by the USACE as "Highway Methodology". This process is intended to satisfy both FHWA's selection of a preferred alternative and the USACE's requirements for selecting a "Least Environmentally Damaging Practicable Alternative" (LEDPA). The process requires that the USACE coordinates with CTDOT and provides written approvals at key milestones in the project. Concurrent with preparation of the EIS, a preliminary application for a Section 404 Permit will be prepared by CTDOT (if necessary and/or applicable).

2.2.4 Coordination Points

SAFETEA-LU Section 6002 establishes milestones within the environmental review process for involvement and review opportunities. Table 2 summarizes the key coordination points between the Lead Agencies, Cooperating Agencies, Participating Agencies, the Public Advisory Committee (PAC) and the general public including which agency is responsible for activities during that coordination point. Estimated completion dates are included for informational and resource planning purposes. Time frames and review periods are established in accordance with SAFETEA-LU Section 6002 unless covered under existing agreements (i.e., review periods established in the CTDOT/FHWA/SHPO Section 106 Programmatic Agreement). Note that this table does not document historic project activities, rather it documents activities related to the SAFETEA-LU Section 6002 coordination and environmental review

process. It, as well as this plan, will be updated as the project proceeds through the environmental review process.

CTDOT and FHWA will ask the agencies for concurrence on three major decision points:

- The final Purpose and Need Statement;
- The methodologies and level of detail required for alternative analysis for resources present in the study area; and
- The reasonable range of alternatives to be studied in the EIS.

Table 2: Agency Roles and Coordination Points

Coordination Point		Completion Date	Originating Agency	Receiving Entity	Task
1.	NOI to Prepare an EIS	TBD	CTDOT	FHWA	NOI, drafted by FHWA, and published in the Federal Register.
2.	Identification of Cooperating and Participating Agencies	Completed January 2015	CTDOT/ FHWA	Cooperating and Participating Agencies	Invitation letter sent by CTDOT/FHWA. The Agencies have 30 days to accept and identify a contact person or decline in writing.
3.	SAFETEA-LU Section 6002 Coordination Plan, including schedule	Most recently revised May 2016	CTDOT/ FHWA	Cooperating and Participating Agencies	Coordination plan drafted by CTDOT/FHWA subject to revisions from Cooperating and Participating Agencies as needed. Will be updated as warranted throughout the project.
4.	Scoping Initiation Packet	Completed December 2014	CTDOT	General Public, Cooperating and Participating Agencies	Scoping Initiation Packet drafted by CTDOT made available to public and agencies.
5.	NEPA/CEPA Scoping Meetings	Agencies – 01/20/15 Public – 01/21/15	CTDOT/ FHWA	General Public, PAC, Cooperating and Participating Agencies	Scoping meetings held; scoping summary finalized and on project website.

Coordination Point		Completion Date	Originating Agency	Receiving Entity	Task
6.	Scoping Summary Report	Completed July 7, 2015	CTDOT	General Public, Cooperating and Participating Agencies	Scoping comments received from public and agencies posted on website.
7.	Purpose and Need Statement	Most recently revised Spring 2016	CTDOT/ FHWA	General Public, PAC, Cooperating and Participating Agencies	Continually updated as project progresses.
8.	Reasonable Range of Alternatives to be Studied in EIS	September 2016	CTDOT/ FHWA	General Public, PAC, Cooperating and Participating Agencies	
9.	Impact Assessment Methodologies/ Level of Detail Required for Alternative Analysis	September 2016	CTDOT/ FHWA	Varies by issue, Cooperating and Participating Agencies	Methodologies and level of detail required will vary by issue and be developed with input from Cooperating and Participating Agencies.
10.	Identify Preferred Alternative	TBD	CTDOT/ FHWA	General Public, PAC, Cooperating and Participating Agencies	Cooperating and Participating Agencies to comment on preferred alternative.
11.	Preliminary DEIS/ EIE	TBD	CTDOT/ FHWA	General Public, PAC, Cooperating and Participating Agencies	CTDOT to issue a working draft for high level review and comment; may be issued on a chapter by chapter basis.
12.	Circulation of DEIS/EIE	TBD	CTDOT/ FHWA	General Public, PAC, Cooperating and Participating Agencies	Public hearing and comment period.
13.	Preliminary Final DEIS/EIE	TBD	CTDOT/ FHWA	Cooperating Agencies	CTDOT to issue a working draft for high level review and comment.

Coordination Point	Completion Date	Originating Agency	Receiving Entity	Task
14. FEIS/ROD and EIE/ Determination of Adequacy	TBD	CTDOT/ FHWA	General Public, PAC, Cooperating and Participating Agencies	Public review.
15. Permits, Licenses and Approvals	TBD	CTDOT	Entity dependent on type of approval required	CTDOT to submit appropriate documentation for permits, licenses and/or approvals, if required.

2.2.5 Methodologies

FHWA and CTDOT have been collaborating with agencies and the public, as appropriate, on the methodologies to be used and the level of detail required in the analysis of the proposed alternatives and preparation of the EIS. Methodologies were discussed at the Agency Scoping Meeting and identified by certain agencies in their formal scoping comments. Ongoing collaborative discussion was conducted at a series of Agency Coordination Meetings that took place in 2015 (May 20, August 14, August 25, September 9, and November 2) to further discuss methodologies and provide the agencies the opportunity to review and approve those methodologies. Over the course of the environmental review process, the Project Team will consult directly with the appropriate resource and regulatory agencies if adjustments to the methodologies are required.

The general steps for impact analysis include: 1) identifying the important cause-and-effect relationships between the project activities and impacts to resources; 2) determining the magnitude and significance of the effects over the relevant time frames, based on the resource characterizations from the data collection phase; 3) identifying relevant mitigation measures, either those to be undertaken as project specific actions or those evolving as general or regulatory trends in the affected area; and 4) summarizing any unmitigated adverse impacts and their significance.

Due to the nature of the project corridor and surrounding area, the impact parameters of most importance will be those related to the built environment such as air quality, noise, and vibration, contamination of soils or water from historic activities, visual resources, cultural resources, economic conditions, and construction activities. The following summary of methodologies has been developed for the **I-84 Hartford Project** for the following technical disciplines:

- Air Quality
- Noise and Vibration
- Cultural Resources
- Hazardous Materials
- Land Use and Socioeconomics
- Natural Resources

These methodologies are summarized below and further described in the Phase 3 (EIS) scope of work which has been developed and has undergone CTDOT review (scope of work available upon request).

Air Quality Technical Report

The Air Quality Technical Report will document the detailed analysis methodologies, assumptions, and results including backup materials for each alternative. The analysis will be conducted in accord with recommendations made at the August 25, 2015 Agency Coordination Meeting which focused solely on air quality methodology. Major tasks to be completed for this report include: conduct a traffic screening analysis, develop emission factors from basic MOVES2014a, conduct hot spot analyses for carbon monoxide (CO) and particulate matter (PM) (qualitative analysis only for PM), perform mesoscale emission burden analysis for criteria pollutants and mobile source air toxics (MSATs), and model impacts of tunnel ventilation with the U.S. Environmental Protection Agency's (U.S. EPA) AERMOD dispersion model (if a tunnel is one of the Build Alternatives). In CO hot spot modeling, it is to be determined whether EPA will have finalized updates to their mobile source modeling procedures (i.e., replacing CALINE3 and CAL3QHC with AERMOD) prior to CO hot spot modeling for the I-84 Hartford Project. At such time, the ET will consult with EPA Region 1 to determine which model to use. Lastly, the ET will conduct qualitative construction period impact analysis. The conclusion on project-level transportation conformity determination will be discussed in the report. The Air Quality Technical Report will be an appendix to the EIS, while a summary of the report findings will be included in the EIS as the Air Quality Chapter.

