

*Route 6 Transportation Study
Project Overview
August 2009*



Capitol Region Council of Governments

*241 Main St. Hartford, CT 06106
Phone: (860) 522-2217 Fax: (860) 724-1274*

Overview

The Connecticut Department of Transportation (ConnDOT) and Capitol Region Council of Governments (CRCOG) are initiating a study to address the issue of safety and access management along the Route 6 corridor; evaluate existing and future land use within the corridor and develop a strategy for economic development and the supporting transportation system. The study will focus on three items (1) components that address safety concerns at a few key locations, (2) access management along the corridor inclusive of both existing and undeveloped / underutilized properties along Route 6, and (3) development potential of larger vacant sites along the corridor and their impacts to the exiting Route 6 corridor. This project will be done in coordination with the Route 6 Planning Project; currently being initiated between the Route 6 Economic Development Council and the consulting firm of LADA, P.C.

The transportation study will be carried out over a 12- to 18-month period by CRCOG assisted by a consultant. Representatives from ConnDOT, the towns of Bolton, Coventry, Andover, and Columbia, Windham Region Council of Governments (WINCOG), CT Transit, local business groups, and citizens appointed by the towns will be consulted with throughout the process and the Route 6 Economic Development Council will help direct the study.

Study Goals

The general goals of the study are listed below.

1. To investigate transportation safety alternatives at select locations throughout the corridor,
2. To review access management throughout the corridor and establish guidelines for roadway improvements that all parties (such as developers, property owners, Department of Transportation, and towns) can refer to,
3. Provide for future, orderly growth and development of vacant and underutilized land in the study area to achieve a more compact, safe, efficient transportation system,
4. To assure Route 6 has sufficient capacity to accommodate projected traffic growth.

Definition of the Study Area

The Route 6 study corridor is approximately 11-miles long and runs between Notch Road in Bolton and Route 66 in the Town of Columbia. The study will also evaluate the stretch of Route 66 between Route 6 and the Willimantic River, an additional 2-mile segment. The study will involve work in 4 communities and focus on three specific areas: traffic safety, access management and development potential / growth. The following summaries key areas that will be reviewed in each community:

Bolton

- Safety improvements at the intersection of Notch Road and Route 6 (specifics such as intersection sight line distances exiting Notch Road, stopping sight distance, and the weaving from Notch Road to Route 44 will be addressed) Alternatives should build upon those that are developed under the Bolton Route 44 Planning Study.
- Incident diversion plans and opportunities to incorporate advance variable message signing on Interstate 384 alerting motorists of delays or incidents on Route 6.
- Curb cut management in the area of the existing ice rink driveway to Stony Road.
- Alternatives to improve the street network and screening in the vicinity of the former Johnson Road (westerly junction). Consideration for emergency vehicles access will also be reviewed.



Coventry

- Safety improvements at the intersection of South Street inclusive of alignment and intersection sight line distance improvements. This will include an evaluation of the existing bridge over the Hop River and a determination of roadway infrastructure impacts if vacant land in the immediate area was developed.



Andover

- Alternatives to improve the existing street network and screening in the vicinity of the former Hutchinson Road (easterly junctions) with Route 6.
- Safety improvements along the corridor (i.e. intersection sight line distances exiting side streets). Of particular concern are the sight lines out of Wales Road
- Usage, amenities and sight line restrictions at the existing commuter lot.



Columbia

- Safety and operational review of Route 6 / Route 66 intersection in combination with review of commuter parking lot usage and amenities
- Curb cut management in the area between Roses Bridge Road and Route 66 considering vacant development land.
- Safety and operational review of Route 66 between Route 6 easterly to the Willimantic River (Columbia-Windham town line).



Other items to be reviewed under the study include:

- School bus stops along Route 6
- Connections to the Hop River State Park Trail
- Evaluation of sidewalks and pedestrian crossings
- Stops along the corridor that may impact traffic circulation (i.e. stops at Hendee Rd in Andover)
- Accident reports and statistics to determine if accident rates have improved over the years, since ConnDOT implemented a few corridor improvements, or if there are new safety concerns that need to be addressed
- Advance signing to alert motorists of upcoming streets, including street names
- Incorporation of passing lanes where appropriate
- Emergency vehicle considerations and maintaining / improving response routes

CRCOG will also work with the Route 6 Planning Project consultant (LADA, P.C.) to understand identified key development sites and build upon their recommendations as they relate to future transportation improvements. This study will reiterate the vision that will be established during the Route 6 Planning Project. The key objective along the corridor will be to develop context sensitive solutions that fit the character of the corridor, preserving the rural qualities of the region. Alternatives that also protect the local heritage and offer recreational opportunities will also be reviewed.

Community Involvement

Community involvement will be an important part of the study process. The primary approaches will consist of consultation with the Route 6 Economic Development Council, coordination and participation in outreach efforts done as part of the Route 6 Planning Project (conducted by LADA, P.C.), on-going technical review meetings and web-site postings of project documents and meetings. The following summarizes these efforts.

