

2023 CTDOT Service and Fare Equity Analysis

Connecticut Department of Transportation

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Service and Fare Equity Analysis Executive Summary

In accordance with Title VI of the Civil Rights Act of 1964 and Federal Transit Administration (FTA) Title VI Circular 4702.1B, Connecticut Department of Transportation (CTDOT) conducts a Service and Fare Equity (SAFE) Analysis any time fare changes or major service changes are proposed to ensure that changes do not unfairly impact minority and low-income populations, as defined by the FTA Title VI Circular.

CTDOT analyzed proposed 2023 bus and rail service changes to determine if they met the criteria of a Major Service Change under the CTDOT FTA Title VI Program, these proposed changes include:

- Proposed schedule changes on Shore Line East, Metro-North New Haven Line, New Canaan Line, and Danbury Line
- Proposed schedule changes to *CTtransit* bus service

Additional items analyzed in this Service and Fare Equity Analysis include:

- Proposed increase to rail fares on the Metro-North Railroad New Haven Line and branch lines, the Shore Line East, and the Hartford Line
- Reintroduction of fares on *CTtransit* buses

Proposed Shore Line East service changes and proposed *CTtransit* bus service changes were deemed to exceed the Major Service Change criteria thresholds and were analyzed for impacts in accordance with CTDOT's Title VI policy.

Equity Analysis Methodology

The CTDOT FTA Title VI Program outlines the agency's Major Service Change, Disparate Impact, and Disproportionate Burden policies, as well as the way in which CTDOT conducts SAFE Analyses. Proposed major service changes to rail and bus services and all fare changes were analyzed to determine if there would be disparate impacts to minority populations, or disproportionate burdens to low-income populations.

Connecticut Rail System Changes

Proposed Rail Service Changes

The bipartisan budget adopted earlier this year included a funding reduction for Metro-North Railroad (MNR) and Shore Line East (SLE) passenger rail service, therefore new schedules are proposed for both services to achieve budgetary targets established by the legislature and more closely align with current ridership levels and travel patterns. The following table illustrates how current ridership compares on the MNR New Haven Line and branch lines and the Shore Line East for Year-to-Date (June 2023) compared to pre-Covid (2019) ridership levels.

Table 1: Percent Change in Ridership by Rail Line (2023 Year-to-Date vs. 2019)

Percent Change	Metro-North Railroad				CTrail
	Main Line	New Canaan	Danbury	Waterbury	Shore Line East
2023 YTD vs. 2019	-31.9%	-45.19%	-49.6%	-2.9%	-68.2%

- Monday-Thursday service on the New Haven Line is proposed to be reduced from 239 trains to 237 trains per day.
- Friday Service on the New Haven Line is proposed to be reduced from 241 trains to 233 trains per day.
- Weekday service on the New Canaan Line is proposed to be reduced from 41 trains to 39 trains per day.
- Weekday service on the Danbury Line is proposed to be reduced from 28 trains to 26 trains per day.
- Weekday service on Shore Line East is proposed to be reduced from 23 trains to 16 trains per day.

Proposed Rail Fare Changes

Fares are critical to CTDOT and its service providers’ ability to operate a safe and reliable transportation system, while helping to support rising costs. To address the loss of fare revenue, CTDOT proposes to increase fares for Metro-North Railroad services in Connecticut, Shore Line East, and the Hartford Line.

Each rail line would experience a slightly different percent increase due to the need to raise one-way fares by 25 cent increments. The collective average proposed fare increase for each fare medium throughout the statewide rail network is presented below (Table 2 - Table 4):

Table 2: Metro-North Railroad Average Fare Medium Changes

Metro-North Railroad		
Fare Medium	Current Average Fare	New Average Fare
One Way - Peak	\$7.14	\$7.60
One Way - Off Peak	\$6.73	\$7.15
Half Price One Way - Peak	\$3.61	\$3.75
Monthly School	\$102.30	\$95.83
Weekly	\$47.78	\$49.58
10-trip Peak	\$63.23	\$67.19
10-Trip Off Peak	\$57.25	\$60.80
10-trip Older Adult/Disabled	\$35.17	\$37.54
Promo Monthly	\$137.44	\$142.98
Average Fare Medium Price	\$51.18	\$52.49

Table 3: Shore Line East Average Fare Medium Changes

Shore Line East		
Fare Medium	Current Average Fare	New Average Fare
One Way	\$4.91	\$5.17
Discount One-Way	\$2.39	\$2.44
10-Trip	\$39.29	\$41.36
10-Trip Discount	\$24.20	\$25.85
Monthly	\$103.13	\$108.56
Monthly Bus Plus	\$113.13	\$118.56
School Monthly	\$69.07	\$69.07
Unirail	\$33.89	\$35.26
Average Fare Medium Price	\$48.75	\$50.78

Table 4: Hartford Line Average Fare Medium Changes

Hartford Line		
Fare Medium	Current Average Fare	New Average Fare
Fare Medium	Current Average Fare	New Average Fare
One Way	\$5.88	\$6.13
Discount One Way	\$2.89	\$3.00
Onboard One Way	\$8.88	\$9.13
Weekly	\$38.29	\$39.88
10-Trip	\$47.07	\$49.00
Discount 10-Trip	\$28.93	\$30.63
Monthly	\$123.56	\$128.63
School Monthly	\$88.26	\$88.26
Unirail	\$57.26	\$59.55
Average Fare Medium Price	\$44.56	\$46.02

CTtransit Proposed Bus System Changes

The bipartisan budget adopted earlier this year included an increase in funding for bus service in Connecticut. The focus of the expansion is to provide better access to jobs, training, and education by providing service that operates later and seven days a week. The Service and Fare Equity Analysis includes one proposed new route in the Hartford Division, two proposed new routes in the CTtransit New Haven Division and proposed improvements to service frequencies on two CTfastrak routes.

