



Bus Rolling Stock



Description

- In non-CTD transit service areas, local transit districts provide bus transit services under the direction of local Boards of Directors representing the member towns.
- CTDOT supports about 90% of the deficit funding in the urban systems, and the state and federal government provide 83% of the deficit funding in the rural systems.
- CTDOT has a capital interest in bus rolling stock for twelve transit districts.
- Transit district bus rolling stock inventory includes three vehicle types: transit bus, cutaway, and minivan.

Performance Measures

The percentage of revenue vehicles within a particular asset class that have either met or exceeded their useful life benchmark

- Useful life benchmark (ULB) defines an asset's economic useful life, specified in terms of age, mileage and/or other factors. An agency can use FTA's default ULB values or set its own values. CTDOT has worked with its transit service provider partners to define custom values.
- A revenue vehicle that has not reached or exceeded its ULB is considered to have met the performance metric.

Inventory and Condition



Transit Bus

A bus with front and center doors, low floor, normally with a rear-mounted engine, and low-back seating. This vehicle can usually hold about 42 ambulatory passengers when two wheelchair tiedowns are provided.

172
Vehicles

95%
Below ULB

12
Years ULB



Cutaway Bus

A vehicle that consists of a bus body that is mounted on the chassis of a van or light-duty truck. The original van or light-duty truck chassis may be reinforced or extended. Cutaways typically seat 15 or more passengers and may accommodate some standing passengers.

282
Vehicles

43%
Below ULB

5
Years ULB



Minivan

A light duty vehicle having a typical seating capacity of up to seven passengers plus a driver. A minivan is smaller, lower and more streamlined than a full-sized van, but it is typically taller and has a higher floor than a passenger car. Minivans normally cannot accommodate standing passengers.

7
Vehicles

0%
Below ULB

5
Years ULB



Total

461
Vehicles

62%
Within ULB



Based on CTDOT data as of June, 2022

**The Performance measures herein are for FTA reporting purposes only. Due to the variability of mechanical reliability and operating environment, the age based metric prescribed by FTA does not fully reflect SGR needs.*



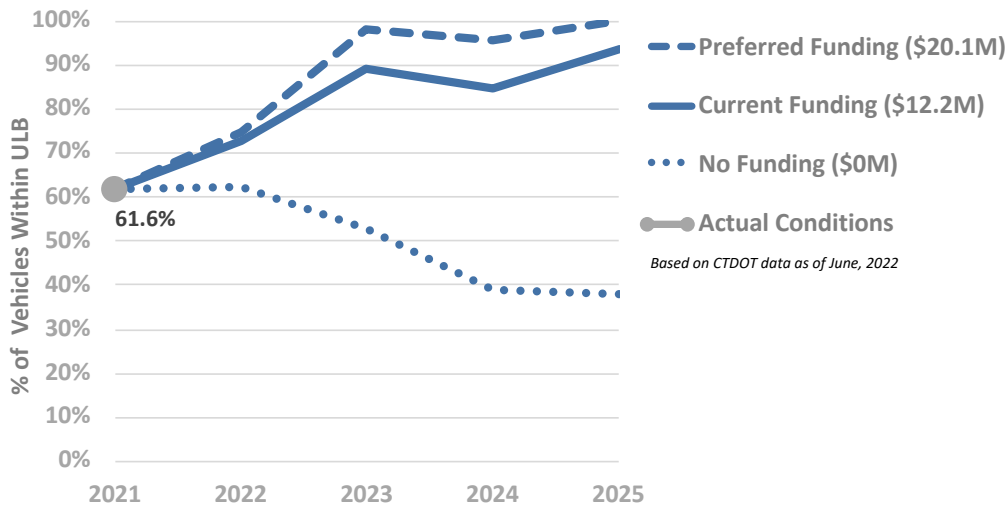
Connecticut Tier II Transit Asset Management Plan

Bus Rolling Stock



Bus Rolling Stock Performance Projections

Percent of Vehicles Within ULB



CTDOT anticipates \$84 million of SOGR needs from 2022-2025 for Tier II Bus Rolling Stock. This includes an initial backlog in 2022 of \$37 million in SOGR needs.