Noise and Vibration Technical Report

A detailed Noise and Vibration Technical Report will be prepared in accordance with the guidelines set forth by the Connecticut Department of Transportation's (CTDOT) *Highway Traffic Noise Abatement Policy For Projects Funded By The Federal Highway Administration* [July 2011]. The detailed environmental analysis is intended to document potential impacts related to traffic noise due to realignment and reconfiguration of the I-84 viaduct. Noise and vibration due to other non-traffic sources (such as Amtrak passenger rail and CSX freight rail operations) will be evaluated using the Federal Transit Administration's (FTA) *Transit Noise and Vibration Impact Assessment* guidelines (May 2006). Other transit sources, such as the CT*fastrak* Bus Rapid Transit (BRT) corridor, would also be evaluated using the Federal Highway Administration's (FHWA) *Traffic Noise Model* (TNM).

The ET would utilize the default FTA source reference noise levels and prediction algorithms included in the *Transit Noise and Vibration Impact Assessment* guidelines to estimate future noise levels from up to two relocated rail alignments. In accordance with FTA guidance, noise levels would be determined for both the Existing Condition and up to two Build Alternatives in the Design Year. Similarly, the FTA default ground-surface vibration curves would be used as a basis for predicting vibration levels at nearby receptors for the same Build Alternatives as they represent a worst-case or conservative estimate of the vibration from transit rail services. Additional information regarding existing and future rail vehicle specifications may also be used to refine the noise and vibration prediction modeling. The prediction models developed as part of the previous tasks would be used to develop future noise and vibration levels for select land uses along the project corridor where there is the potential for noise impact. The FTA *moderate* and *severe* allowable impact criteria would be used to evaluate operational noise impacts from the rail component only. Specifically, the FTA allowable increase thresholds would be evaluated to determine the onset and magnitude of impact between the Existing Condition and the Build Alternatives where there is existing exposure to rail activity. The day-night noise level (or L_{dn}) would be used to evaluate impacts at residential receptors and the peak-hour equivalent noise level (or L_{eq}) would be used to evaluate impacts at institutional receptors (such as schools, libraries, and churches). Similarly, the FTA allowable increase threshold of 3 VdB would be used to evaluate future vibration impacts from relocated or modified rail service as part of this project.

A detailed assessment of the construction impacts expected as part of the proposed highway replacement project would be conducted. The detailed noise and vibration modeling assessment would

be conducted in accordance with the FHWA's *Roadway Noise Construction Model* and the FTA's *Transit Noise and Vibration Impact Assessment* guidelines. Equipment information and operating scenarios would be provided by the CTDOT/Project Team for evaluation by the ET. Noise and vibration levels would be determined at the same receptors as were used for the rail noise and vibration assessment above. The results of the construction noise and vibration modeling analysis would be compared with the project impact criteria (such as from the CTDOT noise policy or from the City of Hartford) to determine the onset and severity of impact.

If exceedances of the CTDOT noise abatement criteria are predicted under the alignments, "feasible and reasonable" mitigation measures would be evaluated. The ET would investigate various noise barrier systems to determine any potential feasibility issues and develop applicable solutions and recommendations if necessary. The alternative mitigation options selected for detailed analysis would be presented to the CTDOT/Project Team to help refine the proposed project Build Alternatives. The barrier analysis would be conducted for the selected noise barrier systems in accordance with the CTDOT noise policy to determine feasibility and reasonableness. The evaluated noise barrier systems would include an iteration of the optimal barrier dimensions necessary to achieve compliance with the CTDOT "feasible and reasonable" criteria. The noise barriers would be evaluated for their potential to shield noise primarily from the I-84 roadway network. However, the degradation effects due to other nearby transportation sources (such as CT*fastrak* BRT or the rail corridor) would be also be evaluated qualitatively. All mitigation measures would be coordinated with the CTDOT/Project Team so that they comply with and are evaluated in accordance with the CTDOT and FHWA noise policy. Similarly, if exceedances of the FTA noise or vibration criteria are predicted from train operations, mitigation measures would be identified and evaluated with regard to the traffic mitigation measures (where applicable).

The Noise and Vibration Technical Report will be an appendix to the EIS, while a summary of the report findings will be included in the EIS as the noise and vibration chapter. The construction impacts will also be addressed in the technical report, however will be summarized in a separate Construction Chapter of the EIS.

Cultural Resources Technical Report

The Cultural Resources Technical Report will incorporate three major regulatory requirements: Technical Analysis in compliance with Section 106 of the National Historic Preservation Act (NHPA); Memorandum of Agreement (MOA) with all consulting parties to mitigate the adverse effect of the preferred alternative on historic resources; and the USDOT Act of 1966 Section 4(f) Evaluation. Detailed information on each is provided below.

Upon selection of the preferred alternative, a Draft Memorandum of Agreement (MOA) between CTDOT, SHPO, FHWA, the Advisory Council on Historic Preservation (ACHP), and other consulting parties will be prepared to mitigate the adverse effect of the preferred alternative on National Register (NR)-listed, NR-eligible, National Historic Landmarks (NHLs), and locally designated resources.

It is anticipated that development of the Draft MOA will require up to two meetings with consulting parties to discuss potential mitigation stipulations included in the Section 106 report and the DEIS.

Upon selection of the preferred alternative, a Draft Section 4(f) Evaluation will be prepared to justify the use of historic architectural resources because no feasible and prudent alternative exists. Table 5 in the Phase 3 scope provides a list of NR-listed, NR-eligible, and potentially NR-eligible resources that may be directly impacted by the range of alternatives developed as of April 2016. Impacts to these resources may constitute a Section 4(f) use. Other resources may be added or removed as the project progresses. The

ET will help CTDOT and FHWA select the appropriate type of Section 4(f) that may be prepared for the resources. These include:

- Individual Section 4(f) Evaluation
- Programmatic Section 4(f) Evaluation for Minor Involvements with Historic Sites
- Programmatic Section 4(f) Evaluation for Transportation Projects that Have a Net Benefit to a Section 4(f) Property
- *De Minimis* Impact Determination on Historic Site (*can be approved by FHWA without need to develop and evaluate alternatives that would avoid using the Section 4(f) property if Section 106 analysis results in no adverse effect finding*)

The Draft Section 4(f) Evaluation will be incorporated as an appendix to the EIS.

The Cultural Resources Technical Report will focus predominantly on architectural resources while summarizing the Phase 1A archaeological surveys conducted during Phase 2 services. No further archaeological surveys beyond Phase 1A are currently envisioned. However, if the results of the Phase 1A survey warrant further archaeological survey, that will be scoped and budgeted at a later date.

Hazardous Materials Technical Report

In accordance with CTDOT Task 110 Corridor Land Use Evaluation Protocol, a Corridor Land Use Evaluation is being conducted, which will produce a technical report detailing the location and scope of the project, the evaluation team and key research dates, and general characterization of current and past land uses, including federal and state requirements associated with any identified regulated land uses, and any known or suspected factors which suggest the presence of moderate or high risk land uses. The report will provide recommendations for further evaluation and include a “Qualitative Site Risk Evaluation” table summarizing the land uses and assigned risk for each parcel evaluated within the project corridor. Additional attachments to the report will include a project location map, corridor map, and a commercial database report covering the properties evaluated, and copies of the land use evaluation sheets completed for every parcel evaluated.