In addition, changes are proposed to eight routes in the CTtransit Hartford Division to better align with ridership demand and promote efficiency. The types of proposed service changes on these eight routes include decreased service frequency, route restructuring and route elimination with replacement service.

Proposed Hartford Division Service Changes

- **Hartford dash Shuttle.** To better align ridership demand with scheduled service the dash Shuttle is proposed to transition from a Monday through Friday schedule to a Thursday through Sunday schedule, operating 8 AM to 10 PM, with service on Mondays, Tuesdays and Wednesdays for special events.
- **45X – Berlin Turnpike Flyer.** It is proposed to discontinue service on this route with replacement service provided by CTfastrak Route 125.
- **47B – Berlin Turnpike.** It is proposed to discontinue service on this branch. Service along Prospect Street in Wethersfield would be replaced with limited alternate service provided by the 61 – Broad Street route. Service along Berlin Turnpike would be provided by CTfastrak Route 125.
- **69 – Capitol Avenue.** Service on this route is proposed to be rerouted to operate via Fenn Road and CTfastrak Cedar Street Station, terminating at the Newington Veteran’s Hospital at all times. Replacement service to Willard Avenue and Berlin Turnpike would be provided by the proposed CTfastrak Route 125.
- **907 – Newington Express.** Service on Route 907 is proposed to be discontinued. Service between the Newington Park & Ride and downtown Hartford on weekdays would be provided by the proposed CTfastrak Route 125.
- **923 – Bristol Express.** Given the limited ridership return to Route 923 as well as the similar geographic coverage provided by Route 102, service on Route 923 is proposed to be discontinued.

Proposed CTfastrak Feeder Service Proposed Service Changes

- **102 – Hartford/New Britain/Bristol.** In Bristol, service on CTfastrak Route 102 is proposed to be discontinued along the expressway portion of CT 72 between Todd Street and Forestville Avenue.

All trips would be rerouted to operate along Pine Street making local stops in both directions, establishing two-way service to Forestville Commons. The level of service on Route 102 is not proposed to change.

- **125 – Hartford-Berlin Turnpike.** CTfastrak Route 125 is a proposed new bus route that would operate between downtown Hartford and Berlin Turnpike. Buses would depart Main Street in downtown Hartford, service Union Station, then operate via the CTfastrak guideway, making all stops to Newington Junction Station.
- **140 – CCSU Connector.** Due to low utilization and the availability of alternate services linking multiple CTfastrak stations to the CCSU campus – including Routes 128, 144 and 507 – service on Route 140 is proposed to be discontinued. Service to Fenn Road would instead be provided on weekdays and Saturdays by Route 69.
- **144 – Wethersfield/Westfarms.** To provide customers with a more convenient and reliable travel experience, weekday headways on Route 144 are proposed to be narrowed from 60 minutes to 40 minutes during the peak and base periods.
- **153 – Elmwood/Copaco.** To provide customers with a more convenient and reliable travel experience, weekday headways on the route are proposed to be narrowed from 60 minutes to 40 minutes during the peak and base periods.

In addition, Route 153 is proposed to be rerouted via Albany Avenue and Bloomfield Avenue in West Hartford to restore service to the University of Hartford campus.

Proposed New Haven Division Proposed Service Changes

- **216 – Northford/Wallingford/Meriden.** CTtransit Route 216 is a proposed new bus route that would operate between New Haven and Meriden.
- **262 – Orange Business District** CTtransit Route 262 is a proposed new bus route that would operate between New Haven and Milford.

Bus Fare Changes

During the early stages of the COVID-19 pandemic, CTDOT suspended CTtransit fares as it implemented COVID-19 specific safety measures like rear door boardings. CTtransit is the CTDOT-owned bus service operating in several metropolitan areas throughout Connecticut. Fare

suspensions were then extended in 2022 as part of the state’s gas-tax suspension bill. As the pandemic waned and economic conditions and safety measures changed, CTDOT restored fare collection following a 12-month fare-free period. Per federal guidance, a restoration of fares following a fare free period needs to be analyzed. As a result, CTDOT conducted a fare equity analysis on the resumption of fare collection to determine if there was a disparate impact on minority¹ or disproportionate burden on low-income² populations as defined in the CTDOT Title VI Program.

Following the reinstatement of fares for all ticket types, the average fare medium cost for overall customers, minority customers pay 2.4% less than overall customers and low-income customers pay 7.2% less than overall customers.

