



October 18, 2022
7:00 PM

Virtual Meeting Via Zoom

<https://us06web.zoom.us/j/92349600233>

I. Call to Order, Roll Call, Introductions, Excused Absences, Equity and Land Acknowledgment 7:00 pm

Present: Ed Rizzuto, Michael Moorman, Susanne Schmal, Scott Carter, Kai Monast, Tyler Dewey, Brian Hawkins, Cesar Castro, Deniz Aydemir, Ryan Phillips, Mike Shepherd, Mac Kendall, Aidil Ortiz, Heidi Carter, Javiera Caballero

Excused Absences: Dan Clever,

Absent: James Barnes, Landon Baucom, Monica Green,

Staff – Dale McKeel, Eric Vitale, Brian Taylor

Guests – Tricia Smar, Jack Anderson

II. Adjustments to the Agenda - 7:10 pm

- None

III. Approval of Minutes – 7:11 pm

- Motion made to approve by Mac Kendall, seconded by Cesar Castro. Motion approved.

IV. Public Comments – 7:12 pm

- Tricia Smar described her experience with the approval for the Courtyards at Southpoint II residential development. Tricia and her neighbors were concerned about high-speed traffic through the new neighborhood and asked the City Council to add a requirement to the development plan that the primary street through the development include traffic calming. However, at the site plan stage the Transportation Department rejected the addition of a raised crosswalk, saying that it could not be put in unless there was a demonstrated need. The developer, the Transportation Department, and the Fire Department had a conversation and developed a compromise to add mini roundabouts to the site plan as well as an additional crosswalk on the north side of the development.
- Trisha and two other neighborhood members along with Bike Durham recently went to a City Council meeting and asked for a review and presentation of Durham’s traffic calming policies. They also asked for a full time Vision Zero staff person. Trisha requests that BPAC

discuss and support a review of Durham's traffic calming policies and a full time Vision Zero coordinator.

- Susanne thanked Tricia Smar for her comments. Aidil shared her experiences with the shared streets pilot project and that some residents in east Durham were frustrated that traffic calming was not allowed on their streets due to Fire Department policies. Deniz said there is not a lot of clarity about what are best practices for traffic calming, and that possibly some requirements could be added to the UDO.

- Brian Taylor said there needs to be a conversation about traffic calming tools that would be acceptable to the Fire Department. There should be something that could be done on more streets.

V. Presentation : Fare Free Transit (Kai Monast) - 7:37 pm

- Kai Monast began by providing an overview of the variety of work performed by the Institute for Transportation Research and Education (ITRE) at NC State.

- Noting that farebox recovery in Durham is 9 percent, Kai stated that pricing is a way to allocate scarce resources. The presentation discussed the goals of public transit, functions of fares, substitutes for fare generation, and reasons why a fare free system might be considered. The full presentation is attached.

VI. Committee Reports - 8:10 pm

- o **Education, Encouragement and Engagement Committee Report (Susanne Schmal)**
 - Ed reported that Durham Mayor Elaine O'Neal attended the Vision Insights five-year celebration.
 - Susanne reported that the committee is working on BPAC member profiles and would like to add these to the website
 - Scott Carter will send a letter to the Parks and Recreation Director and the City Attorney asking about electric assist bicycles on trails in Durham.
 - Susanne stated that the committee would revisit previous conversations on traffic calming based on the public comments at tonight's meeting.
- o **Development Review Committee Report (Dan Clever)**
 - Deniz reported that the committee prepared comments for new developments on Old Oxford near Danube, Burton Road, and Brightleafj North. Comments focused on bus stop improvements, bike facilities, and reserving space for future trails.
 - The committee also reviewed the development plan for Streets at Southpoint Mall. Discussion focused on sidewalk along Fayetteville Road, connections to the intersection of Fayetteville and Herndon roads, and construction of the Triangle Bikeway.
- o **Bike and Pedestrian Plan Implementation / Evaluation Committee Report (Michael Moorman)**

- The committee is working on a resurfacing letter providing recommendations on street being resurfaced by the City of Durham, the letter will be finalized by Thursday
 - The committee discussed a webinar about how to bring the safe systems approach into the development review process, and how some of the concepts could be used to amend the Durham UDO.
- **Updates from Liaisons**
 - Durham City Council (Javiera Caballero) – Noted that budget season is kicking off soon. The social district in downtown Durham has been created – this is an opportunity to make some parts of the district car-free some of the time.
 - Durham Board of County Commissioners (Heidi Carter) – No updates.
 - Duke University (Tyler Dewey) - No updates
 - NC Central University (TBD) – No report
 - Comprehensive Plan (Ed Rizzuto) – Ed reported that the policy committee is having two wrap up sessions and the place type map and guide will be available in October. The new comprehensive plan will be released at end of December with presentation to Planning Commission in March and joint meeting of Council and Commissioners in mid to late spring. Ed made comments to the Planning Department that road resurfacing lists should be provide earlier to allow adequate time for review and consideration of alternative striping plans.
- Other Community Updates (All)
 - None