Current funding for SOGR activities was calculated based on CTDOT’s Capital Plan with the help of CTDOT’s Capital Services Unit. Connecticut’s Capital Plan is a document that lists all projects expected to be federally-funded over a five-year period.

Based on projections made using CTDOT’s prioritization tool given current funding, to make progress on its SOGR needs Connecticut should invest approximately \$49 million in Tier II revenue vehicles over the four-year analysis period.

*Years referenced in these charts are by State of Connecticut Fiscal Year which runs from July 1st to June 30th.

Current Performance and Targets

A group TAM plan sponsor must set unified, one-year performance targets using the performance measures established by FTA for the four capital asset categories required for a TAM plan, as applicable. These targets must be updated and submitted to the NTD annually. These targets must be coordinated with the Tier II transit providers.

Performance and Targets for Tier II Bus Rolling Stock

Asset Class	% Vehicles Within ULB		% Vehicles Met or Exceeded ULB	
	Current Performance	Performance Target	Current Performance	Performance Target
Transit Bus	95%	14%	5%	14%
Cutaway	43%	17%	57%	17%
Minivan	0%	17%	100%	17%

Transit Funding

CTDOT creates a funding pool from which capital projects in regions around the state are funded. The disbursement of these funds based on annual needs is approved by the MPOs in the STIP. Sub-area split agreements that reflect the annual disbursement of funds by region are created by CTDOT and executed by the transit operators from each region. This program allows local transit operators to fund major projects for which they may otherwise have never accumulated adequate funds.

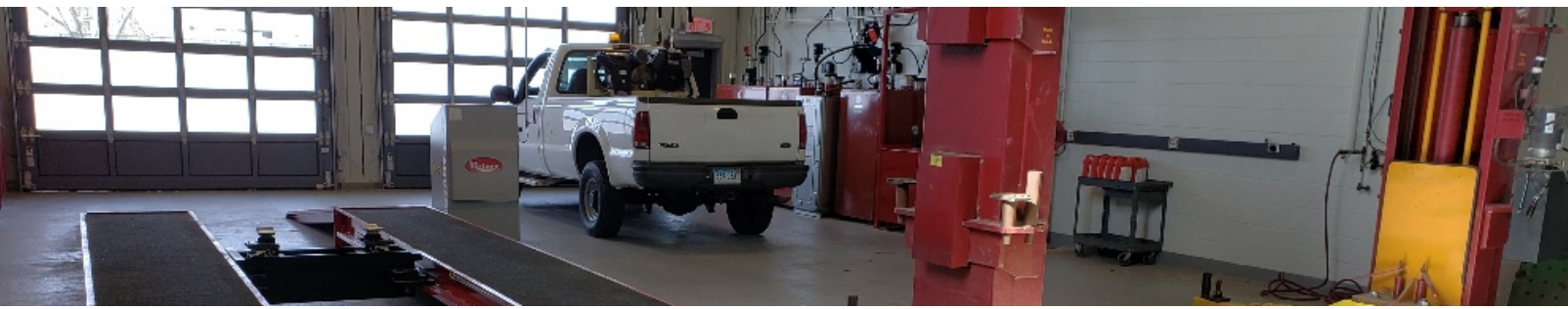
Analytical Approach

CTDOT uses the Transit Asset Prioritization Tool (TAPT) to support its analytical approach for Connecticut transit districts. TAPT is a spreadsheet tool for predicting transit asset conditions and SGR needs.

The tool has a series of models for different asset types that recommend when to rehabilitate or replace an asset, and the conditions and performance predicted for the asset over time. Also, the tool supports prediction of the overall performance resulting for a specified funding scenario, and recommends a prioritized list of projects to fund given a budget constraint.



