

STAMFORD URBAN TRANSIT STUDY

Executive Summary



STAMFORD BUS AND SHUTTLE STUDY



TRANSIT IN STAMFORD – PLANNING FOR SUCCESS

The purpose of the Stamford Bus and Shuttle study was to evaluate 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 second phase explored the CTtransit bus system more broadly and looked at transportation network opportunities. This document summarizes strategies to enhance additional components of the urban transit and transportation network including CTtransit services, roadway operations around the STC and along bus routes, last-mile connectivity improvements, and non-motorized access to, from and through the STC hub.

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 Urban Transit Study phase of the Stamford Bus and Shuttle Study focused on five key elements:

- Stakeholder & Public Engagement
- Existing Conditions
- Opportunities
- Network Alternatives
- Implementation



STAKEHOLDER & PUBLIC ENGAGEMENT

The Stamford Bus and Shuttle Study included outreach to CTtransit riders, non-riders, and public sector stakeholders. Public engagement focused on identifying network gaps and challenges for current bus riders, with an eye toward foundational improvements and future system expansion. This study did not focus on detailed service planning; rather, sought to develop a framework for system growth in the next decade or more.

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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). Bus riders shared their input through pop-up events and an open house held at the STC in early 2017. An online travel survey and the project website offered additional opportunities to contact the project team (www.stamfordbusandshuttle.com).



More than 30 transit users in Stamford attended the February 2017 Open House.



Display boards were used to explain study concepts and solicit feedback on user experience and priorities.

Between November 2016 and February 2017, the study team led a community engagement campaign to learn about the needs, motivations, and experiences of CTtransit bus passengers in Stamford. Surveys were conducted, including in-person feedback at the STC and Atlantic Square and an online survey, which also included questions regarding other non-bus modes of transportation. (The e-survey was available on the project website in English and Spanish and was distributed through the listservs of project partners.) A sample of current rider priorities is summarized in Table 1, clearly indicating a desire for frequency and reliability over discretionary amenities.

Improvement	Percentage
More Frequent Service	40%
More Reliable Service	29%
Upgraded Bus Stops	29%
Lower Cost	21%
Extended Service Hours	21%
Shorter Travel Time	9%
Real-time Arrival Info	7%
Fewer Transfers	6%
Fewer Bus Stops	5%
Wifi on Buses	5%
Other	25%

CTtransit Stamford Division

CTtransit's Stamford Division serves the city of Stamford and links Stamford with Port Chester, NY, Greenwich, Darien, and Norwalk. Commuter service is also provided to White Plains, NY. The routes run primarily along a radial pattern from the STC, which has close to 2,400 passenger boardings on a weekday. The full Stamford Division has close to 15,000 weekday boardings, or approximately 3.5 million annually. Service span is generally 5:30 a.m. to 12:00 a.m. on weekdays, and reduces during the weekend, with typical service spans between 7:00 a.m. to 7:00 p.m. with hourly frequencies.