VII. Old Business 8:35 pm

- Review of Presentation Topics for Upcoming Meetings, with the following suggested changes:
 - ADDED - Bike-Ped Access to New Durham Schools, including Northern High and Lyons Farm Elementary (DPS)
 - ADDED - Re-Engaging with the Office on Youth – Updates and New Priorities (Office on Youth)
 - ADDED - Good Practices for Traffic Calming (Transportation Department)
 - ADDED - Paratransit Study to be funded by Durham County Transit Plan (TBD)
 - REMOVED - City Resurfacing Program (TBD)

VIII. New Business 8:45 pm

- It was briefly discussed that elections are to be held at the December meeting. Susanne has served two terms as chair and is not eligible to serve another term.
- It was also briefly discussed that the annual retreat is typically held in January and planning needs to begin soon.

IX. Announcements and Updates - 8:50 pm

- None

X. Communication Priorities from Meeting and Committees - 8:50 pm

- Tricia Smar public comments – how can BPAC be supportive on traffic calming and Vision Zero and what are follow-up actions to take
- Potentially ask Brian Taylor to present on traffic calming
- Check in with Bike Durham on potential Safe Routes to School activities
- E-bikes issue to be investigated and discussed in EEE as starting point
- Provide comments on city resurfacing streets by Thursday October 20

XI. Adjourn – 9:02 pm

About ITRE

- Located at NC State University
- 50+ full time staff and 100+ students
- Research, Technical Assistance, and Education/Training
- Contracts with NCDOT, local and federal agencies



Highway Systems Design and Operations



LTAP and Other Professional Training



Economics and Policy Assessment



Transportation Planning and Analysis



Transit Systems



School Planning and Transportation



Bicycle and Pedestrian



Aviation



Rail

BPAC Associated Work

- School bus routing, boundary planning
- Transit operations, planning, funding, data, research
- Bicycle and pedestrian data, research
- Work zone safety, pedestrians in work zones
- Rail trespassing, crossings
- Alternative intersection design
- Triangle regional model, household travel survey

Fare Free Transit: Why Charge a Fare?

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What Do These Communities Have in Common?



**Recently Questioning
Whether Fares are Fair**

Recent Industry News- International

- *From June to August 2022, Germany has a €9 unlimited monthly transit pass for all services except high-speed rail*
- *Purpose is to reduce reliance on foreign energy*

Source: [Cities-Today](#), Accessed June 23, 2022

Recent Industry News- Pittsburgh/KC

- *Pittsburgh is making public transportation nearly free across a number of modes for a select number of local workers.*
- *The initiative is part of a pilot project to examine the concept of “universal basic mobility” where access to transportation can help improve quality-of-life metrics in areas like economic opportunity, education or health care.*
- *Some 80 percent of riders of Kansas City Regional Transit “are people who really need us,” said Robbie Makinen, CEO of RideKC,*
- *“As far as I’m concerned, a fare is a regressive tax on them,” he added.*

Source: Pittsburgh, Pa., to Test Universal Basic Mobility, MaaS, GovernmentTechnology 2021

Recent Industry News- Boston

- *Boston dropped its \$1.70 fare on three bus lines serving communities of color*
- *Ridership increased 48%, from 47,000 to 70,000 weekly riders*
- *Mayor Wu cited removing barriers to transportation as the motivating reason*

Source: [The Guardian.com](https://www.theguardian.com), Accessed June 22, 2022

Recent Industry News- Myrtle Beach, SC

- "The increase in the homeless population in the city of North Myrtle Beach can be directly attributed to the Coast RTA bus transportation system."
- "The Coast RTA bus transit system provided free transportation which allowed transient people to travel to areas not previously available."
 - *North Myrtle Beach City spokesman Donald Graham*

Sources: MassTransitMag.com

National Discussion Highlights

- *“A bus that is free, but only runs every two hours and doesn’t run on weekends—that’s no bargain at all,”*
(TransitCenter’s David Bragdon)
- *Free public transit would create more equitable cities and increase people’s mobility*
(Boston Globe columnist Abdallah Fayya)
- *“This (fare free) program has removed barriers . . . , increased ridership... and eased congestion...”*
(Boston Mayor Michelle Wu)
- *“As far as I’m concerned, a fare is a regressive tax”*
(RideKC CEO Robbie Makinen)

Overview

- COVID-19 provides an opportunity to rethink fundamental assumptions about public transportation
- Suspending fares was a common approach to provide essential mobility while ensuring operator safety
- There has been an influx of emergency and sustained federal funds combined with decreased ridership
- Which leads to the question...
 - **Why do we collect fares?**

Who isn't Fare Free to Some Extent?

Even if a transit system is not totally zero fare, many have zero fare elements:

- Human service clients
- Youth and elderly programs
- Downtown circulators
- Try Transit Day
- Code Orange air quality days



Source: wikiwand.com

What are Fare Revenues?

