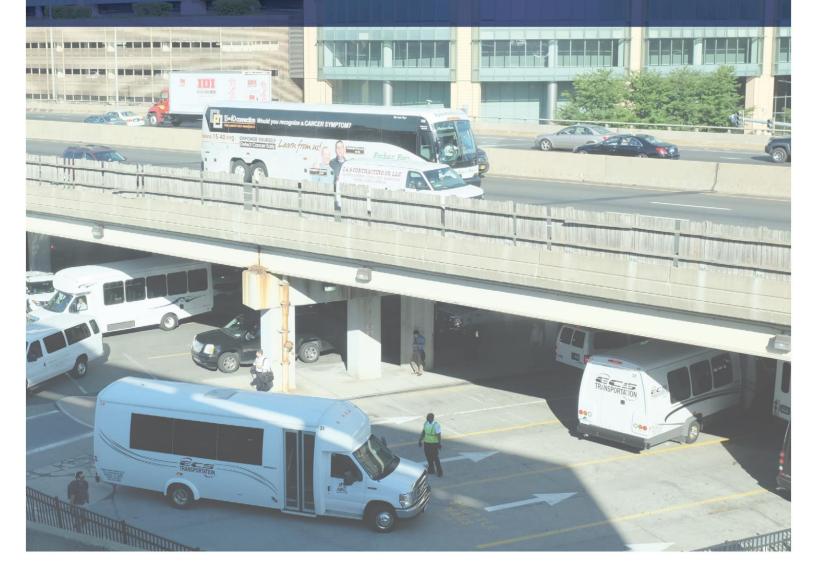


PRIVATE SHUTTLE STUDY

Executive Summary





Final Planning Document December 2016



STAMFORD BUS AND SHUTTLE STUDY



WHY A BUS AND SHUTTLE STUDY IN STAMFORD?

The purpose of the Stamford Bus and Shuttle study was to complete a comprehensive evaluation of current CTTransit and private shuttle bus operations, focusing on the Stamford Transportation Center (STC). The shuttle study represented the first phase of the overall effort and included a detailed investigation of private shuttles and the impacts of shuttle services on network operations and traffic circulation in and around the STC.

The study was funded by the Connecticut Department of Transportation (CTDOT) and the United States Department of Transportation (USDOT). The study was administered by the Western Connecticut Council of Governments (WestCOG).

The shuttle study and this report focused on four key project elements:

- Chapter One: Stakeholder & Public Engagement
- Chapter Two: Existing Conditions
- Chapter Three: Opportunities
- Chapter Four: Evaluation & Recommendations



The shuttle boarding area at the Stamford Transportation Center is used by more than 3,000 riders every weekday morning.

STAKEHOLDER & PUBLIC ENGAGEMENT

The Stamford Bus and Shuttle Study included outreach to businesses, public sector stakeholders, and shuttle riders. Engagement with businesses included individual interviews with employers and property managers, briefings to Stamford's business leadership groups, and two larger meetings with the business community.

To coordinate with public sector stakeholders, the study team formed a Technical Committee (TC) with representatives from CTDOT, WestCOG, the City of Stamford, CTTransit, and Fusco Management Company (property manager for the STC). Last, shuttle riders shared their input through a pop-up event held at the STC in summer 2015. For stakeholders unable to attend meetings, they had opportunities to contact the project team via the project website (<u>www.stamfordbusandshuttle.com</u>).



Outreach with all three groups highlighted a need to address the congestion and safety concerns at the STC. Although all groups emphasized the importance of private shuttles to businesses, property owners, and area workers, the path to addressing these associated challenges was unclear. Some stakeholders do consider CTTransit buses, walking, and bicycling as viable alternatives, but many are concerned by the added time delay. Businesses and property managers view shuttles as a critical means to attract talent and tenants, so any additional inconvenience is seen as a competitive disadvantage.

EXISTING CONDITIONS

Privately-funded shuttles are an important component of Stamford's overall transportation network. As Stamford's economy grows and attracts more people to live and work in Stamford, shuttles help complete the "last mile" between the STC and places of employment and residences. This amenity in turn helps Stamford's ability to attract talented professionals and grow as an economic hub. Although most shuttles carry commuters to and from places of work, residential property owners, universities, and hotels also provide shuttles as an amenity for their employees, tenants, and customers. The vast majority of shuttle trips are two miles or less.