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Route Classification

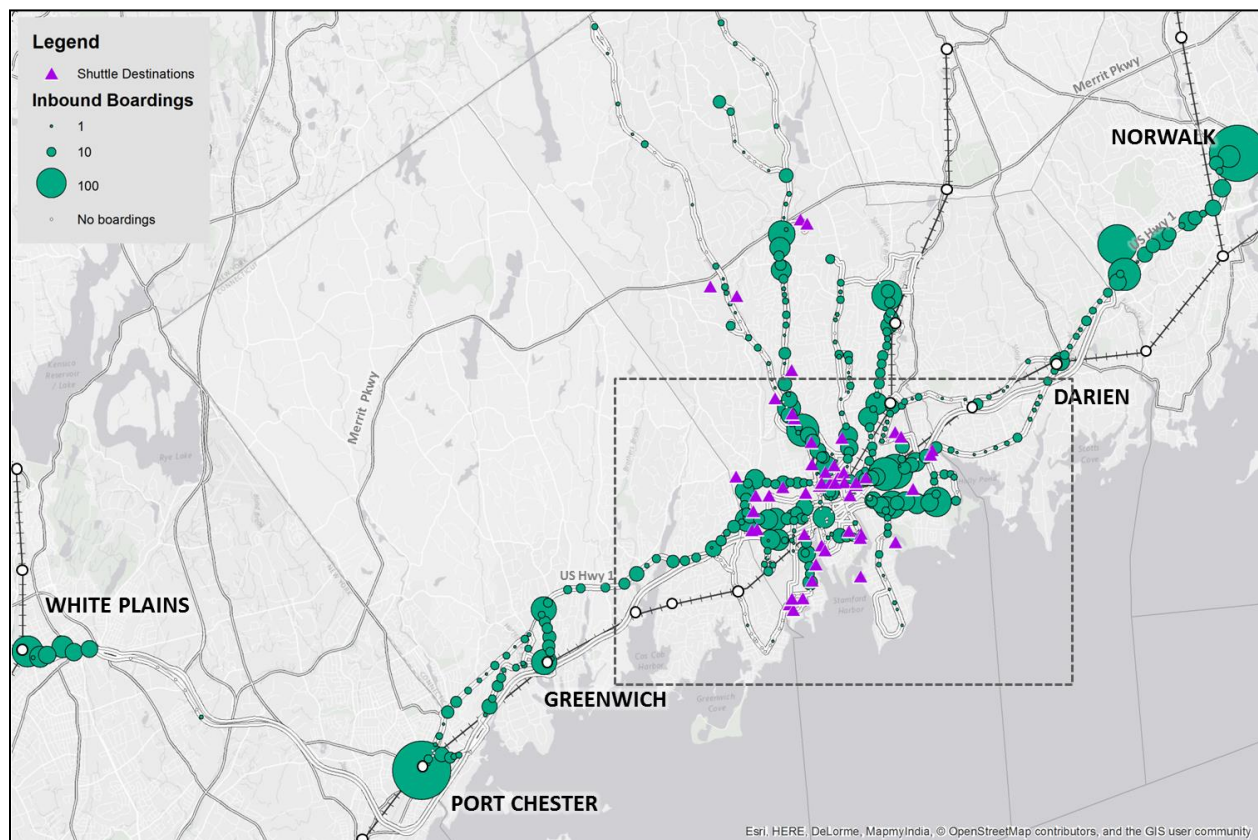
CTtransit's routes provide service for shorter trips within the defined inner and outer urban parts of Stamford and also provide longer distance routes to specific areas and attractors. Additionally, some routes are designed to provide “last mile” connections for inbound train commuters working in Stamford and “first mile” connections for commuters traveling from Stamford to surrounding towns. Bus routes in Stamford serve a variety of markets, including long-distance commuters, regional travel in the US Route 1 corridor, and local travel within neighborhoods close to the downtown area.

Service Coverage and Ridership

The Stamford Division network provides good geographic coverage and serves all major employment areas in and around Stamford. In addition to CTtransit's network, there are many businesses and residential complexes served by private shuttles located within the ¼-mile network's catchment area. This shows that the CTtransit network can provide an alternative to shuttle users if the shuttles are not available.

Figure 2 illustrates daily inbound bus boardings at the bus stop level. Ridership is significant in the Stamford core, the US Route 1 corridor (including connections to Port Chester, Greenwich, and Norwalk), the Long Ridge and High Ridge Road corridors, and the Hope Street corridor to Springdale.

Figure 2 – Ridership Patterns: Weekday Inbound Boardings (Excluding Transfers)



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Other Transit

Many large employers and property managers in and around Stamford provide free private shuttle buses to transport employees between the STC and employment or residential sites. Rail service at the STC includes Metro-North Railroad commuter service and regional Amtrak service. Regional bus connections include CTtransit's 971 STAMFORD / WHITE PLAINS EXPRESS.

ALTERNATIVES DEVELOPMENT

Based on an analysis of existing transit service demand and regional travel patterns (including non-transit trips), the study identified various gaps and opportunities for CTtransit in the Stamford area, leading to the development of a long-list of options for addressing those gaps:

- 1) New service areas
- 2) Service level increases
- 3) Express services
- 4) Premium bus service
- 5) Transit priority measures
- 6) Changes to route network
- 7) Alternative service methods
- 8) Stop consolidation
- 9) Pedestrian environment

The options and alternatives here are presented at the strategic level, designed to consider opportunities and challenges for the Stamford system well into the future. Each was evaluated relative to performance metrics and community and Technical Committee feedback. Those with the highest potential for system growth and improvement were retained for more detailed consideration.