Route 6 Economic Development Council. CRCOG will look to the Route 6 Economic Development Council to help guide the study team throughout the process, commenting on project findings and alternatives developed throughout the project.

Technical Review Meetings. Periodic meetings will be held among CRCOG staff and other agencies such as WINCOG, ConnDOT, and CT Transit. Some of these meetings are intended to work directly with town staff and other stakeholders to ensure technical aspects of the study are feasible. CT Transit will be invited to participate when discussing transit-related items. These meetings will help to facilitate coordination and communication between the towns and ConnDOT.

Involvement of General Public. CRCOG will coordinate and participate in open houses scheduled under the Route 6 Planning Project. The transportation study will be structured to complement work being done under the planning project. We will look for the Planning Project to take the lead on the meetings, as identified in their scope of work; however we will be available at the meetings to brief attendees on our study findings and solicit comments.

Web-Site. CRCOG will post Route 6 Transportation Study documents and meeting announcements on our web-site and consult with the Route 6 Economic Development Council and the Route 6 Planning Project consultant as to other posting locations. Information will also be made available on the Route 6 Planning Project website.

Study Deliverables

Technical memorandums will be prepared at critical milestones such as the completion of existing conditions, assessment of future conditions, and the alternative analysis phase. Improvement implementation plans will be prepared which will include potential traffic safety improvements, access management concepts (i.e. curb cut consolidation and intersection improvements), potential environmental impacts of recommended alternatives, potential development opportunities and feasible access points, and cost estimates.

Draft Study Task Outline

The project is expected to be broken into seven (7) tasks, summarized as follows:

- | | |
|--------|---|
| Task 1 | Project Management |
| Task 2 | Community Involvement |
| Task 3 | Data Collection |
| Task 4 | Assessment of Existing Conditions (Roadway / Traffic Safety, Access Management, Development Potential, Transit / Commuter, Land Use / Development, Pedestrian / Bike) |
| Task 5 | Assessment of Future Conditions |
| Task 6 | Identification and Analysis of Alternatives |
| Task 7 | Development of Corridor Transportation Safety and Access Management Plan |

A detailed outline of these tasks is summarized on the next few pages.

Route 6

Preliminary Scope of Services

TASK 1 PROJECT MANAGEMENT

1.1 Management and Administrative Control

The study will be organized to allow all affected parties 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 the towns and ConnDOT will be ongoing. CRCOG will coordinate activities with the Windham Regional Council of Governments (WINCOG).

1.2 Reporting

Monthly progress reports, both by the consultant and by CRCOG, will be prepared to keep the project on-schedule. Periodic invoices will also be prepared (no less than 1 invoice every 2 months).

TASK 2 COMMUNITY INVOLVEMENT

2.1 Route 6 Economic Development Council

The Route 6 Economic Development Council will help guide the study process and assist in evaluating the feasibility of improvement alternatives. It is expected that the Route 6 Transportation Study team will meet with the Route 6 Economic Development Council at least ten (10) times over a twelve to eighteen-month period.

2.2 Technical Review Meetings

Periodic meetings will be held among CRCOG staff and other agencies such as ConnDOT and CT Transit. Some of these meetings are intended to work directly with town staff to ensure technical aspects of the study are feasible. CT Transit will be invited to participate when discussing transit-related items. The meetings will facilitate good coordination and communication between the towns and ConnDOT. It is expected that at least ten (10) meetings will be necessary.

2.3 Involvement of the General Public

As part of a parallel Route 6 Planning Study, public meetings will be scheduled to obtain public input. CRCOG will coordinate and participate in these open houses with the consultant, presenting information on the Route 6 Transportation Study and soliciting comments from area residents and businesses.

Additional Outreach – Stakeholders and Community

2.3.1 Interviews with local citizens and business owners

2.3.2 Discussions with others (possibly Chamber of Commerce, Historic Commission, etc.) as they become apparent throughout study.

2.4 Website

In an effort to keep the community involved in the study process, alternative development, and final plan for the corridor, information will be posted on CRCOG's website and the website developed by the Route 6 Planning Project. CRCOG will also coordinate with the Route 6 Economic Development Council to determine if there are other locations where study documents should be electronically posted.

2.5 Records and Documentation

Mailing lists and technical review meeting minutes will be prepared.

TASK 3 DATA COLLECTION

3.1 Data Gathering and Collection

3.1.1. Transportation

- 3.1.1.1 Obtain data collected by the Route 6 Planning Project (ConnDOT traffic flow data, curb cuts, existing intersection traffic control)
- 3.1.1.2 Previous Reports, Signal Plans, ConnDOT planned or programmed projects in the study area, and growth factors
- 3.1.1.3 Commuter Bus Service to/from Hartford
- 3.1.1.4 Park and Ride Lots
- 3.1.1.5 Travel Time Runs: to meet Congestion Management System (CMS) requirements
- 3.1.1.6 Turning Movement Data
- 3.1.1.7 Speed Data
- 3.1.1.8 Accident Data
- 3.1.1.9 Signage Database
- 3.1.1.10 Field Reconnaissance

3.1.2 Land Use

- 3.1.2.1 Obtain data collected by the Route 6 Planning Project (existing land use, existing zoning, wetlands and watercourses, slopes, soils)
- 3.1.2.2 Town Plan of Conservation & Development
- 3.1.2.3 ROW, and Property Delineation
- 3.1.2.4 Population and Employment

3.1.3 Pedestrian and Bicycle

- 3.1.3.1 Obtain data collected by the Route 6 Planning Project (pedestrian facilities and use, bike paths and use)

3.2 Product: Base Maps

Use Base Mapping developed under the municipalities, the regional planning organizations, the Route 6 Economic Development Council and the Route 6 Planning Project to prepare supplemental graphics focusing on transportation safety, access management and links to land use.