The number of businesses providing their own shuttle services has grown considerably in the past five years, along with total shuttle ridership citywide. The study team conducted field work and data collection in July 2015 and observed 425 AM peak vehicle departures from the STC, more than 60 individual shuttle destinations, and an estimated AM peak ridership of over 3,000 customers. This is approximately 700 more customers more than five years ago.

Figure 1 Growth in Shuttle Ridership



Although the growth of shuttles and riders may indicate a growing economy, additional shuttles present a challenge. Shuttle volumes contribute to congestion within an already constrained facility and on key roadways in the vicinity of the STC (e.g., North State Street, Washington Boulevard). General traffic affects the ability for shuttle operators to efficiently access and depart the STC; at the same time, the high volume of shuttle vehicles and circulation patterns contribute to conflicts and queuing on North State Street and impact CTTransit's bus access and egress from the STC. Moreover, the traffic within the STC has created unsafe conditions for riders, some of whom have to dart across two lanes of shuttles to board.

STAMFORD BUS AND SHUTTLE STUDY



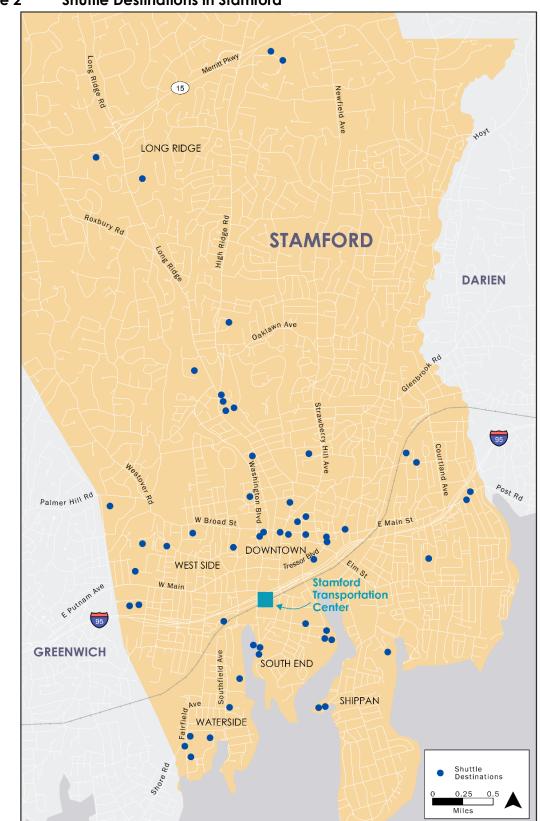


Figure 2 Shuttle Destinations in Stamford

STAMFORD BUS AND SHUTTLE STUDY

OPPORTUNITIES

The continued growth in shuttle services has resulted in operational and safety concerns, as discussed in both the public outreach and conditions existing sections. Vehicle throughput, schedule reliability, passenger safety, and comfort are all compromised during the morning and afternoon peak periods. The study explored opportunities for addressing these challenges through the following focuses:

- Facility. Opportunities addressed in • this focus relate to the physical constraints of the STC and surrounding streets.
- Service. Service opportunities consider adjustments to shuttle and CTTransit operations that would alleviate congestion and provide other mobility and safety benefits.
- Administration. Administration opportunities consider ways in which new or realigned • approaches to administration could help the Stamford community overcome its current mobility challenges.

Together, these three approaches consider the full range of opportunities, each evaluated based on their ability to address study goals defined by the Technical Committee. The opportunities are organized by approach in the table below. These three focus areas are interrelated, and it is expected that maximum improvements will be realized with a combination of strategies from each.