OPPORTUNITIES

In total, six of the nine alternatives advanced to formal recommendations. The three that are not moving forward – new service areas, premium bus service, and improving pedestrian environment – either do not adequately address the goals of this study or would require detailed analysis falling outside the study's scope. The remaining six alternatives are:

- Service level increases
- Express services
- Transit priority measures
- Changes to route network
- Alternative service methods
- Stop consolidation

Performance Metrics

The nine alternatives were evaluated with respect to the following performance metrics:

Transit performance

- Ridership changes
- Headways
- Intermodal connectivity
- Reliability
- Environmental justice

Transportation system performance

- Walkability and access to transit
- Increased mobility/accessibility

Economics

- Costs (capital & operating)
- Access to jobs and transit customers
- Development compatibility

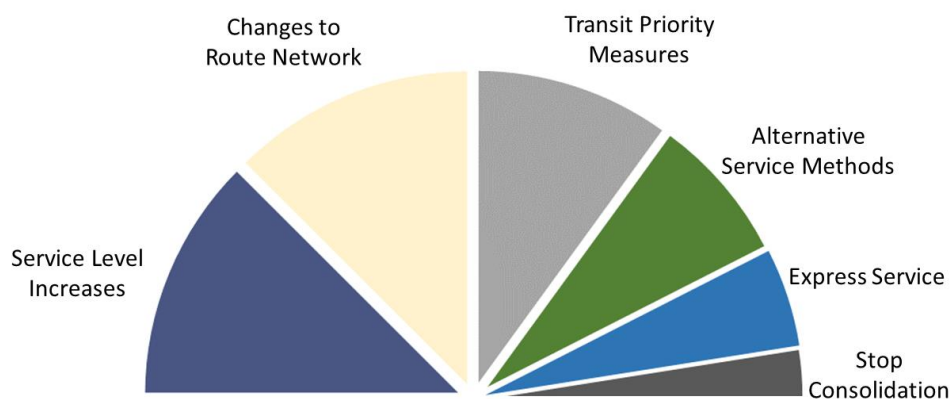
Public Involvement

- Technical Committee (TC) prioritization
- Community input

IMPLEMENTATION

The implementation plan outlines the path forward for each of the six preferred alternatives, including proposals for implementation priority as a function of Technical Committee and stakeholder feedback and the performance metrics described above. The Urban Transit Study report describes high-level costs in terms of capital requirements and estimated operating costs, discusses implementation issues including prerequisites, and outlines the key roles from supporting agencies. The entirety of the Stamford Bus and Shuttle Study has focused on a multi-faceted approach, recognizing the range of implementation components, complexity, and potential level of benefit from various recommendations

MULTI-FACETED APPROACH



Implementation guidance for the recommendations is summarized as follows, including discussion of phasing, priorities, and champions for implementation.

Service Level Increases

Increasing service frequency and service span was considered on all routes. Ideally, service level increases could be implemented on every route; however, the emphasis on the highest demand routes is considered the key priority.

The four routes with the highest demand include Routes 311 Port Chester, 328 Cove Road, 331 High Ridge Road (south of the Merritt Parkway), and 341 Norwalk. The service level increases would lower peak headways from 20 minutes to 15 minutes and off-peak headways from 30 minutes to 20 minutes.

Priority/Phasing

The combined Route 311 / Route 341 is a high priority and its implementation will be guided through work on the separate [Route 1 BRT Feasibility Study](#). Between the proposed changes for Route 328 and Route 331, the Route 331 – High Ridge is recommended as a priority step (if both routes cannot be implemented simultaneously) since it results in higher net ridership increases and better tailors the allocation of resources based on demand.

Key Roles

Implementation Lead

- CTtransit

Supporting Partners

- CTDOT
- City of Stamford

Changes to Route Network

Overall, the structure and function of the CTtransit route network is effective and does not warrant significant change. Additions to the route network are proposed to address gaps within the network and help improve the performance of existing routes. Proposed changes include new connections between the Springdale area and employment centers, and reconfiguration of the interlined pair Route 311 / Route 341 for more direct routing through downtown Stamford (see related Route 1 BRT Feasibility Study). Proposed new routes include Springdale-Cove, Springdale-Westover, and Springdale-Westhill. These are crosstown routes that do not connect to the STC.

