

DEUSA Fleet Success Stories: Stamford Transit (CTtransit)



Location: Stamford, Connecticut CTtransit division

Fleet type: Electric transit buses



Narrative

Since 2019, Clean Transportation Coalition – Western Connecticut has maintained communications with the Connecticut Department of Transportation (CTDOT) to advance transportation electrification initiatives throughout Connecticut. During the early years of the partnership, the Coalition and CTDOT met regularly to share updates, coordinate activities, and identify opportunities to support electric vehicle deployment. In 2021, the Coalition developed the application for the Federal Highway Administration's Alternative Fuel Corridor designation for Connecticut's Route 7. CTDOT submitted the Coalition's application to the Federal Highway Administration, resulting in Route 7's official designation as a federally recognized EV corridor. In recognition of the Coalition's leadership and longstanding partnership, CTDOT Commissioner Garrett Eucalitto recorded a congratulatory video message celebrating the Coalition's 30th Anniversary.



The Connecticut Department of Transportation (CTDOT) secured a \$26.4 million federal grant to fund 20 new battery-electric buses and facility upgrades for the CTtransit Stamford division, utilizing heavy-duty zero-emission models from New Flyer. As a result, Connecticut began building its battery-electric transit program, Stamford became the proving ground. Serving one of the state's busiest transit corridors, the CTtransit Stamford Division was selected as the first CTtransit facility designated for full electrification. What followed was not simply a vehicle deployment, but a comprehensive transformation of infrastructure, operations, safety protocols, and workforce readiness. Today, Stamford serves as Connecticut's primary learning laboratory for battery-electric transit operations. Its experience has helped shape statewide planning while providing valuable lessons on infrastructure investment, fleet resilience, and the realities of operating zero-emission transit service at scale.

Impact: Key Figures

- Location: Stamford, Connecticut
- Agency: CTtransit Stamford Division/Connecticut Department of Transportation
- Fleet Type: Heavy-duty battery-electric New Flyer transit buses
- Historic Distinction: First CTtransit facility designated for full electrification
- Federal Funding: \$26.4 million FTA modernization grant to fund 20 new battery electric and facility upgrades, utilizing heavy-duty zero-emission models from New Flyer
- Charging Infrastructure: Installation of high-power plug-in chargers and a free-standing indoor storage and charging building at the Stamford facility
- Bus Manufacturers: New Flyer

Connecticut's Transit Electrification Proving Ground

The Stamford Division was selected as Connecticut's lead battery-electric transit site because of its combination of operational importance and manageable scale. The facility serves local and regional routes connecting Stamford, Greenwich, Darien, Norwalk, White Plains, and Port Chester, making it one of the state's most visible transit operations. Its centralized depot and compact fleet provided an ideal environment for testing electric bus technology, charging strategies, maintenance procedures, and workforce training before broader deployment across Connecticut's transit network.

Building the Depot of the Future

One of Stamford's most important contributions to Connecticut's electrification efforts is demonstrating that transit electrification is fundamentally an infrastructure project as much as a vehicle project. A \$6.7 million Federal Transit Administration grant funded a comprehensive modernization of the Stamford depot, including five 150-kW chargers, upgraded electrical systems, enhanced fire suppression infrastructure, backup power systems, and planning for future indoor charging and storage capacity. These investments created the operational foundation required to support long-term fleet electrification.



Why Infrastructure Matters

Stamford's charging strategy relies primarily on overnight depot charging. Because fixed-route buses return to the depot on predictable schedules, charging can occur during off-peak hours when electricity demand is lower and operational efficiency is higher. The Stamford experience demonstrates that charging infrastructure, electrical capacity, safety systems, and facility readiness must be planned alongside vehicle procurement. Successful electrification requires both vehicles and the systems that support them.

Outputs & Outcomes

- Connecticut's leading transit electrification pilot site established.
- Comprehensive depot modernization completed.
- Battery-electric buses operating in revenue service.
- Battery safety and monitoring protocols strengthened following recovery efforts.
- Valuable operational data generated for statewide planning.
- Mixed-fleet experience developed through multiple bus manufacturers.
- Foundation established for future fleet expansion and facility electrification.

Best Practices & Lessons Learned

- Phase implementation deliberately and learn incrementally.
- Treat infrastructure investment as equal to vehicle investment.
- Build battery safety protocols into daily operations.
- Match routes to charging strategies and operational strengths.
- Invest in workforce readiness alongside technology deployment.
- Use setbacks as opportunities to improve systems and procedures.

Looking Ahead

Stamford's role as Connecticut's first fully electrification-designated transit facility places it at the center of the state's transition toward zero-emission transit. With infrastructure already in place, operational experience accumulated, and additional charging and storage capacity under development, the division is well positioned to continue expanding battery-electric operations. For transit agencies across Connecticut and beyond, Stamford demonstrates that the challenges of electrification are real but manageable. By investing in infrastructure, workforce readiness, operational planning, and resilience, the division has helped create a roadmap that will guide future transit electrification efforts throughout the state.