Overview
Recent investments and planning efforts by the State, municipalities, and the University of Connecticut (UCONN) in the vicinity of the UCONN Storrs Campus established a need to study the transportation network and present the opportunity to support this growth in a sustainable manner. Four large-scale developments are currently in construction or are planned for the near future: Storrs Center, the UCONN Technology Park, the Tolland Technology Zone, and Tolland Village. Based on a preliminary assessment, these projects have the potential for a major traffic impact on the Route 195 Corridor. As a secondary access corridor to UCONN, Route 44 may also experience increased traffic due to these new developments. While some operational improvements on Route 195 are currently in design under CTDOT Project 142-146, these are not anticipated to remediate all anticipated traffic issues and the project does not develop a comprehensive transportation plan needed to support this growing community.

The Capitol Region Council of Governments (CRCOG), in partnership with the Connecticut Department of Transportation (CTDOT) and the Towns of Tolland, Mansfield, Coventry, Bolton, and Windham, propose to initiate a study of the Route 195 and Route 44 corridors that will:

- Address the issues of safety and congestion
- Recommend appropriate access to Route 195 and Route 44 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
- Strengthen connectivity between the UCONN campuses and other important destinations
- 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, and the Towns of Tolland, Mansfield, Coventry, Bolton, and Windham will be consulted with throughout the process and a Steering Committee will help direct the study.

Definition of the Study Area and Near-Term Development Projects
The proposed project includes the primary approaches to UCONN’s main campus in the Storrs section of Mansfield:

- Route 195 between Interstate 84 (exit 68) and Route 66. The segment of Route 195 north of Route 44 traverses through Tolland, Coventry, and Mansfield is heavily used since it provides access to UCONN from the interstate highway system. The southern approach to the University along Route 195 through Mansfield and Windham provides secondary access from Route 6 and points south.
- Route 44 between Interstate 384 (termination) to Route 195. This corridor traverses the towns of Bolton, Coventry, and Mansfield and serves as a key connection between Hartford and UCONN’s main campus.

The four major developments driving this study are:

1. **Storrs Center** - Storrs Center is an estimated 1,100,000 square foot mixed use “downtown” development located along the northeast side of Route 195 adjacent the UCONN’s Storrs Campus. The first phases of development are complete and consist of about 400 residential apartments and approximately 86,000 square feet of retail space. The remaining phases are anticipated to be completed within the next few years and result in total development (inclusive of the completed phases) of 660 residential units (apartments, townhomes and condos) and 120,000 square feet of commercial space. A State Traffic Commission (STC) certificate has been secured for all phases of development.

2. **UCONN Technology Park** - An Environmental Impact Statement (EIS) has been completed for the extension of North Hillside Road on the UCONN Campus approximately ¾ miles to Route 44, approximately ¼ mile west of Route 195. The roadway extension is proposed to enable the full development of a UCONN Technology Park that will support an estimated 900,000 square feet of office/research/laboratory development. In 2011, $18 million was approved for design and construction of the approximately 125,000 square foot Innovation Partnership Building, the first envisioned phase of development in the Park. Completion of the building is estimated by the end of 2015. Completion of the remaining development phases are anticipated to extend beyond a 5 year time horizon.

3. **Tolland Technology Campus Zone (and adjacent Residential Development)** – Planning efforts for a technology zone along both sides of Route 195 between Goose Lane/Rhodes Road and Baxter Street/Anthony Road revealed a potential for approximately 400,000 square feet of non-retail development. Additionally, the town has a vision for a residential development of approximately 90 units to be located off Anthony Road adjacent the planned Technology Zone. These developments are currently still in the planning stage. The study will identify recommended points of access to Route 195.

4. **Tolland Village Area** - Tolland Village is a planned 330,000± to 570,000± square foot mixed use town village located on Route 195 immediately northwest of I-84 Interchange 68. Planning efforts have been vetted through the Town and new zoning regulations for the concept have been adopted. For purposes of this analysis is was assumed that the full village development would consist of a 110 room hotel, 150,000 square feet of retail space, 75,000 square feet of office space, and 115 residential units. The study will identify recommended points of access to Route 195.

**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, a technical working group, and a broad public outreach program. Innovative technologies and techniques to engage the public are encouraged.

**Advisory Committee.** The 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 Study Area. The core element of the Advisory Committee will be municipal representation. It is anticipated that each town will appoint a representative from its town council and other town officials such as the Town Planner and/or Engineer. Other potential groups
represented on the Advisory Committee include CTDOT, CRCOG, CTTransit, UCONN, business owners, and citizens appointed by the town.

