

A Comparison of Reduced Fare Programs for Low Income Transit Riders

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TRB Event Number: 1465
Date: 1/29/2021
Time: 2:30 PM – 4:00 PM ET

Abstract

Means-based reduced-fare programs can help address transit rider fare equity. The objective of this study is to synthesize the current state of reduced-fare programs for low-income transit riders. The reduced-fare programs of the fifty largest transit agencies in the United States were examined and agencies with programs for low-income riders were compared based on three dimensions: eligibility and enrollment, fare media and discount pricing, and estimated transit expenditure by eligible riders. The results reveal that seventeen of the fifty largest transit agencies have low-income reduced-fare programs. Of these, fourteen agencies administer the programs themselves, while three use partnerships with social service organizations to administer them. Additionally, nine of the fourteen agencies that administer their own programs provide a 50% discount on fares and require participants to have an income at or below 125% to 200% of the Federal Poverty Level for eligibility. Using a method developed to evaluate the fare burden of transit riders with different income levels, it was determined that low-income reduced-fare program participants at the income eligibility threshold typically spend an estimated two to six percent of their annual income on transit, although very low-income people may need to spend much higher shares of their incomes on transit fares. These results indicate that agencies may need to reevaluate the structure of their existing low-income reduced-fare programs and implement tiers of discounts to ensure that fare equity is being extended to all riders.

Research Questions

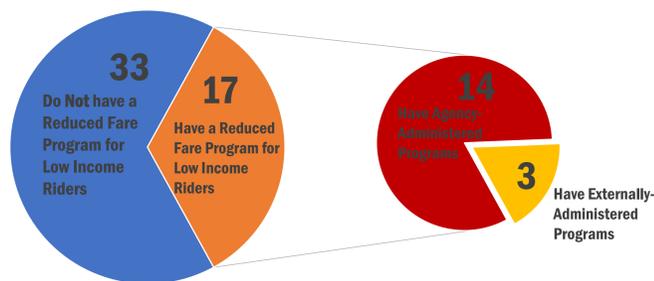
How are reduced fare programs for low income riders being implemented in the United States?

- What is the enrollment process for different low-income reduced-fare programs and how do they determine rider eligibility?
- What fare media do the programs use and how do the pricing discounts compare?
- What is the estimated transit expenditure for eligible riders?

A *Multiple Case Study* methodology using publicly available sources found on the internet was used to compare and evaluate reduced fare programs administered by transit agencies specifically for low-income transit riders.

Background

Top Fifty Largest U.S. Transit Agencies (by Unlinked Passenger Trips)¹



Fourteen of the fifty largest U.S. transit agencies administer *twelve* low income reduced fare programs (some agencies that share service regions share programs)

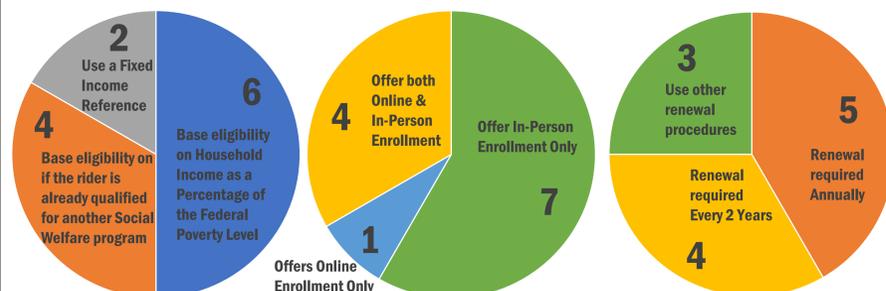
Reference: (1) Hughes-Cromwick & Dickens, 2020 Public Transportation Fact Book. <https://www.apta.com/wp-content/uploads/APTA-2020-Fact-Book.pdf>.

Enrollment & Eligibility

What do programs base eligibility on?

How do programs enroll riders?

How often must riders renew their eligibility?



Fare Media & Pricing Discount

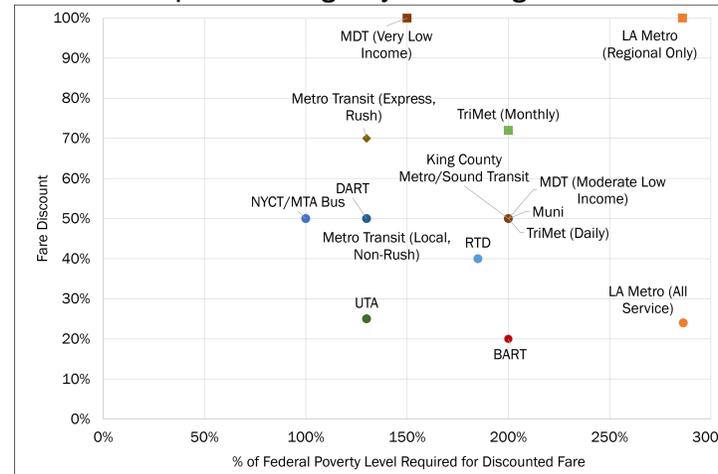


9 of 12 programs issue a specially programmed Smart Card

2 of 12 programs issue an ID card

1 of 12 programs issues a pre-programmed magnetic stripe card

Comparison of Eligibility and Pricing Discount

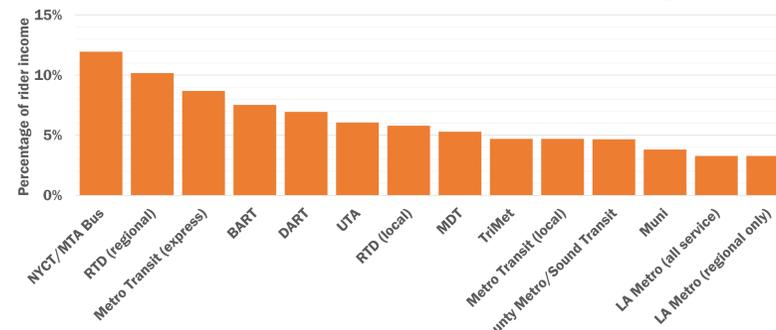


Most programs provide a discount between 50% and 75% and have an income eligibility threshold of between 125% and 200% of the Federal Poverty Level.