Facility Focus	Service Focus	Administration Focus
 Parking relocation Mobility Concept: North State Street Transit Prioritization Developing Off-site Staging Area for Shuttles Improved Passenger Amenities 	 CTTransit Optimization: Circulator Option CTTransit Optimization: Added Service Option STC Operational Optimization for CTTransit Stops and Routes Shuttle Consolidation Scenarios 	 TMAs or Business Consortium Publicly-run System Access Management Status Quo

Table 1 Summary of Opportunities

EVALUATION & RECOMMENDATIONS

The opportunities were considered in light of the project goals as identified by the Technical Committee (see callout box below). The evaluation process worked as an iterative, on-going discussion with the Technical Committee and the Stamford business community rather than a purely quantitative approach. The opportunities are categorized into four groups:





- Implemented. Business leaders stated they were willing to test out potential solutions and did
 not want to wait until the conclusion of the study to see changes made to the shuttle
 environment. In keeping with this suggestion, some recommendations developed in the study
 process were implemented before the final report was completed.
- **Recommended.** After analysis and conversations with key stakeholders, the study team recommends several opportunities to move forward with implementation. In doing so, these opportunities will address the project goals.
- Needs further consideration. Many of the opportunities would potentially address the project goals but need further study or discussion with key stakeholders. The strengths and drawbacks of these goals are detailed below.
- Not recommended. The study attempted to analyze the full range of opportunities for addressing the challenges facing the existing private shuttle study. Not all opportunities are feasible, desirable, or would address the prioritized list of project goals. For these opportunities, an explanation for why they are not recommended is provided below.

Prioritized Project Goals

- Improve traffic operations in and around Stamford Transportation Center (STC)
- Improve safety at the STC at the shuttle boarding area
- Reduce shuttle-related congestion at the STC
- Improve pedestrian and bicycle access to the STC
- Support economic development by leveraging benefits of transit
- Plan for transit interface at transit-oriented development (TOD)
- Increase transit mode share at the STC
- Implement travel demand management program to encourage transportation options
- Increase mobility within the City of Stamford
- Improve shuttle access to and from STC with respect to delay
- Improve rider experience on shuttles and CTTransit system
- Expand transit to underserved or growing areas

The shuttle study defined the pressing challenges associated with the existing shuttle service, identified the range of opportunities for addressing those challenges, and made recommendations. The stakeholder and public engagement process highlighted the most pressing issues and prioritized the study goals. With these in mind, the project team considered a range of opportunities from a facility, service, and administration perspective.

These opportunities were honed through an iterative process through coordination with the Technical Committee, business leaders, public agency representatives, and the study team. Through this process, one of the recommendations – the relocation of parking in the STC bus and shuttle areas to create additional space for CTTransit and private shuttle operations – was implemented in August 2016.

Opportunity	Status	Context	Key Players	
Parking Relocation	Implemented	Facility	CTDOT, CTTransit	
Shuttle consolidation scenarios	Recommended	Service	Stamford business community, City of Stamford, WestCOG, CTDOT	
TMA or business consortium	Recommended	Administration	Stamford business community, City of Stamford	
Mobility Concept: North State Street Transit Prioritization	Recommended	Facility	City of Stamford, CTDOT, CTTransit	
Improved passenger amenities	Recommended	Facility	CTDOT, CTTransit	
CTTransit optimization: Circulator	Recommended	Service	CTDOT	

Table 2Study Recommendations

Inaction and maintaining the status quo will result in worsening traffic and safety conditions, which will lead to negative impacts on Stamford's growing business community. The recommendations should be carried out through a collaborative effort involving WestCOG, the City of Stamford, CTDOT, and the Stamford business community. The newly formed steering committee will work to implement consolidated shuttle services and determine the purpose of a TMA or business consortium.

ACKNOWLEDGMENTS

This study represents a collaborative effort between WestCOG, CTDOT, the City of Stamford, CTTransit, and the consultant team, led by Fitzgerald & Halliday, Inc. of Hartford, Connecticut, and New York, New York.

Vital insights and outreach assistance were provided by the Stamford business community, including the Business Council of Fairfield County, Stamford Partnership, Stamford Downtown, and the Stamford Chamber of Commerce, along with each of the businesses that provided time and input during early interviews. Background information and operational assistance were provided by Fusco Property Management at the Stamford Transportation Center.

PROJECT ADMINISTRATION AND CONTACT

Western Connecticut Council of Governments 1 Riverside Road Sandy Hook, CT 06482 Web: www.westcog.org



CONSULTANT TEAM

Lead consultant:



Subconsultants:



steer davies gleave