Transportation Safety and Improvement Study  
Farmington and Hartford  
Preliminary Scope of Work  
September 2014 

Overview
Recent investments by the State, Private Sector, and the University of Connecticut (UConn) in the areas surrounding the UConn Health Center in Farmington and the UConn’s proposed Greater Hartford Campus in Hartford, establish the need to study the surrounding transportation networks, and present the opportunity to support this growth in a sustainable manner.

Near the Health Center in Farmington, approximately 1.1 million square feet of construction and/or renovation is proposed over 8 years. Large-scale developments currently in construction or planned for the near future include the UConn Health Center Expansion and the construction of the Jackson Laboratories Bioscience Facility. Based on a preliminary assessment, these projects have the potential for major traffic impacts on the adjacent Route 4 Corridor, roadway network, and the I-84 and Route 9 ramp systems. While some operational improvements on Route 4 and the local roadway network have been OSTA mandated to address some immediate needs, they do not constitute a comprehensive multi-modal transportation plan needed to support this growing, economically important area. Many of the identified Transportation Issues, such as operations at the Route 4/Talcott Notch/Old Mountain Road intersection, need further study.

Additionally, UConn plans to relocate its Greater Hartford Campus to the site of the Hartford Times Building in downtown Hartford, preferably by the start of the 2017 Fall Semester. Although a traffic study will be performed, there is a need for a more regional planning perspective. In addition to coordinating the UConn study findings with on-going City projects, it’s anticipated that the study will assess leveraging the benefits of CTfastrak, CTTransit, regional rail service, and walking and cycling for campus transportation needs. The study recommendations will help mitigate operational and access issues associated with area roadway systems currently experiencing some of the region’s most significant network and interstate traffic congestion.

Therefore, the Capitol Region Council of Governments (CRCOG), in partnership with the Connecticut Department of Transportation (CTDOT), UConn, the Towns of Farmington, and the City of Hartford proposes to initiate a study of transportation systems in the areas surrounding the UConn Health Center and proposed UConn Greater Hartford Campus to:

- Address the issues of safety and congestion
- Recommend appropriate access for planned developments
- Identify opportunities to develop and support multi-modal transportation options
- Review existing and proposed future land uses and projects
- Evaluate existing and future traffic operations, and existing transportation improvement plans
- Assure adequate access and transportation choices to both areas
- Adhere to smart growth principles and identify sustainable solutions
- Develop a strategy for a safe and efficient multimodal transportation system consisting of implementable planning-level projects capable of obtaining funding from currently available programs
The study will be carried out over an 18- to 24-month period by CRCOG with the assistance of a consultant. Representatives from CTDOT, UConn, the Town of Farmington, and the City of Hartford will be consulted with throughout the process and an Advisory Committee, anticipated to be comprised of stakeholders from many of these institutions, will help direct the study.

Definition of the Study Area and Near-Term Development Projects

The proposed project includes the following primary approaches to the Farmington Health Center and proposed UConn Greater Hartford Campus areas:

- **Farmington - Route 4 between State Route 508 (Interstate 84 exit 39 ramps) and the West Hartford Town Line.** Highway access to the Health Center area, including access to and from I-84 and Route 9 via highway ramps and the combinations of South Road/Colt Highway and Middle Road/Tunxis Road/Ridgewood Road. Additionally, improvements to the highways’ ramp configurations will be explored, potentially including use of the unfinished ramps associated I-84/Route 9 highway stack, and the longstanding concept plans for providing direct highway access from Route 4 eastbound to Route 9 southbound. Area Transit Stops locations, along with cycling and pedestrian access between them and the Health Center area will also be reviewed (including the commuter lots at I-84 interchanges 37 and 39), and area bus stops along Route 4 and within the Health Center (including those for CTTransit 2 express, 66, and F routes).

- **Hartford – The Study will consider existing and potential transit stop locations/routing, within a ¼ mile radius of the campus. Additionally pedestrian routes from the school to the transit locations will be studied.**

The major developments in the Study Area are:

**Farmington**

- Construction of a new 12-story, 400,000± square foot hospital tower, a new visitor parking structure with an approximately 420± car capacity, and a new staff parking structure with 400± car capacity to be located adjacent to the new hospital tower

- Construction of a new Ambulatory Care Complex (ACC) of 300,000± square feet in two buildings and related parking to support 1,250± cars (garage and surface parking).