Key Roles

Implementation Lead

- CTtransit

Supporting Partners

- CTDOT

Priority/Phasing

For the new market routes recommended in this study, each plays an important role in improving the network, and should be implemented as a package. However, if available funding dictates a staged approach, the chief difference among these routes is their financial performance, and so they could be implemented in that order:

1. Springdale – Cove
2. Springdale – Westover
3. Springdale - Westhill

Transit Priority Measures

Transit priority measures could be beneficial throughout the network but are recommended as priority elements on North State Street, notably between Atlantic Avenue and Washington Boulevard, and on Washington Boulevard from Henry Street to at least Tresser Boulevard and preferably to Broad Street.

Options on both streets can be accomplished within the existing right-of-way only by re-allocating lane capacity from general traffic to bus and shuttle only, along with complementary signal priority treatments. Initially, this could be done in peak periods only, and as a pilot program to test performance and local acceptance.

Key Roles

Implementation Lead

- City of Stamford

Supporting Partners

- CTDOT
- CTtransit
- Stamford business community

Priority and Phasing

Transit priority on North State Street should be considered first, followed by (or in conjunction with) Washington Boulevard. This could also be framed as a pilot project to test the feasibility and impacts for wider application. Outreach to transit customers, employers, and local property owners is vital to advancing such a pilot project. The business community is a valuable partner, as private shuttles could also benefit significantly from priority measures on North State Street and Washington Boulevard.

Alternative Service Methods (North of Merritt Parkway)

Alternative service concepts are proposed for the area north of Merritt Parkway to better tailor the resources and service levels to the demand in this area. These alternative service methods for the area north of Merritt Parkway would be implanted in conjunction with the service level changes

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recommended for Route 331 High Ridge south of Merritt Parkway, as an alternative to the reduced service levels on the fixed route service.

In this concept, CTtransit would enter into a contract with a taxi company, transportation networking company (TNC), or other provider to provide on-demand service north of Merritt Parkway, in the areas currently serviced by Route 331 – High Ridge and 336 Long Ridge. These on-demand services would connect with transfers to the fixed route service at Merritt Parkway on Long Ridge Road and High Ridge Road.

Priority and Phasing

Because of the potential for savings with this change, consideration should be given to combination with other priority items, especially service level increases, to offset the cost. Policy groundwork must also be laid to enable this change in service delivery and potential impacts on transit operating contracts.

Express and Limited Stop Services

Three enhanced route options have been considered in this study. First, a limited stop service option on US Route 1 affecting the Route 311 / Route 341 service has been deferred in favor of the separate Route 1 BRT Feasibility Study.

The second two options include Route 331 – High Ridge – one as a limited stop overlay service which would partially replace the existing local service, and the second as a non-stop express. The non-stop express would operate from the Merritt Parkway park-and-ride providing a direct connection to downtown Stamford.

Maximizing the potential of this service would require additional parking spaces at an expanded park-and-ride lot. Since there is no imminent solution to this issue and alternatives require additional study, this option is not recommended as a priority at this time but should be considered if opportunities arise.

Bus Stop Consolidation

The final measure among the recommended priorities is the consolidation of little used stops throughout the network. The elimination of unused stops could also be part of this program, though this will have negligible impact on the service. The greatest potential time savings will come from a reduction in the number of stops with low to moderate activity and the policy direction for appropriate, efficient spacing. Eliminating stops with low (but not zero) use can have some impact in terms of travel time and reliability, making the service more attractive and promoting additional ridership as a result.

Key Roles

Implementation Lead

- CTDOT

Supporting Partners

- CTtransit
- City of Stamford
- Private sector operators

Key Roles

Implementation Lead

- CTtransit

Supporting Partners

- CTDOT

Key Roles

Implementation Lead

- CTtransit

Supporting Partners

- City of Stamford
- CTDOT

Priority / Phasing

As part of the proposed study, routes should be examined to determine where even small decreases in travel time or increases in service reliability might be important and prioritize these routes. For instance, if a route is experiencing running time and schedule adherence issues to the point where a service adjustment is required, a stop consolidation program may eliminate or at least defer this unwanted change.

CONCLUSION

As a mid- to long-range plan, the Urban Transit Plan provides a framework and sufficient analysis and direction to program subsequent study and commitment to the associated improvements. Taken together, these recommendations will build on the strengths of the CTtransit and the urban transportation network in Stamford and position the City and the region for continued success.

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

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