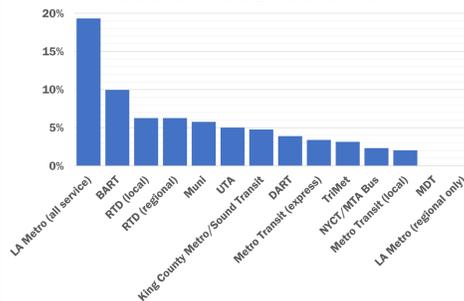
The Fare Burden Concept

- Fare burden is the percentage of a person's income required to pay for transit
- From the discount percentage for low income reduced fare programs, transit agencies *imply* a maximum affordable fare burden – the fare burden of the person earning one dollar more than the income eligibility threshold
- The fare burden for a specific rider can be calculated by dividing the cost the rider would pay for a year of unlimited monthly transit passes (including any low income discounts) by the rider's annual income level

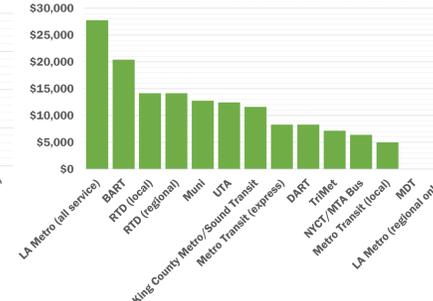
Implied Maximum Affordable Fare Burden for each Program



Percent of MSA Population paying Maximum Fare Burden or more

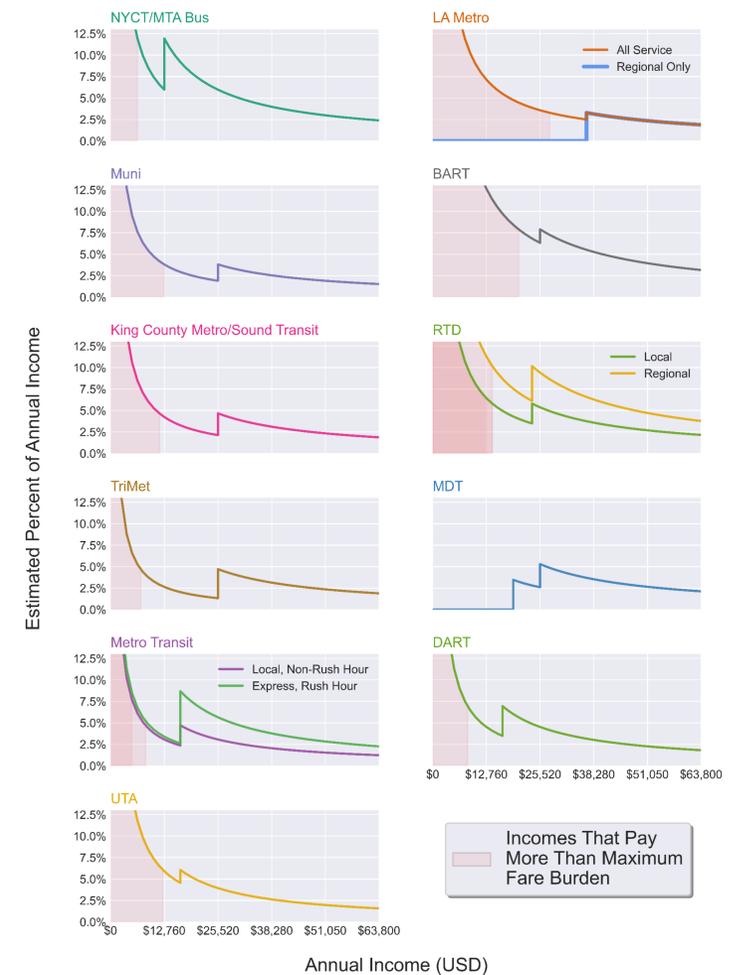


Income Level Paying Maximum Fare Burden or more



Estimated Fare Burden of Reduced Fare Programs

- The cost of one year of unlimited monthly transit passes was determined for each annual income level from \$0 to 500% of the Federal Poverty Level (household of one person) with any potential low income discounts applied
- Estimated fare burden was calculated by dividing the annual cost of transit fare by the annual income level
- Income ranges that pay *more* than the implied fare burden (red shaded areas) were found by calculating the fare burden of individuals earning one dollar more than the eligibility threshold for each program and then determining the incomes of riders eligible for the low income reduced fare program that have an equal or greater fare burden



Conclusions

- Calculating the fare burden per income level can be used to evaluate how a reduced fare program impacts low income riders' fare burdens and whether their fare burdens are proportionate to those of higher income riders
- Agencies can explicitly determine a maximum fare burden to guide the selection of discount amounts
- Using tiers of discounts can ensure the maximum fare burden for very low income riders is never exceeded

Future Research

- Incorporate MSA cost of living into fare burden analysis
- Analyze farebox recovery impacts of different discount levels and interview transit agency administrators to gain insights on agency-side decision making
- Fare burden curves can be used to evaluate the transit fare equity of the "working poor" who may be ineligible for low-income programs