The technical report described above was part of the ET’s Phase 2 scope and budget. The Phase 3 scope and budget includes subsequent analysis of the various Build and No Build Alternatives and how they affect the moderate and high risk land uses identified in Phase 2. Phase 3 will also include any activities necessary to carry out recommendations for further evaluation identified as a result of completion of the Phase 2 scope. The full technical report will be an appendix to the EIS, while a summary will be provided in the Hazardous Materials Chapter of the EIS.

Land Use and Socioeconomic Technical Report

All required tasks and work products will fully comply with NEPA and State of Connecticut regulations applicable to economic impact assessments, including FHWA’s T-6640.8A guidelines for preparation of environmental documents. The Land Use and Socioeconomic Technical Report will be appended to the EIS. Each proposed alternative will be assessed for its potential to influence net new economic activity within the region as well as the sub-regional allocation of growth already forecast. It will also include analysis of how potential growth attributable to the proposed alternatives conforms to local and regional goals, objectives, policies and plans for economic development. Furthermore, potential secondary and cumulative social and economic effects will be assessed by considering how likely the proposed action in combination with other planned and proposed developments within the overall study area are to affect development and existing residential, commercial, and institutional land uses. It is anticipated that further

collaboration with the agencies will be required to further address the level of detail necessary for adequate assessment of potential secondary and cumulative impacts.

The I-84 Hartford Project will document Environmental Justice (EJ) communities living and working within the study area; including potential impacts and mitigation strategies. Appropriate and necessary steps to identify and address disproportionately high and adverse effects on the health and environment of minority and low-income populations will be recommended and implemented to the greatest extent practicable, as permitted by law.

Natural Resources Technical Report

The Needs and Deficiencies Analysis for the **I-84 Hartford Project** identified existing natural resources within the study area. The data and information from this analysis will serve as the framework for the Natural Resources Technical Report and will be used to identify the presence of any natural resources within the footprint of each build alternative. The following natural resource impacts will be identified in this technical report: Surface Water Resources Impacts; Groundwater Impacts; Floodplain Impacts; Wetlands Impacts; Endangered and Threatened Species Impacts; Prime Farmland Soils Impacts and Wildlife/Fisheries. For each build alternative, the ET will determine the extent of impacts for any identified natural resources. Results from this analysis will be summarized to provide detailed descriptions of all impacts. Where significant impacts have been identified, mitigation strategies for each Build Alternative will be developed in accordance with regulatory requirements.

3. Public Involvement

The **I-84 Hartford Project** is being driven by a robust public and stakeholder outreach program, guided by this Agency Coordination Plan and the Public Involvement Plan (PIP). CTDOT and FHWA are committed to utilizing a wide range of strategies to engage all interested parties. Public input is a crucial element to ensure that the project addresses and supports the needs of a wide range of engaged parties while producing a suitable, workable, and cost-effective solution. A separate PIP has been developed for the **I-84 Hartford Project** and is summarized in this section.

3.1 Environmental Justice Outreach

Hartford has significant low-income and minority populations, with more than 56 percent of the City of Hartford's population identified as "minority" in the 2012 U.S. American Community Survey. Federal Guidance on Environmental Justice, including "Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations" (Executive Order (EO) 12898) from February 1994 and "Environmental Justice: Guidance Under the National Environmental Policy Act" (December, 1997), require agencies to address significant adverse environmental effects on these communities with mitigation measures outlined and/or analyzed in any environmental evaluation process.

In conformance with the Federal Guidance for environmental reviews with significant Environmental Justice (EJ) communities, this Agency Coordination Plan and the PIP will follow the principles set forth in Executive Order 12898 to determine any disproportionately high and/or adverse human health or environmental effects to low-income and/or minority populations within the study area.

This Agency Coordination Plan, and all work associated with the **I-84 Hartford Project**, will conform to U.S. EPA's "Final Guidance for Consideration of Environmental Justice in Clean Air Act Reviews" (July,

1999) and U.S. EPA's "Final Guidance for Incorporating Environmental Justice Concerns in U.S. EPA's NEPA Compliance Analyses" (April, 1998).

The EIS that will be prepared for the **I-84 Hartford Project** will take all of the above Federal Guidance into consideration and ensure that EJ communities are appropriately included and considered throughout the process.

3.2 Limited English Proficiency Outreach

Individuals who do not speak English as their primary language and who have a limited ability to read, speak, write, or understand English can be limited English proficient, or "LEP". EO 13166, "Improving Access to Services for Persons with Limited English Proficiency" was signed on August 11, 2000. EO 13166 requires federal agencies to identify a need for services and to develop and implement a system to provide those services to LEP persons. The **I-84 Hartford Project Team** has reviewed demographic data and identified that 16 percent of the total Hartford population speaks Spanish as their primary language and has limited English-language proficiency. To accommodate Spanish speakers, Spanish translation has been provided on the project website via Google Translate. All public meetings will have a translator present; in addition, select meeting materials will be translated into Spanish.

3.3 Americans with Disabilities Act Outreach

Public meetings will be held in locations that meet current Americans with Disabilities Act (ADA) standards to assure those with a disability have convenient access to meetings and are able to participate. Sign language interpreters will be available at public meetings, if a request for accommodation is made to CTDOT.

3.4 Website

Project websites are an effective way to support public participation efforts for transportation studies and provide a source for immediate, up-to-date information. A project website, i84hartford.com, has been created and will be expanded and refined as the project evolves.

Questions and data requests received via the website will be responded to in a timely manner. The website will be updated frequently to ensure that it reflects current project information and in accordance with project progress through the various phases of work (alternatives development, environmental documentation, design, and construction). Content on the website includes reports of past meetings, information regarding future meetings, photographs of the project area, current project status, and links to relevant websites. The website will be developed in conformance with EJ considerations as well as current ADA standards for visually impaired individuals, if necessary.

3.5 Newsletters

One of the major sources of project information will be regularly issued newsletters to help the public better understand project progress and the steps toward developing and delivering this project. Quarterly newsletters are planned as part of the project's first phase, but it is anticipated that newsletters will be developed and distributed approximately three to four times per year throughout the course of the project. These newsletters may report on significant milestones or provide routine updates as to the progress of the project. Hard copies (single-fold, four-page layout in color with graphics, photos, and text) will be provided to some venues, e.g., libraries.

In order to ensure compliance with federal EJ requirements of NEPA, newsletters will be available in Spanish. According to the 2005-2009 American Community Survey (ACS) data, 16 percent of the total Hartford population speaks Spanish as their primary language and has limited English-language proficiency. No other non-English languages are spoken exclusively in more than one percent of the population.

3.6 Email Bulletins

In addition to regularly issued newsletters, the Project Team will prepare and electronically distribute email bulletins at key milestones over the course of the project to a stakeholder email list (and to physical mailing addresses for those on the contact list for whom no email address is available). The communications will include project updates, notifications of public meetings and events, links to project news articles, project website updates, and project newsletters in electronic format. Email bulletins will be available in Spanish and potentially other languages upon request.

3.7 Social Media

Social media pages on Facebook (facebook.com/I84Hartford) and Twitter (@i84hartford) have been developed as another means of disseminating information and encouraging public participation. The pages will be monitored and updated regularly with project information, meeting notices, relevant project photos, and links to the project website and comment form. Comments received through social media will be monitored, recorded and reported to the Project Team. Questions posted to the pages will be responded to in a timely manner.