TASK 4 ASSESSMENT OF EXISTING CONDITIONS

4.1 Roadway and Traffic

4.1.1 Operational Analysis

- 4.1.1.1 AM / PM Peak Hour Analyses - Synchro
- 4.1.1.2 Queuing Analyses

4.1.2 Safety Analysis

- 4.1.2.1 Accident Analysis
- 4.1.2.2 Roadway and Geometric Conditions Review

4.1.3 Review of Driveway Problems & Access Management Analysis

4.1.4 Identification of Deficiencies and Opportunities

4.2 Land Use and Development

- 4.2.1 Review existing land use and development data from Route 6 Planning Study
- 4.2.2 Review future land use and development data from Route 6 Planning Study
- 4.2.3 Identify Major Traffic Generators (Existing and Potential)
- 4.2.4 Identify Deficiencies and Opportunities

4.3 Pedestrian / Bicycle

- 4.3.1 Interviews
- 4.3.2 ADA Compliance
- 4.3.3 Identification of System Gaps
- 4.3.4 Identification of Deficiencies and Opportunities

4.4 Transit and Commuter System

- 4.4.1 Interviews
- 4.4.2 Service Issues
- 4.4.3 Commuter Lot Usage
- 4.4.4 Identification of Deficiencies and Opportunities

4.5 Assessment of Issues and Opportunities by Landscape Architect

4.6 Product: Technical Memorandum - Existing Conditions Assessment Report

TASK 5 ASSESSMENT OF FUTURE CONDITIONS

5.1 Traffic Forecast: 2030 Baseline (Network and land use growth)

5.2 Traffic Forecast: 2030 Developed Scenario (Development Potential)

- 5.2.1 Review data developed under the Route 6 Planning Project related to key development sites as it relates to growth potential
- 5.2.2 Evaluate trip generation and peak hour volume implications of key sites. Specific intersections to be analyzed will be determined in cooperation with town officials.

5.3 Traffic Operations Analyses (Baseline and Developed Scenarios)

- 5.3.1 AM / PM Peak Hour Analysis – Synchro
- 5.3.2 Queuing Analyses

5.4 Product: Technical Memorandum – Assessment of Future Conditions

TASK 6 IDENTIFICATION AND ANALYSIS OF ALTERNATIVES

6.1 Assess and Refine Alternatives As a Result of Development Areas

6.1.1 Roadway System

- 6.1.1.1 Access Management
- 6.1.1.2 Intersection Improvements (Operations, Geometry)
- 6.1.1.3 Safety Improvements
- 6.1.1.4 Roadway Realignment / New Construction / Widening
- 6.1.1.5 Incident Diversion Plans
- 6.1.1.6 Traffic Calming
- 6.1.1.7 Landscape Treatments

6.1.2 Pedestrian and Bicycle System

- 6.1.2.1 Review alternatives developed under the Route 6 Planning Project and offer additional improvements if suggested (such additional improvements could include new sidewalk improvements, crosswalks, or bicycle markings / re-striping)
- 6.1.2.2 Intersection Treatments (i.e. textured crosswalks)
- 6.1.2.3 Landscape Treatments

6.1.3 Transit System

- 6.1.3.1 Improvements to Bus Stop Routes / Locations (service to major generators)
- 6.1.3.2 Commuter Lot Improvements
- 6.1.3.3 Potential Amenities (bus shelters, bike racks, etc.)

6.2 Refine and Reassess Alternatives

6.3 Product: Technical Memorandum – Alternatives Analysis

TASK 7

**DEVELOPMENT OF CORRIDOR TRANSPORTATION SAFETY AND ACCESS
MANAGEMENT PLAN**

7.1 Product: Draft Plan and Executive Summary

- 7.1.1 Engineering of Preferred Alternatives
- 7.1.2 Visualization via photo imaging or renderings – Landscape Architectural Components
- 7.1.3 Right of Way Impacts
- 7.1.4 Sample Cross Sections
- 7.1.5 Constructability Review
- 7.1.6 Construction Cost Estimates
- 7.1.7 Operations/Maintenance Cost Estimates

7.2 Product: Final Draft Plan and Executive Summary

7.3 Town Council / Board of Selectmen Meetings: Consideration of Final Draft Plan and Resolution of Support

7.4 Product: Final Plan and Executive Summary