Connecticut Tier II Transit Asset Management Plan Service Vehicles



Description

- Service vehicles are defined by FTA as equipment used primarily to support maintenance and repair work for public transportation.
- Tier II service vehicles support bus transit.
- Tier II service providers own service vehicles that are organized into four types. Rubber tire vehicles (trucks), automobiles, SUVs, and vans, which can be used as staff vehicles.

Performance Measures

The percentage of service vehicles within a particular asset class that have either met or exceeded their useful life benchmark

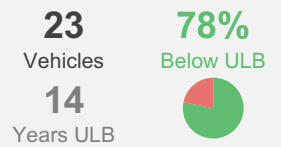
- Useful life benchmark (ULB) defines an asset's economic useful life, specified in terms of age, mileage and/or other factors. An agency can use FTA's default ULB values or set its own values. CTDOT has worked with its transit service provider partners to define custom values.
- A service vehicle that has not reached or exceeded its ULB is considered to have met the performance metric.

Inventory and Condition



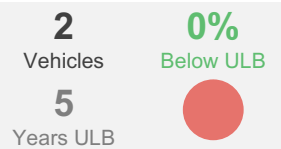
Rubber Tire Vehicles (Trucks)

Any motor vehicle designed to transport cargo.



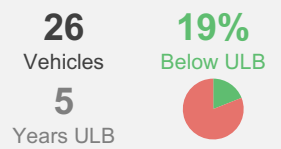
Automobiles

Passenger cars, up to and including station wagons in size. Excludes minivans and anything larger.



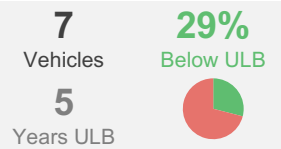
Sport Utility Vehicle

A high-performance four-wheel drive car built on a truck chassis. It is a passenger vehicle which combines the towing capacity of a pickup truck with the passenger-carrying space of a minivan or station wagon.



Van

An enclosed vehicle having a typical seating capacity of 8 to 18 passengers and a driver. A van is typically taller and with a higher floor than a passenger car, such as a hatchback or station wagon.



Based on CTDOT data as of June, 2022

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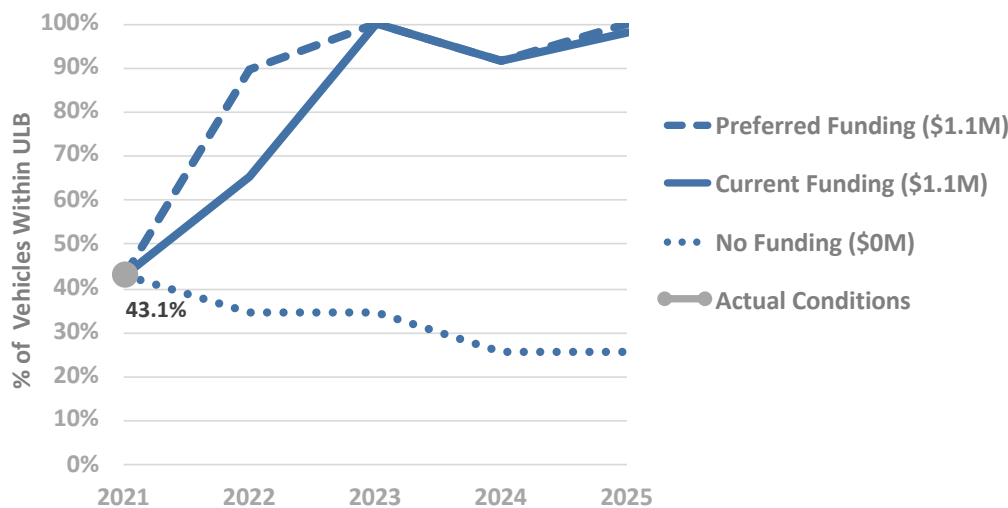
Connecticut Tier II Transit Asset Management Plan

Service Vehicles



Service Vehicles Performance Projections

Percent of Service Vehicles Within ULB



CTDOT anticipates \$5 million of SOGR needs from 2022-2025 for Tier II Service Vehicles. Much of the service vehicles are part of the initial backlog in 2022, totaling around \$4 million.

