



Waterbury Area Transit Study

Project Scope of Work

1. **Identify underserved or unserved locations, neighborhoods, and times of day**
 - a. Analysis of *Waterbury Regional Bus Ridership Study: 2013*
 - Bus ridership trends by route
 - Bus ridership trends by stop
 - Bus ridership trends by time of day
 - b. Identify passenger transfer patterns based on fare box data
 - Optimize route interlines
 - Determine number of riders using Green as transfer point vs. downtown destination
 - c. Public involvement and outreach
 - Bus rider surveys
 - Assessing rider needs/preferences
 - Text-based system
 - Outreach to employers, retailers, social services, institutions, and property owners
 - Create and maintain study website (to be hosted on COGCNV website)
 - Bus driver screenings
 - d. Analysis of socioeconomic data
 - Demographic data
 - Employment data
 - Social services data (COGCNV)
2. **Proposals for modified or new routes to serve these locations**
 - a. Operating statistics for proposed or modified routes
 - Route length
 - Estimated travel time
 - Trip frequency
 - b. Operational changes
 - Route interlines
 - Driver shifts
 - Identification of passable roadways and bus turn-around locations

- c. Impacts of new CT Transit bus Garage.
 - Deadhead times, vehicle miles, fuel costs, driver scheduling
 - Storage capacity
- d. New or modified bus stop locations
- e. Expanded service hours (holidays, Sunday evenings, etc.)
- f. Expansion of evening bus service (days, new routes, etc.)
- g. ADA requirements
 - Changes to ADA paratransit service area
 - ADA accessibility at new or changed bus stops
 - Assessing future demand for handicap accessible transit service
- h. Infrastructure needs (rolling stock, bus stop signs, shelters, etc.)
- i. Impacts on ridership

3. Bus Operations Downtown

- a. Identify strategies to minimize bus congestion in the Central Business District
 - Alternative bus stop locations downtown
 - Improvements in signal timing
 - Coordinate with Downtown Waterbury Traffic Signal Retiming Project (CMAQ). Turning movement counts should be available
 - Turning restrictions
- b. Improve passenger experience downtown and heavily used bus stops outside of downtown
 - Passenger waiting areas
 - Shelters
 - Seating
 - Trash and recycling bins
 - Bus information kiosks
 - Public restrooms
 - ITS infrastructure (AVL is being installed in 2015)
 - Snow removal
 - Pedestrian Safety
 - ADA compliance
 - Crosswalks
 - Lighting
- c. Address business concerns at downtown bus stops
 - Sidewalk overcrowding
 - Loitering
 - Vagrancy
 - Littering
 - Crime

4. Intermodal Connectivity

- a. Identify ways to improve intermodal connections between local buses, Metro North, CT Fastrak, and intercity buses
- b. Investigate improved intercity bus connections between the CT Transit – Waterbury bus system and the municipalities of Ansonia, Bristol, Derby, Plymouth, Seymour, and Shelton

5. Development of Alternatives

- a. No build
 - Modification of routes and stops within the current pulse-point system at Exchange Place and the Green
- b. Identification of alternative pulse point locations
 - Identification of suitable locations
 - Property owner outreach
 - Bus rider surveys
 - Impacts on bus operations
 - Impacts on vehicular traffic
 - Pedestrian accessibility
- c. Non-pulse (schedule-based)
 - Determination of route headways
 - Trip frequency
 - Route modification
- d. Hybrid pulse/scheduled system

6. Comparison of Alternatives

An analysis of alternatives including a “no build” option, alternative pulse point locations, non-pulse point (schedule-based), and a hybrid pulse/scheduled system.

- a. Analyze operational changes
 - Route interlining
 - Diver shifts
 - Passable roadways and end of route turn around areas
 - Fleet requirements
 - Impacts on ADA paratransit service
 - ADA accessibility requirements at new or changed bus stops
 - Title VI compliance
- b. Assessment of changes to transit level of service
 - Passenger experience
 - Trip length
 - Trip frequency

- Transfer time
- Ridership projections
- c. Analyze operating and capital costs
 - Capital costs
 - Operating costs
 - Impacts on fares
 - Cost/benefit analysis
- d. Public outreach
 - Public meetings with proposals
 - Additional pop-up or “rolling” meetings
 - Additional passenger surveys
 - Steering committee involvement

7. Transportation Coordination

- a. Coordination of fixed-route bus service with elderly and disabled transportation services
 - GWTD Dial-a-Ride
 - ADA and Non-ADA Paratransit
 - Municipal and privately owned shuttles (senior, grocery, medical, etc.)
- b. Coordination between other transit modes
 - Waterbury Branch (Metro North commuter rail)
 - CT Fastrak
 - Intercity buses
 - Job Links
- c. Assess the impacts of the I-84 widening project on bus service