3.8 Public Advertisements/Press Releases

Public advertisements or press releases will be prepared as required and disseminated to news outlets (e.g., *Hartford Courant*) to announce or advertise the public meetings or hearings. Newspaper advertisements will be prepared in English and in Spanish and will also be disseminated to *La Voz*, Connecticut's largest Spanish language newspaper. The legal notice will indicate the locations where the DEIS is available and the date, time, and place of the public hearings (if required). Additional display ads will identify the date, time, and location of the public meetings and/or hearings.

For the public scoping meeting on January 21, 2015, advertisements were published in *La Voz*, *The Hartford Courant* and the CTDEEP's *Environmental Monitor*. These notices provided general information on the meeting and the public scoping comment period and ran on several days in the weeks leading up to the meeting.

3.9 Stakeholder Database

The Project Team will maintain a stakeholder contact list throughout the project. This list will be used as a way to convey information to stakeholders through email bulletins, newsletters, and project updates. Project contacts without email addresses, or who do not wish to provide an email address, will receive hard copy communications through the U.S. Postal Service (USPS) announcing public meetings. Members of the public who wish to be added to the stakeholder database may submit contact information through the project website, or in person at public meetings throughout the project.

3.10 Stakeholder Meetings

The Project Team will gain early input from key project stakeholders regarding the **I-84 Hartford Project** needs and deficiencies, as well as their desires and ideas regarding areas of concern and potential recommendations. This input will inform the entire Project Team and will provide early stakeholder

perspective. The stakeholder meetings will introduce the scope of the project, the anticipated timeline, and the findings of the various data collection activities. Other stakeholder meetings will occur as needed.

A representative group of key stakeholders has been formed to provide guidance throughout the project. The PAC was established early in the process and includes representatives of Hartford-based community organizations, neighborhood revitalization associations, industries, religious organizations, educational institutions, and government agencies and municipalities. In addition, up to 25 key stakeholder interviews have been facilitated by the Project Team.

The PAC will provide input throughout all phases of the **I-84 Hartford Project**, including the consideration of the early alternatives and continuing on through environmental documentation, design, and construction. One of the primary goals of the PAC is to give the Project Team an ongoing perspective from informed individuals regarding existing conditions and priorities in the study area.

PAC "Working Groups" have been formed to discuss specific topics/issues. Working Groups in progress include: Purpose and Need; Bicycles, Pedestrians and Transit; Traffic and Parking; and Urban Design. Other working groups are also being considered.

The Project Executive Committee (PEC) oversees the PAC. The PEC is composed of leadership from a few stakeholder groups with the directive to help drive decision-making in the event the PAC cannot reach consensus on a particular issue. It includes upper-level management from FHWA, CTDOT, Capitol Region Council of Governments (CRCOG), and the cities of Hartford, East Hartford, and West Hartford.

3.11 Public Meetings

It is anticipated that many public meetings will be held during the course of the project at locations within the project area. A public meeting was held on June 17, 2014, and a Scoping Meeting, a preliminary step in the NEPA/CEPA process, was held on January 21, 2015, in accordance with Section 6002 of SAFETEA-LU. Additional public meetings will be scheduled when the Project Team has relevant information to share. The goal of these meetings will be to provide information to interested parties and obtain public input on potential alternatives.

From April 27, 2015, to May 2, 2015, an Open Planning Studio was held at a church in downtown Hartford, where over 400 people attended design charrettes and issue-specific presentations, and had the opportunity to talk to CTDOT and FHWA staff, as well as consultants working on the project. Since May 2015, seven additional Open Planning Studios were held: July 29, 2015, August 12, 2015, September 22, 2015, November 16, 2015, December 10, 2015, February 25 and 26, 2016, and April 20 and 21, 2016.

Several public meetings are also anticipated at key milestone points in accordance with federal and state regulations. Upon publication of the DEIS, a public hearing will be held during the comment period to allow for formal feedback on that document. Written comments, emails, and website comments will also be accepted. Other informal meetings will occur throughout the environmental documentation process.

Meetings will be in compliance with all EJ considerations and requirements for ADA accessibility.

For more detailed information on the public involvement component of the **I-84 Hartford Project**, please refer to the PIP, which can be found at i84hartford.com.

4. Project Schedule

A draft schedule has been developed for the project. The schedule anticipates that conclusion of the NEPA/CEPA process would take place towards the end of 2018, followed by final design of the preferred alternative and subsequently, construction.

Note that detailed coordination information for cooperating and participating agencies is provided in Table 2. In general, participating agencies will have 30 days from the transmittal of information from CTDOT or FHWA in which to respond and provide comments.

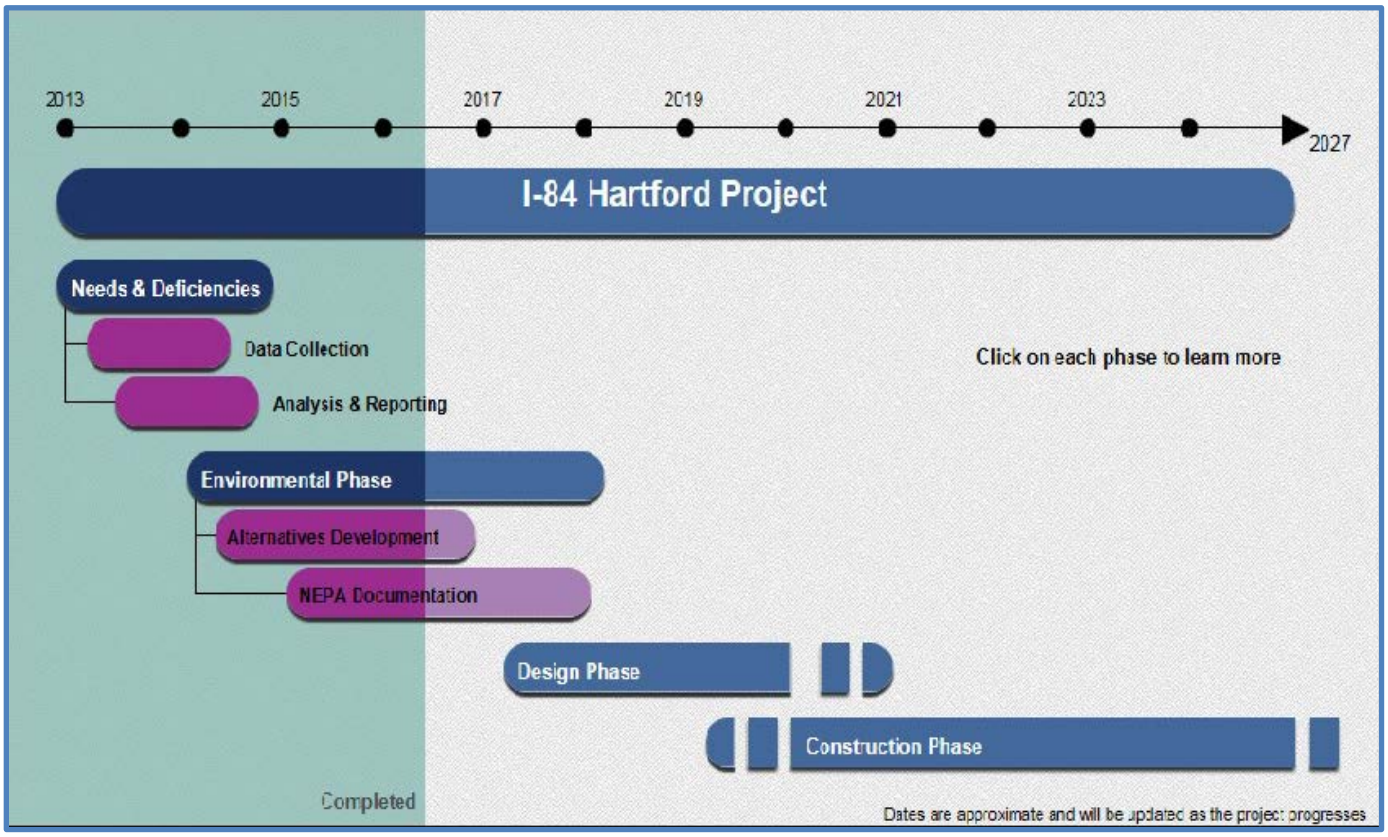


Figure 2: Environmental Review Process Schedule

5. Revision History

Changes to this Agency Coordination Plan are identified below.