Focus Group(s). Focus group(s) will also be formed as needed throughout the study and will be comprised of those with special interest or technical knowledge of the topic. Groups such as those focused on bicycle and pedestrian facilities, transit access, and future development are anticipated but will not be limited to these areas.

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 for this study that oral and written Spanish translation may be needed for some documents, outreach efforts, and meetings.

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

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

Study Website. A website will be developed and maintained to provide information and the latest documents for public information.

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, coordination conference calls every two weeks will be scheduled with CRCOG to discuss 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 coordination calls & Monthly progress reports and invoices**
Task 2 Community Involvement

2.1 Advisory Committee Meetings: An Advisory Committee will be assembled to help guide the study process and assist in evaluating the feasibility of alternatives. It is expected that the Consultant will meet with the Advisory Committee at least twelve (12) times throughout the study.

Deliverable: Minutes for Advisory Committee Meetings

2.2 Focus Group Meetings: Focus group(s) will also be formed as needed throughout the study and will be comprised of those with special interest or technical knowledge of the topic. Groups such as those focused on bicycle and pedestrian facilities, transit access, and future development are anticipated but will not be limited to these areas. Some of these meetings are intended to work directly with municipal and CTDOT staff to ensure technical aspects of the study alternatives are feasible. At least one meeting with CTDOT State Design will be held to review concepts and to coordinate with other anticipated projects. It is expected that at least (10) meetings will be necessary.

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: Three study newsletters will be developed at key project milestones

Deliverable: Newsletters

2.3.3 E-Blasts: Email updates will be provided to registered interested parties to notify recipients of upcoming meetings, newsletter releases, and the availability of reports and other important information.

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: (3) 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 throughout the Study to obtain public input, with each meeting being held in two communities each time. 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 with (10-15) key community representatives/groups

Deliverable: Interview Summary

2.5 Surveys will be designed and administered to better understand transportation needs and deficiencies.

Deliverable: Summary of survey results and analysis

2.6 Town Council/Board of Selectmen and CRCOG Transportation Committee/Policy Board Meetings: In an effort to keep town 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

Task 3 UCONN Travel Pattern Analysis
3.1 Work with UCONN officials to understand existing travel survey information from the University and commuting patterns (students, faculty, employees)
   - To Storrs
   - To UCONN Farmington Medical Center
   - Between Storrs, Downtown Hartford, and UCONN Farmington Medical Center
   - May also want to understand travel patterns involving West Farms Mall, Buckland Hills Mall, Eastern Connecticut State University, and Central Connecticut State University
3.2 Review existing data, collect missing data and analyze data ensuring the following information is captured
   - Number of trips per day (origins and destinations) that are associated with University students, faculty and employees at Storrs and Hartford
   - Number of trips per day (origins and destinations) that are associated with UCONN Medical Center students, faculty and employees
   - Modal Split for students, faculty, and employees (Car – SOV/carpool; Public Transportation, Bicycling, Walking)
   - Vehicle occupancies and peak times of day / week
   - Seasonal variations
   - The effect of sporting and special event variations
   - Survey tools should include basic demographic information (gender, race, income)
   - The consultant should augment survey data with travel data generation from cell phone, blue tooth, GPS, etc.
3.3 Review on-campus and local transit systems (Storrs, Farmington, Hartford)
   - Strength, weaknesses, opportunities
   - Linkage to other systems (i.e. CT Transit / WRTS systems, CTfastrak or park and ride lots)
3.4 Review established performance metrics or university goals for transportation

Deliverable: Summarize findings of UCONN Travel Pattern Analysis

Task 4 Data Collection & Base Maps
4.1 Collect Data
   - Previous Reports, Related Studies
   - Currently Planned or Programmed Transportation Improvements
   - 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
   - Crash Data
   - Incident Management/Emergency Response Plans
   - Transit and Commuter Facilities and Services (CTTransit, WRTD, and UCONN)
   - 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)
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, commuter lot usage and amenities
5.1.8 Pedestrian & Bicycle 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, anticipated development, 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)
- 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 and Bicycle 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 an alternatives matrix (as needed)**

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

**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 Refine and Reassess Alternatives: develop more detailed concept drawings, cost estimates, and impact determinations

7.4 Selection of Preferred Alternatives: 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)

**Deliverable: Transportation Strategy and Implementation Plan**

Task 9 Final Report and Executive Summary

**Deliverable: Final Report and Executive Summary**