- Construction of a 170,000 to 200,000 square feet New Systems Genomics/Personalized Medicine Facility in place of the existing Lower Campus Research Complex (with expansion capability to 250,000 square feet), and replacement of associated existing parking with 350 surface parking spaces (expansion potential to 500± spaces)

- Renovations to 230,000± square feet of in order to expand the Cardiology Services, Clinical/Pathology Labs, Pharmacy, and Cancer Center programs

- Clinical "C" and John Dempsey Hospital "H" Buildings renovation and infrastructure upgrades

- Building L renovation and infrastructure upgrades (143,000 square feet in Phase 1 and 138,000 square feet in Phase 2, including 28,000 square feet of new incubator space)

**Hartford**

- UConn plans to relocate its Greater Hartford Campus from West Hartford to downtown Hartford, and projects that the first students attending classes at the new facilities in the fall of 2017. Although the former Hartford Times building property on Prospect Street has been identified as the campus’ main site, recent planning efforts envision a neighborhood campus with some classes scheduled in such surrounding venues as the Hartford Public Library, the Wadsworth Atheneum, the Connecticut Science Center, the Connecticut Convention Center,
UConn’s search for the new site indicated a need to accommodate day and evening enrollment of 3,100 students and 300 faculty and staff members. Associated parking needs were identified as 850 spaces during the day, and 800 during the evening, which may in part be accommodated with existing parking capacity. The current campus accommodates approximately 2,000 students.

**Community Involvement**

Community involvement will be an important part of the study process. A variety of techniques and methods will be used to achieve effective involvement. The primary approaches will consist of the formation of an advisory committee, advisory committee focus groups, and a broad public outreach program.

**Advisory Committee:** An Advisory Committee will guide the study team throughout the study process. It will include representatives of agencies, organizations, or groups with a special interest in the transportation system in the two Study Areas. The core element of the Advisory Committee will be municipal representation. It is anticipated that each municipality will appoint a representative from its town/city council and another municipal official with technical expertise, such as Municipal Planners and/or Engineers. Other potential groups represented on the Advisory Committee include CTDOT, CRCOG, CTTransit, UConn, business owners, and citizens appointed by each municipality.

Two subsets of the Advisory Committee, one for Farmington and one for Hartford, will be formed. For the more focused work tasks, each of these breakout Advisory Committee will meet separately to address issues within each of the study areas. In order to consolidate meetings, the entire Advisory Committee will meet to advance the entire project through the more general work tasks. As such, the breakout or combined Advisory Committee meetings will not only be held at important decision points in the planning process, but also regularly to allow effective municipal involvement at all points of the process. These regular meetings will also facilitate good coordination and communication between the municipalities and CTDOT.

**Focus Groups:** It is anticipated that focus groups, comprised of a few selected Advisory Committee individuals will be formed as needed to address especially technical issues. The focus groups will be tasked with specific work efforts and report their findings to the Advisory Committee.

**Involvement of General Public:** There will be a public outreach effort with this study. Residents and businesses in the area will have ample opportunities to monitor the progress of the study and offer input to the process. All Advisory Committee meetings will be advertised and open to the public, and there will be Public Information Meetings. Mailings to an established contact list and meetings with specific community or business groups will be conducted as needed. CRCOG’s policies to reduce language barriers and to encourage involvement of low-income and minority residents will be followed. It is anticipated that oral/written Spanish translation may be needed of some documents, outreach efforts, and meetings.

**Town and City Council/Board of Selectmen Briefings:** Town and City Councils/Boards of Selectmen will be briefed at key points in the planning process.

**CTDOT Coordination:** DOT will assign planning personnel to attend various outreach/Committee meeting and potentially serve on the Advisory Committee. Additionally technical assistance will be provided by CTDOT’s Project Development Unit’s (PDU). The PDU will be consulted with and/or met with at key study milestones including, but not limited to, during Task 7 - Identification and Analysis of Alternatives.

**Newsletters:** Newsletters will be prepared at key points in the process and distributed to municipal commissions, residents, businesses and other interested parties within the study area.
Study Deliverables

Technical memoranda will be required at critical milestones such as the completion of the existing conditions review, assessment of future conditions, and alternatives analysis. The Transportation Strategy and Implementation Plan will include transit enhancements and strategies, traffic operational and safety improvements, access management concepts (i.e. curb cut consolidation, intersection improvements), and pedestrian and bicycle improvements.

A Final Report and Executive Summary will be produced that includes all technical memoranda, the Transportation Strategy and Implementation Plan, and a public participation summary. Translation to Spanish of some important documents will likely be required.

Draft Study Task Outline

The project is expected to be broken into nine (9) tasks, summarized as follows:

Task 1 Project Management

1.1 Management and Administrative Control: This study will be organized to allow affected parties to have input into the planning process. CRCOG will serve as the lead agency with technical assistance by a consultant. Coordination and input from all stakeholders such as CTDOT and the participating municipalities will be ongoing. At a minimum bi-weekly (every two weeks) consultant conference calls with CRCOG will be made to report study progress.