Note: If the schedule requires modification, concurrence on the schedule is only required from Cooperating Agencies if the schedule is being shortened. Participating Agencies are not required to concur with changes.

Table 3: Revision History

Version	Date	Name/Section	Description
0	January 2015		
1	May 2015	1.4 Project Initiation	Changed reference to January 2015 public scoping meeting to past tense.
1	May 2015	2.1.3 Cooperating and Participating Agencies	Corrections to names and contact information and addition of project role acceptance dates in Table 1.
1	May 2015	2.2 Initial Coordination, Coordination Points and Responsibilities	Changed references to January 2015 public and agency meetings to past tense and updated dates in Table 2.
1	May 2015	3.11 Public Meetings	Changed reference to January 2015 public scoping meeting to past tense.
1	May 2015	6. Acceptance of Agency Coordination Plan	Corrections to signatory names; created individual signature pages.
2	July 2015	2.1.3 Cooperating and Participating Agencies	Corrections to names and contact information in Table 1.
3	May 2016	Entire document – EIS 2.2.5 Methodologies 2.1.3 Cooperating and Participating Agencies 6. Acceptance of Agency Coordination Plan	Overall revision of entire document to: 1) Reiterate class of action as an EIS; and 2) Provide greater detail on methodologies. Updated air quality paragraph in 2.2.5 based on comment/clarification from CTDEEP. Corrections to names and contact information in Table 1. Corrections to signatory names on signature pages.
4	August 2016	2.2.5 Methodologies	Updated cultural resources paragraph in 2.2.5 based on comments from SHPO.
5	October 2016	Appendix A: Purpose and Need Statement	Correction to crash data infortaion and minimum shoulder width.

6. Acceptance of Agency Coordination Plan

The signatures of the following duly authorized agency representatives from the Lead, Cooperating, and Participating Agencies, indicate acceptance of their roles as represented in this Agency Coordination Plan.

Lead Agency Acceptance

FEDERAL HIGHWAY ADMINISTRATION

By: _____ Date: _____

Eloise Powell
Planning, Environment, and Research Team Leader

Joint Lead Agency Acceptance

STATE OF CONNECTICUT DEPARMENT OF TRANSPORTATION

By: _____ Date: _____

Richard Armstrong
Principal Engineer

Cooperating Agency Acceptance

U. S. ARMY CORPS OF ENGINEERS

By: _____ Date: _____

Susan Lee
Project Manager

Cooperating Agency Acceptance

FEDERAL RAILROAD ADMINISTRATION

By: _____ Date: _____

Michael Johnsen
Acting Division Chief
Environmental & Corridor Planning Division

Cooperating Agency Acceptance

FEDERAL TRANSIT ADMINISTRATION

By: _____ Date: _____

Mary Beth Mello
Regional Administrator

Cooperating Agency Acceptance

STATE HISTORIC PRESERVATION OFFICE

By: _____ Date: _____

Kristina Newman-Scott
Director of Culture

Participating Agency Acceptance

U.S. DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT

By: _____ Date: _____

Suzanne Piacentini
Connecticut Field Office Director

Participating Agency Acceptance

U.S. ENVIRONMENTAL PROTECTION AGENCY

By: _____ Date: _____

Timothy Timmermann
Associate Director, Office of Environmental Review

Participating Agency Acceptance

CONNECTICUT DEPARTMENT OF ENERGY AND ENVIRONMENTAL PROTECTION

By: _____ Date: _____

David Fox
Senior Environmental Analyst

Participating Agency Acceptance

NARRAGANSETT INDIAN TRIBE

By: _____ Date: _____

Doug Harris
Deputy THPO

APPENDIX A: PURPOSE AND NEED STATMENT

I. PROJECT BACKGROUND AND HISTORY

The City of Hartford is the capital of Connecticut, and the largest employment center in the State. Known as the "Insurance Capital of the World", three of the top five employers in Hartford are in the insurance industry. Downtown Hartford is home to approximately 80,000 jobs with employment concentrated in the insurance, financial, legal, and government sectors.[1]

Interstate 84 (I-84) bisects the city, and within Connecticut, it serves as a critical east-west transportation link between New York and Massachusetts. It provides connectivity to and from Interstate 91 (I-91) in Hartford, a major north-south section of interstate highway between New Haven and Massachusetts; and Route 2 in East Hartford, a major east-west expressway serving eastern Connecticut. Locally, commuters use I-84 and its interchanges to access Hartford's business districts, State Capitol, and downtown areas.

The **I-84 Hartford Project** limits extend from just east of the Flatbush Avenue Interchange (Interchange 45) to just west of the I-91 Interchange (Interchange 51/52) in downtown Hartford. The Sisson Avenue, Sigourney Street, and Capitol Avenue interchanges are within the project limits (see Figure 1: Project Limits). Within the corridor area are many local streets, buildings, parks, several parking lots, and Union Station. Two other transit corridors are within the I-84 Hartford Project limits: the recently completed bus rapid transit system known as CT*fastrak*; and Amtrak's Hartford Line, which will ultimately be upgraded and included in the New Haven-Hartford-Springfield (NHHS) rail corridor, currently under construction.

Connecticut Department of Transportation (CTDOT) recently completed the Hartford Rail Alternatives Analysis to address the future of the aging Hartford rail viaduct, which is a critical link in the regional passenger and freight rail system, in particular the NHHS Rail Program. The Analysis included options to maintain, reconstruct, or relocate the rail corridor. The interstate and the railroad are each a physical constraint on the other. It has become increasingly clear that design solutions for the interstate and the railroad are potentially linked, as the alternative development process for the highway greatly influences the alternative development process for the rail line and vice versa. This provides the opportunity for CTDOT to integrate the highway and rail elements in the development of a holistic corridor transportation solution, as opposed to two separate modal solutions.

Construction of I-84 in Hartford began in 1959 and was completed in 1969. Its alignment grew from various 1940s and 1950s studies of the "East-West Expressway," a highway meant to relieve congestion on local streets and to provide fast and efficient travel between the west and southwest and the central business district of Hartford. Within Hartford the highway corridor plan generally followed the corridor of the railroad and the Park River. The plan was solidified in 1956 upon the passage of the National System of Interstate and Defense Highways, with the East-West Expressway approved as a portion of I-84.

There was great debate concerning the freeway's most suitable location; impacts and costs were weighed against maximum benefits to the traveling public. When I-84 was constructed, it not only displaced many families, businesses and institutions, it created a lasting impact, especially on nearby neighborhoods. Where in some locations the Park River, the railroad and bordering industries had

[1]City of Hartford, *One City, One Plan – POCD 2020*, adopted June 3, 2010.