Current funding for SOGR activities was calculated based on CTDOT’s Capital Plan with the help of CTDOT’s Capital Services Unit.

Based on projections made using CTDOT’s prioritization tool given current funding, to make progress on its SOGR needs Connecticut should invest approximately \$4.3 million in Tier II service vehicles over the four-year horizon from 2022-2025.

Years referenced in these charts are by State of Connecticut Fiscal Year which runs from July 1st to June 30th.
Based on CTDOT data as of June, 2022

Current Performance and Targets

Transit providers must set one-year performance targets using the performance measures established by FTA for the four capital asset categories required for a TAM plan, as applicable. These targets must be updated and submitted to the NTD annually.

Performance and Targets for Tier II Service Vehicles

Asset Class	% Vehicles Within ULB		% Vehicles Met or Exceeded ULB	
	Current Performance	Performance Target	Current Performance	Performance Target
Rubber Tire Vehicle (Truck)	78%	7%	22%	7%
Automobile	0%	17%	100%	17%
Sport Utility Vehicle	19%	17%	81%	17%
Van	29%	17%	71%	17%

Transit Funding

CTDOT creates a funding pool from which capital projects in regions around the state are funded. The disbursement of these funds based on annual needs is approved by the MPOs in the STIP. Sub-area split agreements that reflect the annual disbursement of funds by region are created by CTDOT and executed by the transit operators from each region. This program allows local transit operators to fund major projects for which they may otherwise have never accumulated adequate funds.

Analytical Approach

CTDOT uses the Transit Asset Prioritization Tool (TAPT) to support its analytical approach. TAPT is a spreadsheet tool for predicting transit asset conditions and SGR needs.

The tool has a series of models for different asset types that recommend when to rehabilitate or replace an asset, and the conditions and performance predicted for the asset over time. Also, the tool supports prediction of the overall performance resulting for a specified funding scenario, and recommends a prioritized list of projects to fund given a budget constraint.



Connecticut Tier II Transit Asset Management Plan

Bus Facilities



Description

- Tier II transit providers in Connecticut own 10 administrative or maintenance facilities and five passenger facilities.
- The following providers own facilities: GBTA, HART, MAT, MfDfTD, GNHTD, NWLKT, SEAT, WRTD, VTD. The Nash-Zimmer Transportation Center owned by the Town of Mansfield is also included.
- Over half of the facilities have recent formal condition assessments, while condition data for the other facilities is based on engineering judgement.

Performance Measures

The percentage of facilities within a particular asset class rated below condition 3 on the FTA Transit Economic Requirements Model (TERM) scale.

- Major facility components are inspected and rated on a 1 to 5 condition scale. The component condition ratings are averaged using weight factors and replacement cost to calculate the overall condition of a facility.
- For some components, a visual inspection may be insufficient for establishing conditions. In these cases, an age-based approach is used to estimate condition using useful life.
- A facility that has a condition rating of 3 or greater has met the performance metric.

Inventory and Condition



Administrative/Maintenance

Administrative facilities are typically offices that house management and supporting activities for overall transit operations such as accounting, finance, engineering, legal, safety, security, customer services, scheduling, and planning. They also include facilities for customer information or ticket sales, but that are not part of any passenger station. Maintenance facilities are those where routine maintenance and repairs or heavy maintenance or unit rebuilds are conducted.