1.2 Reporting: Monthly progress reports and invoices will be prepared by the consultant to keep the project on schedule.

Deliverable: Bi-weekly (every two weeks) Conference Calls, Monthly progress reports and invoices

Task 2 Community Involvement

2.1 Advisory Committee Meetings: It is expected that the Consultant will meet with the combined Advisory Committee at least four (4) times throughout the study, and each of the two break-out Advisory Committees approximately five (5) times through the study.

Deliverable: Minutes for Advisory Committee Meetings

2.2 Focus Group Meetings: Periodically work tasks will be assigned to selected members of the Advisory Committee. These are not anticipated to, but may require Consultant attendance at meetings to work directly with agency specialists to ensure technical aspects of the study alternatives are feasible. It is expected that at least (6) focus group tasks may be assigned with the consultant attendance required at two (2) meetings.

Deliverable: Minutes for Focus Group Meetings

2.3 Dissemination of Public Information

2.3.1 Contact Lists will be maintained for registered interested parties

Deliverable: Interested Parties Contact List

2.3.2 Newsletters

Deliverable: Newsletters

2.3.3 E-Blasts: Email updates will be provided to registered interested parties

Deliverable: Email updates

2.3.4 Website: In an effort to keep the community involved and informed throughout the study process, the consultant will develop and maintain a study website with CRCOG oversight.

Deliverable: Study website with up to date materials posted

2.3.5 Public Access Appearances: Up to (4) Program appearances to review existing/future
conditions, preliminary alternatives, and final recommendations

2.3.6 Public Information Meetings: Public Meetings/Open Houses will be held at (3) key milestones points throughout the study in the town of Farmington and up to three (3) meetings in the City of Hartford to obtain public input. CRCOG will coordinate and participate in these open houses/meetings with the consultant, presenting information on the Study and soliciting comments from attendees.

**Deliverable: Minutes for Public Information Meetings**

2.4 Stakeholder Interviews (approximately 6-10) with key community representatives/groups

**Deliverable: Interview Summaries**

2.5 Surveys

**Deliverable: Summary of survey results and analysis**

2.6 Town or City Council/Board of Selectmen and CRCOG Transportation Committee/Policy Board Meetings: In an effort to keep municipal officials informed of the study and ensure comments are addressed, (2) Council/Selectmen meetings in each community will be scheduled. The first meeting will serve to introduce the study, existing conditions, anticipated future operations, and preliminary alternatives. The second meeting will present the study recommendations and will seek final endorsement. Additionally, (1) presentation to the CRCOG Transportation Committee and (1) presentation to the CRCOG Policy Board will be made to inform and seek final endorsement.

**Deliverable: Municipal and CRCOG endorsement of study recommendations**

2.7 Public Involvement Summary: All public involvement efforts will be summarized for inclusion in the final study report.

**Deliverable: Public Involvement Summary**

2.8 CTDOT Meeting: It is expected that two (2) meeting will be held with CTDOT staff (from Project Development and/or other Units) to receive CTDOT feedback on project alternatives. It is anticipated that a package summarizing all alternatives, including a concept plans and evaluation matrices will be prepared and delivered to CTDOT at least a week prior to the meeting.

**Deliverable: Alternatives Summary Package, Minutes of CTDOT meeting**

**Task 3 UCONN Travel Pattern Analysis**

3.1 Incorporation into this study’s documents of the Task 3 UConn Travel Pattern Analysis performed by others under the NextGen Pathways to UConn: Eastern Gateways Study

**Task 4 Data Collection & Base Maps**

4.1 Collect Data

- Previous Reports, Related Studies (including the traffic study for recent medical center UConn/Jackson Labs Expansion & OSTA mitigation requirements)
- Currently Planned or Programmed Transportation Improvements (including CTDOT Project Development Unit’s Concept Plans for the Rte. 6/SR 531/I-84 On-Ramp intersection)
- Inventory of Traffic Control Devices and Obtain Signal Plans
- Signage and Pavement Marking Inventory
- Roadway and Geometric Conditions
- Inventory of Access Drives
- Current Traffic Volumes and Speeds
- Turning Movement Counts at select intersections
- UConn Greater Hartford Campus associated Travel Patterns
- Crash Data
- Incident Management/Emergency Response Plans
- Transit and Commuter Facilities and Services (CTTransit, CTfastrak, and commuter parking lots)
- School Bus Stops
- Inventory of Bicycle and Pedestrian Facilities
- Inventory of Natural Resources
- Inventory of Historic, Archaeological & Architectural Resources
- Inventory of Wetland & Surface Water Resources
- Study Area Development in Construction, Approved, or Planned for Near-Term
- Existing Land Uses, zoning & development regulations