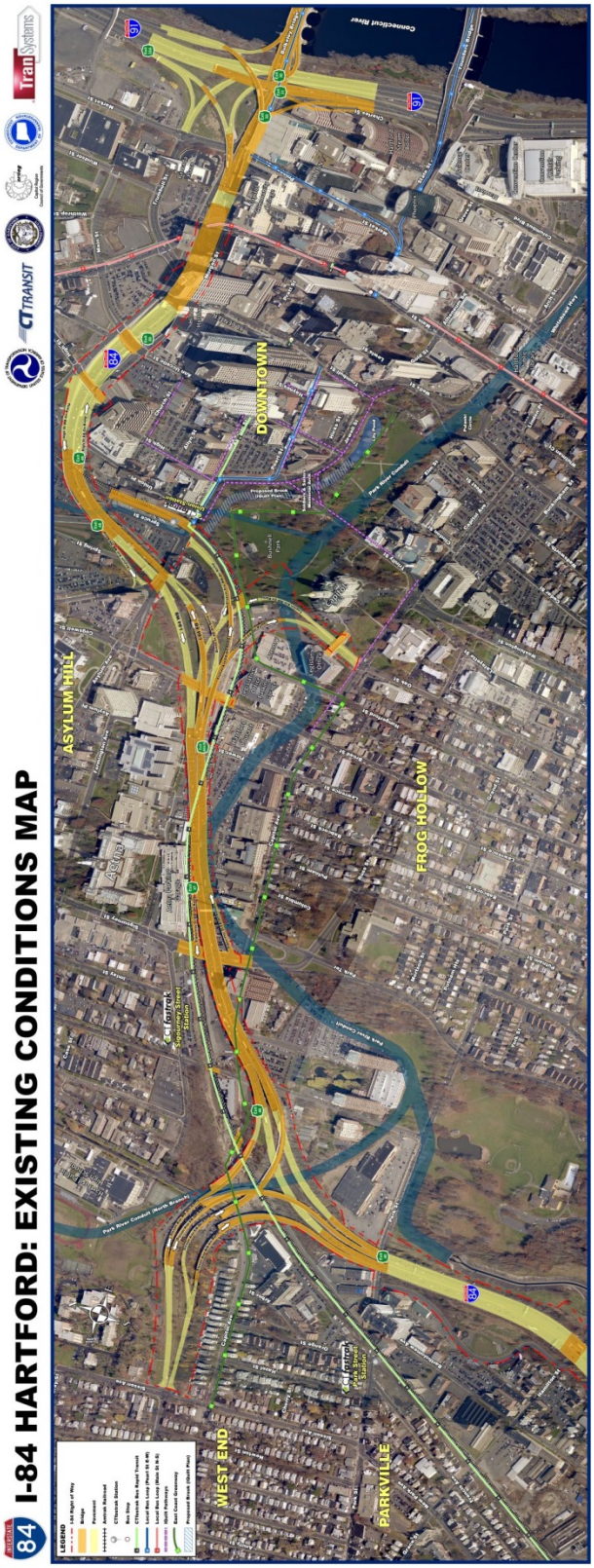
previously been the physical demarcation between north and south neighborhoods, I-84 with its massive interchanges, bridges, and elevated structures has been a far more disruptive and imposing barrier. As one CTDOT report observed upon completion of the expressway, "The impact of the I-84 freeway upon the physical environments into which it was introduced has been both dramatic and overwhelming."[2] The scale of the interstate so dominates the area that surrounding neighborhood communities have long insisted that the highway's physical and visual impact be lessened as part of any reconstruction plan.

When I-84 in Hartford was designed, it was originally anticipated that the interstate would be carrying between 50,000 and 66,000 vehicles per day by the year 1975; however, shortly after the highway opened in 1970, the actual traffic volume was between 70,000 and 100,000 vehicles per day. Today, I-84 in Hartford is the most heavily-traveled section of highway in the State, with traffic volumes in excess of 175,000 vehicles per day.

Much of I-84 and its interchange ramps in Hartford are elevated on structures known as viaducts, consisting of several long, multi-span bridges high above ground level. Now near or past their anticipated life span, many of the viaducts are classified as either "structurally deficient" or "functionally obsolete" or both, and are in need of rehabilitation or replacement. While still safe for the public to drive on, a "structurally deficient" classification means that there are deteriorated conditions of significant bridge elements and potentially reduced load-carrying capacity. Bridges with a structurally deficient (SD) designation typically require repair to remain in service and eventually require rehabilitation or replacement to address the underlying deficiency. If a bridge is classified as "functionally obsolete," it means that the bridge no longer meets the current design standards for its intended use. CTDOT has spent tens of millions of dollars to maintain and make repairs to keep these bridges in a state of good repair and will have to continue to perform extensive work, such as recurring repairs, rehabilitation, and even bridge replacement as the structures' conditions continue to decline.

[2]CTDOT et al, *I-84 Environmental and Joint-Use Study Hartford, CT,* 1970.

Figure 1: Project Limits



In 2010, the Capitol Regional Council of Governments (CRCOG) completed the "I-84 Viaduct Study." Led by the Hub of Hartford Committee, the planning study explored a broad range of possible project alternatives that would improve the I-84 infrastructure, while considering economic development opportunities, neighborhood connectivity, community cohesion, livability and mobility. The I-84 Viaduct Study documented how I-84 is a visual and physical barrier, dividing employment centers, communities and neighborhoods within Hartford. Crossings of I-84 are mostly limited to locations where local streets pass under the highway viaduct spans. These crossings are characterized by environments that are unappealing and challenging to pedestrians and bicyclists, discouraging travel and interaction between communities that the highway bisects. The planning study explored these community impacts in concert with other issues and proposed conceptual alternatives that would "reduce the visual and environmental impacts of the highway; promote walkable, bikeable environments that support transit use and enhance transit access; and reconnect the City across the highway."

Among the preliminary alternatives that were initially evaluated and subsequently eliminated in the study were the Skyway Viaduct and Boulevard concepts. The Skyway Viaduct would have been at a higher elevation than the existing viaduct. Many existing ramps would have been removed with access to the downtown provided by interchanges at the edge of the project limits. This alternative was eliminated because it did not adequately address downtown Hartford access needs. The Boulevard concept would have replaced the highway viaduct with a high volume tree-lined street, but was eliminated because it performed poorly from multiple perspectives.

The study developed the following four potential concepts, but did not select a preferred alternative:

- Highway replaced with an enhanced viaduct structure.
- Highway replaced with an enhanced viaduct structure with improved connections across the highway.
- Viaduct replaced by a surface highway; rail line relocated to the north side of I-84; city reconnected across highway.
- Viaduct replaced by a tunnel; rail line relocated to the north side of I-84; city reconnected across the highway.

Many of the ideas and concepts coming out of this Planning Study have been incorporated as "Goals and Objectives" into the **I-84 Hartford Project** to give a broader vision of the project for project decision-makers, distinct from the Project Purpose and Need.

II. PURPOSE AND NEED

This Purpose and Need Statement will serve as the foundation for developing evaluation criteria that will drive the decision-making process resulting in selection of a preferred alternative. This decision-making process, or alternatives analysis process, will evaluate a range of build and no-build alternatives based on how they achieve Project Purpose and Need; Goals and Objectives; and how they compare in terms of their environmental and socioeconomic impacts. It is imperative that the preferred alternative meets the Purpose and Need elements being: structural deficiencies; traffic operational and safety deficiencies; and mobility deficiencies. It is also important that the preferred alternative takes all reasonable measures to remedy the impacts this section of the interstate has imposed on the neighborhoods, businesses, and communities of Hartford. In an effort to address this, a set of Goals and Objectives has been established to further support the decision-making process and lead to a transportation solution that is also a solution to the various community impacts caused by the interstate.