10
Facilities

94%
components
rated 3 or
above



Passenger/Parking

Passenger facilities are significant structures on a separate ROW. Examples include

- All motorbus, rapid bus, commuter bus, and trolley bus passenger facilities in a separate ROW that have an enclosed structure (building) for passengers for items such as ticketing, information, restrooms, and concessions
- All transportation, transit or transfer centers, and transit malls if they have an enclosed structure (building) for passengers for items such as ticketing, information, restrooms, concessions, and telephones

5
Facilities

94%
components
rated 3 or
above



Total

15
Facilities

94%
components
rated 3 or above



Based on CTDOT data as of June, 2022

**Performance measure herein is required for FTA reporting purposes only. Condition Ratings are used to determine overall SGR status either through engineering judgement or formal condition assessments, which may not reflect SGR needs in its entirety.*



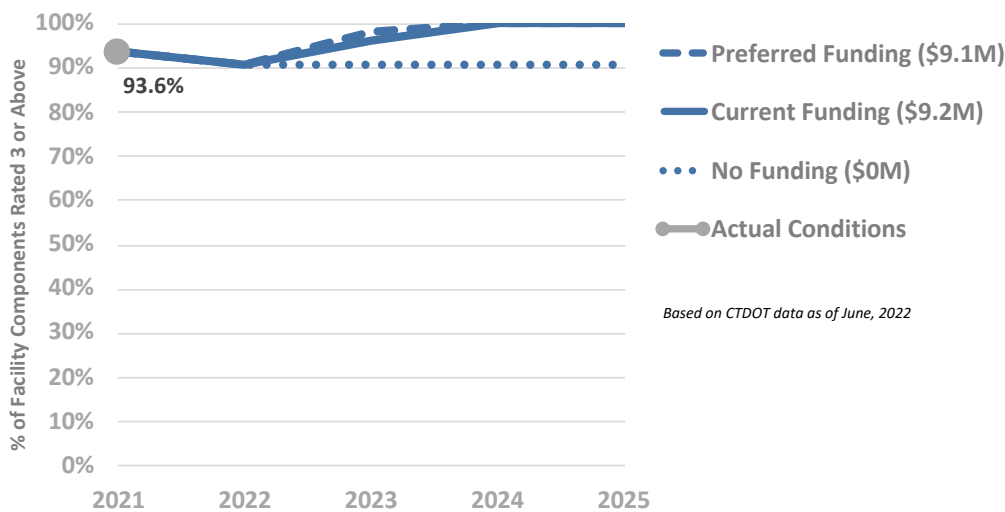
Connecticut Tier II Transit Asset Management Plan

Bus Facilities



Bus Facilities Performance Projections

Percent of Bus Facility Components Rated 3 or Above on FTA TERM Scale



CTDOT anticipates about \$39 million of SOGR needs from 2022-2025 for Tier II Bus Facilities.

Current funding for SOGR activities was calculated based on CTDOT’s Capital Plan with the help of CTDOT’s Capital Services Unit. Connecticut’s Capital Plan is a document that lists all projects expected to be federally-funded over a five-year period.

Based on projections made using CTDOT’s prioritization tool, the current funding level will allow Tier II facilities to achieve the desired SOGR.

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Transit Funding

CTDOT creates a funding pool from which capital projects in regions around the state are funded. The disbursement of these funds based on annual needs is approved by the MPOs in the STIP. Sub-area split agreements that reflect the annual disbursement of funds by region are created by CTDOT and executed by the transit operators from each region. This program allows local transit operators to fund major projects for which they may otherwise have never accumulated adequate funds.

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Current Performance and Targets

Transit providers must set one-year performance targets using the performance measures established by FTA for the four capital asset categories required for a TAM plan, as applicable. These targets must be updated and submitted to the NTD annually.

Performance and Targets for Tier II Bus Facilities

Asset Class	% Components Rated 3 or Above	% Facilities Rated 3 or Above	% Facilities Rated Below Condition 3	
	Current Performance	Current Performance	Current Performance	Performance Target
Administrative/Maintenance	94%	100%	0%	0%
Passenger	94%	100%	0%	0%