4.2 Develop Base Maps
  4.2.1. Prepare mapping for concept development
  4.2.2. Inventory Mapping
  - Planned or Programmed Transportation Improvements
  - Traffic Control Devices
  - Signage and Pavement Markings
  - Roadway and Geometric Conditions
  - Access Drives
  - Crash Locations
  - Transit and Commuter Facilities and Services
  - School Bus Stops
  - Bicycle and Pedestrian Facilities
  - Natural Resources
  - Historic, Archaeological & Architectural Resources
  - Wetland & Surface Water Resources
  - Near-Term Development
  - Existing Land Uses
  - Existing Zoning Map

**Deliverable: Set of Inventory Mapping**

**Task 5 Assessment of Existing Conditions**

5.1 Transportation
   5.1.1 Summarize previous reports, recommendations, and planned improvements
   5.1.2 Existing Operations Analyses (delay and queue) – With specific attention given to the Route 4 at Talcott Notch Road and Old Mountain Road intersection
   5.1.3 Crash Analysis
   5.1.4 Roadway and Geometric Conditions
   5.1.5 Access Management
   5.1.6 Incident Management/Emergency Response Plans
   5.1.7 Transit and Commuter System – ridership, service areas, stops and connections, commuter lot usage and amenities
   5.1.8 Pedestrian & Commuter Network – system gaps, ADA compliance, bicycle parking

5.2 Land Use and Development: Review Zoning Codes for regulations in support of sustainable transportation

5.3 Environmental: Natural, Historical, Architectural, Wetland, and Surface Water Resources

**Deliverable: Technical Memorandum – Assessment of Existing Conditions**
**Task 6 Assessment of Future Conditions**

6.1 Future Development Potential: Identify major development projects or planning efforts (scale, land use, and time horizon)

6.2 Traffic Forecast: 2030 Baseline (includes programmed transportation projects and regional growth factor) traffic growth and operations analysis (delay and queue)

6.3 Traffic Forecast: 2030 Potential Growth (includes programmed transportation projects, programmed major developments, and regional growth factor) traffic growth and operations analysis (delay and queue)

**Deliverable: Technical Memorandum – Assessment of Future Conditions**

**Task 7 Identification and Analysis of Alternatives**

7.1 Establish a Vision and Identify Priority Areas

7.2 Develop Preliminary Alternatives: sketch-level concept plans; high-level planning cost estimate for comparison purposes; potential right of way, environmental, and other impacts identified

7.2.1 Roadway System

- Access Management
- Intersection Improvements (Operations, Geometry)
- Interstate I84 Ramps to/from Route 4
- Safety Improvements
- Roadway Realignment / New Construction
- Signal Coordination
- Incident Diversion/Special Event Plans
- Traffic Calming
- Landscape Treatments
- Green Infrastructure

**Deliverable: Roadway sketch-level concept plans and an alternatives matrix**

7.2.2 Pedestrian System

- Sidewalk Connectivity
- Roadway Crossings – crosswalks, signage, signals
- On-road Bicycle Network – bike lanes, re-striping, signage
- Off-road Bicycle Network – trail connections, wayfinding signage
- Landscape Treatments
- Bicycle Parking
- Green Infrastructure

**Deliverable: Pedestrian and Bicycle sketch-level concept plans and alternatives matrix**

7.2.3 Transit System

- Improvements to transit services (service to major generators)
- Commuter Lot Improvements
- Transit Hubs
- Amenities (bus shelters, signage)
- Regional Connectivity (including linkage to CTfastrak)

**Deliverable: Transit sketch-level concept plans and an alternatives matrix (as needed)**

7.2.4 Land Use and Zoning recommendations in support of smart growth principles as they relate to sustainable transportation

**Deliverable: Sustainable Transportation Land use and Zoning Recommendations**
7.3 Screen Alternative: Review and screening of all alternatives to a short-list of promising alternatives
7.4 Travel Demand Modeling of Alternatives: For alternatives that propose altering roadway/transit networks in a way that traffic would be substantially altered, additional Travel Demand Model runs will be performed as necessary.
7.5 Refine and Reassess Alternatives: develop more detailed concept drawings, cost estimates, and impact determinations of short-list alternatives
7.6 Selection of Preferred Alternative(s): Final review of evaluation matrices and identification of the preferred alternative(s)
7.7 Development of Preferred Alternative: further develop concept engineering plans, sample typical sections, constructability review, planning-level cost estimates, and finalize impact estimates.
   (5) Visualizations at key locations.
**Deliverable: Technical Memorandum – Alternatives Analysis**

**Task 8 Transportation Strategy and Implementation Plan**
8.1 Identify Study Area Priorities
8.2 Identify Potential Funding Sources
8.3 Segment Preferred Alternatives into implementable projects with associated schedule time horizon (short, mid, long term project) based on the anticipated costs, feasible schedules and/or impacts.
**Deliverable: Transportation Strategy and Implementation Plan**

**Task 9 Final Report and Executive Summary**
**Deliverable: Final Report and Executive Summary**