A. Purpose

The purpose of the **I-84 Hartford Project** is to address structural deficiencies, improve traffic operations and safety, and improve mobility on the I-84 mainline and its interchanges between Flatbush Avenue and I-91 in Hartford. Addressing these deficiencies would allow I-84 to continue to serve as a vital link in the interstate highway system in the Northeast and provide needed access to Hartford business districts and the State Capitol. The project would also improve access, safety, and mobility for bicycles and pedestrians within the project area. At the same time, the **I-84 Hartford Project** would aspire to reduce the highway's footprint on the city; lessen the highway's visual and physical impact on adjoining neighborhoods; better integrate the highway into the urban environment; create linkages to existing and proposed future modes of transportation; and support Hartford's economic development goals.

B. Need

1. Bridge Structure Deficiencies

There are several long, multi-span bridges within the **I-84 Hartford Project** corridor that are in an advanced state of deterioration. The bridges within the project limits also include those carrying portions of the Sisson Avenue ramps (Interchange 46), Sigourney Street ramps (Interchange 47) and the Asylum Street/Capitol Avenue/Broad Street ramps (Interchange 48).

The corridor is approximately 2.5 miles long; however, it comprises approximately 4.5 miles of bridges with a total deck area of over 1.3 million square feet, or about 30 acres. These structures were originally designed for a 50-year service life, and now that they have reached the end of their intended life span, costly repairs are routinely needed to control their continued deterioration. Between 2002 and 2012, CTDOT spent approximately $60 million to rehabilitate some of the bridges within the corridor, and an additional $50+/- million is programmed for repairs in the next three years. Despite continual maintenance, repairs, and capital investment, the condition of the bridges will continue to worsen over time and lead to extensive rehabilitation and ultimately full replacement of many of the bridges.

2. Traffic Operational and Safety Deficiencies

The designs of the interchanges within the corridor do not meet current design standards and are inadequate for today's traffic conditions. Designed in the 1950s and early 1960s for much lower traffic volumes, the interchange designs also do not meet driver expectations and, consequently, can contribute to driver confusion. Between 2009 and 2011, there were 1,840 motor vehicle accidents within this corridor. Some of the many operational deficiencies that contribute to a higher than average statewide crash rate include:

- Closely spaced interchanges that create difficulties in expressway signage and conflicts between traffic entering and exiting the highway;
- Poor lane continuity;
- Short distances between on-ramps and off-ramps creating weave sections;
- Partial interchanges with left-hand entrance and exit ramps;
- Substandard shoulder widths (minimum is 10', existing shoulders are 2-4'); and
- Undesirable horizontal alignments.

The existing interchange and ramp spacing is less than the recommended guidelines for urban freeways. Design guidance by the American Association of State Highway and

Transportation Officials (AASHTO) recommends interchange spacing of one mile in urban areas and a minimum of 1,000' between successive on-ramps or off-ramps and 2,000' between successive on- and off-ramps. When interchanges are spaced closer than one mile, the interaction between the highway mainline traffic and the ramp traffic becomes constrained, which can lead to a significant reduction in free flow speeds. Including Flatbush Avenue and the I-91 interchange, the existing corridor has eight (8) full or partial interchanges within 2.7 miles.

Due to the existing substandard shoulder widths, damaged or disabled vehicles block travel lanes until towing assistance can arrive on the scene, causing significant delays. Responding to incidents within the corridor during heavy congestion is very difficult because drivers have little room to pull off the travel lanes. Heavy congestion within the corridor, coupled with the lack of standard shoulder widths also adversely affects the emergency response times for Hartford Hospital and St. Francis Hospital, among others. The sense of openness created by shoulders of adequate width also contributes to driving ease and reduced stress.

Due to the high volume of traffic, wider shoulders are needed on I-84 to provide space for vehicles to pull-off in emergencies, provide space for evasive maneuvers to avoid or reduce accidents, provide space for maintenance operations such as snow removal, and provide space to control drainage during rain events to avoid ponding on the highway.

3. *Mobility Deficiencies*

This section of I-84 was designed in anticipation of 50,000 and 66,000 vehicles per day by the year 1975. Traffic volumes have increased to approximately 175,000 vehicles per day, with up to 7,200 vehicles in the morning peak hour on I-84 westbound. These volumes include the freight movement of goods, which is above the national average within this section of I-84. The existing interstate layout and ramp configurations do not meet modern design standards. The closely spaced interchanges and multiple-lane weaving sections create a constrained environment for the high traffic volumes and cause higher travel friction. This section of highway experiences significant delays on a daily basis, and I-84 west of I-91 accounts for 53% of all delays on the region's freeways.[3] The interstate operates at a Level of Service (LOS) F during the morning and afternoon peak hours. Speed data from INRIX reveals that the interstate travel speeds are often below 20 mph for more than an hour at a time. A significant amount of nonrecurring congestion is caused by crashes, disabled vehicles, and work zones. The relatively high crash rate on I-84, coupled with the lack of usable shoulders, frequently lead to emergency and disabled vehicles blocking a travel lane(s), which dramatically reduces the available capacity of I-84. This temporary but significant congestion reduces the reliability of I-84.

A significant portion of the traffic using the interstate during the morning and afternoon peak hours is commuters working in Hartford. The freeway interchanges provide important access to and from the employment centers via the city street system. In addition to the employment centers, the concentration of businesses, institutions, and neighborhoods in the vicinity of I-84 in Hartford create a heavy traffic demand and also rely on the interchanges for access. The need for access at interchanges has to be balanced with the need to improve the interchanges' designs and spacing.

[3] CRCOG, *I-84 Viaduct Study*, Fall 2010.

There is also a need to address vehicular, pedestrian, and bicycle accommodation deficiencies and connectivity issues along city streets that are located within I-84 right-of-way or directly affected by proposed I-84 improvements. Improvements should create more inviting, attractive, safe and accessible pedestrian and bicyclist environments to better accommodate non-motorized modes of travel. The Urban Land Institute identified development strategies for Hartford, and one of the recommendations included "creating a more pedestrian-friendly community with better access to the downtown area, and improving both perceived and real safety for employees and residents."[4]

III. PROJECT GOALS AND OBJECTIVES

As stated earlier, a set of Goals and Objectives has been established to provide other potential and broader factors to be considered by the CTDOT and FHWA in the alternatives analysis screening process. The project Goals and Objectives are as follows:

A. Ensure the long-term serviceability of the corridor by:

1. Creating opportunities for connections to existing and future modes of transportation within the corridor;
2. Coordinating with the City of Hartford and CRCOG towards a workable solution that is compatible with city and regional initiatives; and
3. Developing a holistic corridor multi-modal solution that balances the needs of the highway with the needs of the rail corridor and CT*fastrak.*

B. Maximize the public investment in this corridor by:

1. Utilizing cost-effective solutions that maximize capital investment over the life span of the project;
2. Reducing maintenance requirements and operations costs;
3. Sequencing staged construction to minimize the impact on the traveling public and the local community;
4. Reconfiguring the interstate in a manner that frees up land no longer needed for highway purposes, increasing the opportunities for open space, development, or other purposes; and
5. Implementing recycling strategies to reuse existing materials on site.