Service and Fare Analyses – Findings and Alternatives

Rail System Findings

A summary of the rail major service change threshold analysis results and fare changes are presented as follows:

- **New Haven Line – Did not meet the threshold for a Major Service Change**, therefore no equity analysis was required.
- **New Canaan Line – Did not meet the threshold for a Major Service Change**, therefore no equity analysis was required.
- **Danbury Line - Did not meet the threshold for a Major Service Change**, therefore no equity analysis was required.
- **Shore Line East – Met the threshold for a Major Service Change**, therefore an equity analysis was required

Proposed Fare Change Impacts by Individual Rail Line

An evaluation of the individual fare changes on each line was conducted.

Metro-North Railroad Fare Change

The percentage change for each Metro-North Railroad type of customer showed that all customers, once adjusted for the types of fare used, would experience a 5.86% increase in average fare medium price, minority customers would experience a 5.74% increase in average

¹ The United State Department of Transportation defines minorities as a person who identifies as American Indian and Alaska Native, Asian, Black, or African American, Hispanic or Latino Populations, and Native Hawaiian and Other Pacific Islander.

² The definition of “low-income” is a reported household income 150% of the poverty line or lower. The poverty line is a sliding scale that adjusts the poverty line to the number of individuals living in a given household. This analysis utilized the U.S. Federal Poverty Guidelines as identified by Department of Health and Human Services (HHS).

fare medium price and low-income customers would experience a 5.91% increase in average fare medium price. Given that the difference between all customers and minorities is 0.12%, the difference between all customers and low-income customers is -0.05% -- values that are well below the CTDOT-mandated 10% threshold -- there was no finding of a disparate impact or disproportionate burden on the New Haven Line.

Hartford Line Fare Change

The percentage change for each Hartford Line type of customer, once adjusted for the types of fare used, showed that all customers would experience a 4.06% increase in average fare, minority customers would experience a 4.07% increase in average fare medium price and low-income customers would experience a 4.04% increase in average fare medium price. Given that there is a 0.01% difference between all customers and minorities and a -0.02% difference between all customers and low-income customers -- values that are well below the CTDOT-mandated 10% threshold -- there was no finding of a disparate impact or disproportionate burden on the Hartford Line.

Shore Line East Fare Change

The percentage change for each Shore Line East type of customer, once adjusted for the types of fare used, shows that all customers would experience a 4.95% increase in average fare, minority customers would experience a 5.07% increase in average fare medium price and low-income customers would experience a 5.05% increase in average fare medium price. Given that there is a 0.12% difference between all customers and minorities and a 0.11% difference between all customers and low-income customers -- values that are well below the CTDOT-mandated 10% threshold -- there is no finding of a disparate impact or disproportionate burden on Shore Line East.

Proposed Fare Change Impacts for all Individual Rail Lines Combined (Full Package)

Metro-North Railroad, Hartford Line, and Shore Line East data was combined and weighted based on their total estimated annual ridership.

- The percentage change analysis revealed that the change, following the fare increase, for minority and low-income ridership was 5.73% and 5.86% respectively.
- Compared to all customers, the difference for minority customers was approximately 0.12% below the overall average increase.
- Compared to all customers and the difference for low-income customers was a 0.02% above the overall increase.

Because these differences are below the 5% disparate impact or disproportionate burden threshold, the analysis concluded that the proposed fare changes for the full package did not have a disparate impact on minority or disproportionate burden on low-income populations.

Rail System Mitigation Alternatives

There was no finding of disparate impact or disproportionate burden resulting from the proposed Shore Line East service changes, therefore, no mitigations or alternatives must be considered.

Bus System Findings

Proposed Bus Service Change Findings

The proposed route elimination of Route 907 resulted in a disparate impact to minority populations.

The proposed change in service frequency on the Hartford dash Shuttle resulted in a disparate impact to minority populations and a disproportionate burden to low-income populations.

Reintroduction of Bus Fare Findings

The percent difference in average fare price between overall CTtransit customers and minority customers was -3.2%, meaning minority riders pay an average of \$0.56 less per average fare medium than the overall CTtransit customer base. The percent difference in average fare price between all customers and low-income customers was -8.2%, meaning low-income riders pay an average of \$1.45 less per average fare medium than all CTtransit customers.

The percentage difference between overall customers and minority customers fell below the 10% disparate impact threshold. Similarly, the percentage difference between overall customers and low-income customers fell below the 10% disproportionate burden threshold.

Bus System Mitigation Alternatives

Route 907 is a commuter service with AM trips inbound from the Newington Park and Ride to downtown Hartford and PM trips outbound from Hartford back to the Park and Ride. Service between the Newington Park & Ride and downtown Hartford on weekdays is proposed to be provided by CTfastrak Route 125.

To better align ridership demand with scheduled service, the dash Shuttle is proposed to transition from a Monday through Friday schedule to Thursday through Sunday. On Monday, Tuesday and Wednesday, replacement service along the dash route is proposed to be provided by CTfastrak Route 125.

Bus Fare Mitigation Measures

There was no finding of disparate impact or disproportionate burden, therefore, no mitigations or alternatives must be considered.