C. Ensure better integration of the interstate with the urban environment by:

1. Reducing the physical impact of the interstate by reducing the footprint of I-84 and its ramps;
2. Repairing the visual and physical connectedness of the areas that the interstate corridor divides;
3. Using architectural features and details on the proposed structures and other design treatments that would improve the highway's aesthetic qualities as viewed from neighboring areas;
4. Creating aesthetically pleasing spaces for those highway areas that are shared with or adjacent to local streets and properties including passive parks and recreational uses in accordance with Hartford's sustainability goals; and
5. Supporting the City's urban design goals; and pedestrian, biking, and transit interconnectivity.

[4] Panel Advisory Services by the Urban Land Institute, City of Hartford, September 2007.

APPENDIX B: INITIATION LETTERS

STATE OF CONNECTICUT
DEPARTMENT OF TRANSPORTATION

2800 BERLIN TURNPIKE, P.O. BOX 317546
NEWINGTON, CONNECTICUT 06131-7546
Phone:

September 30, 2014

Ms. Amy D. Jackson-Grove
Division Administrator
Federal Highway Administration
628-2 Hebron Avenue, Suite 303
Glastonbury, CT 06033

Subject: State Project No. 0063-0644
Federal Aid Project No. 0843(244)
I-84 Hartford Viaduct Environmental Study
Notification of Project Initiation per Section 6002 of SAFETEA-LU

Dear Ms. Jackson-Grove:

The Connecticut Department of Transportation (CTDOT) is initiating the environmental review process as required by the National Environmental Policy Act (NEPA) and in accordance with Section 6002 of the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU, as codified in 23 U.S.C. §139) for the proposed I-84 viaduct reconstruction project (The I-84 Hartford Project) in Hartford, CT. The proposed project is approximately two miles in length, and is located between the Flatbush Avenue Interchange (Interchange 45) on the west and the I-91 Interchange in downtown Hartford on the east (Interchange 52). A Study Area Map is enclosed for your review. In addition, CTDOT will ensure that all requirements of the Connecticut Environmental Policy Act (CEPA) will be met during the environmental review process and documentation.

Most of I-84 and its interchange ramps in Hartford are elevated on structures known as viaducts, consisting of several long, multi-span bridges high above ground level. The viaduct structures were originally designed for a 50-year service life. Now near or past their anticipated life span, many of the viaducts are classified as either "structurally deficient" or "functionally obsolete" or both. Despite continual maintenance, repairs and capital investment, the condition of the bridges will continue to worsen over time and lead to extensive rehabilitation and ultimately full replacement of many of the bridges.

This section of I-84 was designed in anticipation of 50,000 vehicles per day by the year 1975. Traffic volumes have increased to approximately 175,000 vehicles per day (inclusive of freight movement of goods). Preliminary findings reveal that the existing design does not meet modern interstate standards for current or future traffic demand and is detrimental to the freeway's optimum functionality. Complicating this reconstruction project is that the New

Haven-Hartford-Springfield Amtrak Railroad Line and the CT*fastrak* busway share the same geographic location as the I-84 corridor in downtown Hartford, with I-84 crossing the railroad line and CT*fastrak* at least twice. A study funded by the Federal Transit Administration (FTA) is underway to evaluate the feasibility and costs of relocating a portion of the railroad, which may enhance the reconstruction of I-84. The FTA study will be completed in early 2015.

The purpose of the project, as currently defined in the draft Purpose and Need statement, is to address structural deficiencies; improve traffic operations and safety; and improve mobility on and along the I-84 corridor within the project limits. It will also address pedestrian and bicycle deficiencies along and across the corridor and address other connectivity issues across the I-84 corridor. Preliminary alternatives are being developed at this time.

As the project is in the early phases of alternatives development, the significance of potential impacts in the corridor are not clearly established at this time. Therefore, CTDOT recommends that an Environmental Assessment (EA) be prepared for the proposed project, per 23 CFR §771.115(c), to determine the appropriate environmental document required. The EA will be done in accordance with the agency coordination requirements found in Section 6002 of SAFETEA-LU, which is required for Environmental Impact Statements (EIS). The requirements are being followed so that if significant impacts are identified during the environmental review process, the anticipated participating and cooperating agencies will have already been involved in the project in accordance with the law, resulting in minimal delay to the overall project schedule. If significant impacts are identified during the environmental review process, CTDOT and the Federal Highway Administration (FHWA) will take the necessary procedural steps under NEPA to prepare an EIS.

Pursuant to Section 6002 of SAFETEA-LU, FHWA must serve as the lead federal agency for this project, and CTDOT will serve as a joint lead agency. The responsibilities of the lead agencies are to:

- Establish a list of potentially participating and cooperating agencies and send these agencies invitation letters to participate in the project.
- Develop an Agency Coordination Plan in compliance with Section 6002 of SAFETEA-LU.
- Provide opportunities for public and agency involvement in defining purpose and need and range of alternatives.
- Consult with participating agencies in determining methodologies and the level of detail for the analysis of alternatives.

In addition to the NEPA/CEPA environmental review process, as well as various state permits and approvals, CTDOT anticipates that this project may require Section 4(f) approval and Section 106 determinations of effect from FHWA.

At this time, CTDOT requests FHWA approval to initiate the NEPA process for The I-84 Hartford Project and requests concurrence with CTDOT's recommendation for an EA compliant with Section 6002 of SAFETEA-LU. CTDOT will be the joint lead agency with FHWA and will work with FHWA in finalizing the Agency Coordination Plan and inviting participating and cooperating agencies to be officially involved. CTDOT anticipates holding a public scoping meeting and an agency scoping meeting later this fall or early 2015 to formally introduce the NEPA process to the public and associated federal and state agencies involved with this project. At that time, CTDOT will discuss the draft Purpose and Need Statement and the initial range of alternatives.

If you have questions or would like to discuss this project, please contact Mr. Richard Armstrong, Principal Engineer, at (860) 594-3191.

Very truly yours,

Timothy M. Wilson, P.E.
Manager of Highway Design
Bureau of Engineering and Construction

Enclosure: Study Area Map

U.S. Department of Transportation
Federal Highway Administration

Connecticut Division

628-2 Hebron Avenue
Suite 303
Glastonbury, Connecticut 06033
Phone (860) 659-6703
Fax (860) 659-6724
http://www.fhwa.dot.gov/ctdiv/index.cfm

October 24, 2014

In Reply Refer To:
HPR-CT

Mr. Timothy Wilson, P.E.
Manager of Highway Design
Bureau of Engineering and Construction
Connecticut Department of Transportation
2800 Berlin Turnpike
Newington, CT 06131

Dear Mr. Wilson:

The Federal Highway Administration (FHWA) has reviewed the letter you have sent on September 30, 2014, regarding the I-84 Hartford Viaduct Environmental Study [State Project No. 0063-0644/ Federal Aid Project No. 0843(244)] Notification of Project Initiation per Section 6002 of SAFETEA-LU.

We concur that due to the unknown significance of potential project impacts at this time that an Environmental Assessment (EA) should be prepared, as prescribed in 23 CFR §771.115(c). We also concur that the Section 6002 Agency Coordination process be used for the project to minimize delay and ensure full agency participation. FHWA will serve as the lead federal agency with CTDOT as the joint lead agency. We look forward to working with you on this project.

Sincerely,

Elena L. Powell

for: Amy Jackson-Grove
Division Administrator

cc: Mark Alexander, CTDOT
Richard Armstrong, CTDOT