“All income received directly from passengers, paid either in cash or through pre-paid tickets, passes, etc. It includes donations from those passengers who donate money on the vehicle. It includes the reduced fares paid by passengers in a user-side subsidy arrangement.”

Sources:

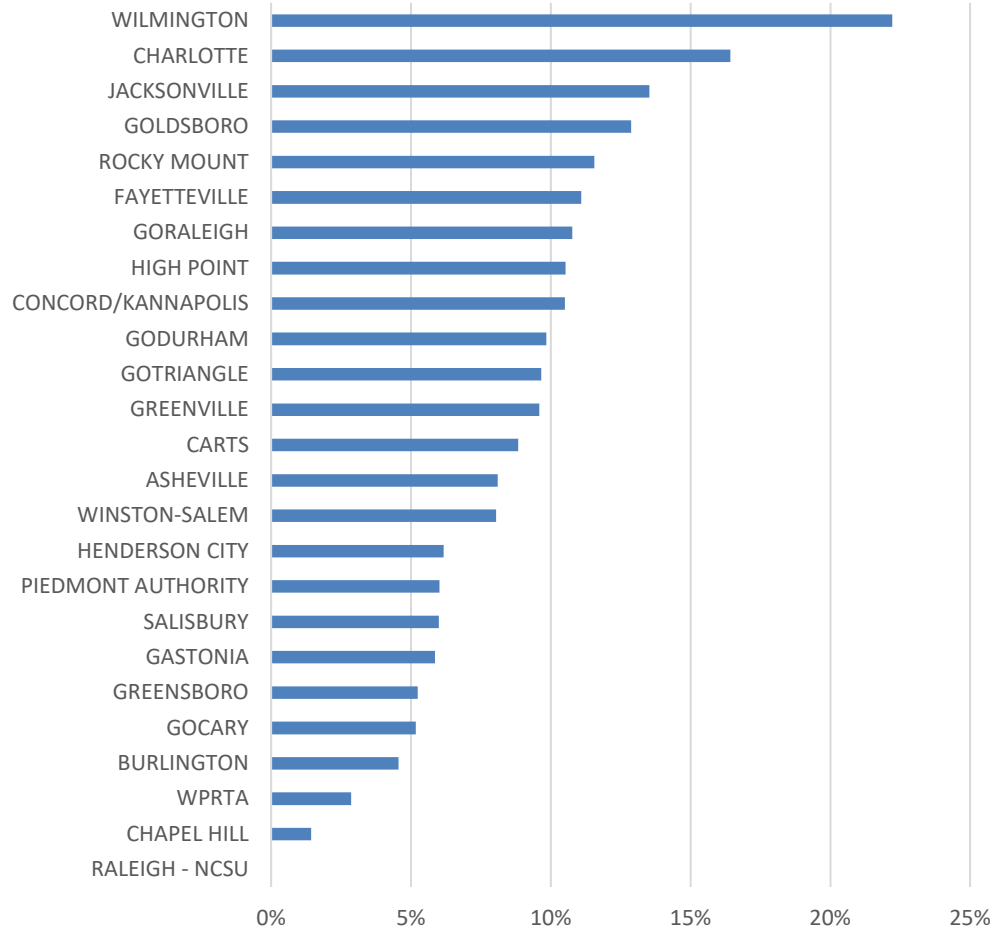
<https://www.transit.dot.gov/ntd/national-transit-database-ntd-glossary#Fggwash.org>



Farebox Recovery in NC (FY19)

- ~ **\$280,000, or <0.3%** of Community Transportation operating funds were generated through fares
- ~ **\$34,000,000, or 9%** (average) of urban bus and paratransit operating funds were generated through fares
- **Including capital funds, the percentages decrease by 10-50%**

Operating Farebox Recovery Percentage



Sources: FY19 OpStats and National Transit Database

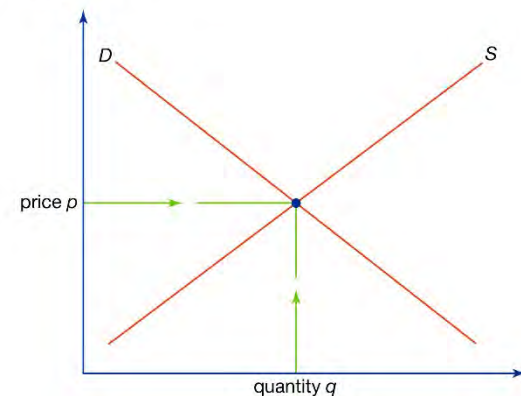
**So, fares don't equate to much compared
to our expenses...**

Economic Theory of Pricing

- Fares = pricing
- Pricing is a method of resource allocation
- Private firms set the optimal price to maximize profits
- Public firms set prices to achieve policy goals, typically designed to maximize social welfare (utility)
- For public firms, there is no such thing as the '*right*' price/fare, but there are optimal pricing strategies which enable goals to be realized

Sources: *Button, Transport Economics*
Brittanica.com

Supply and demand



Economic Theory of Pricing

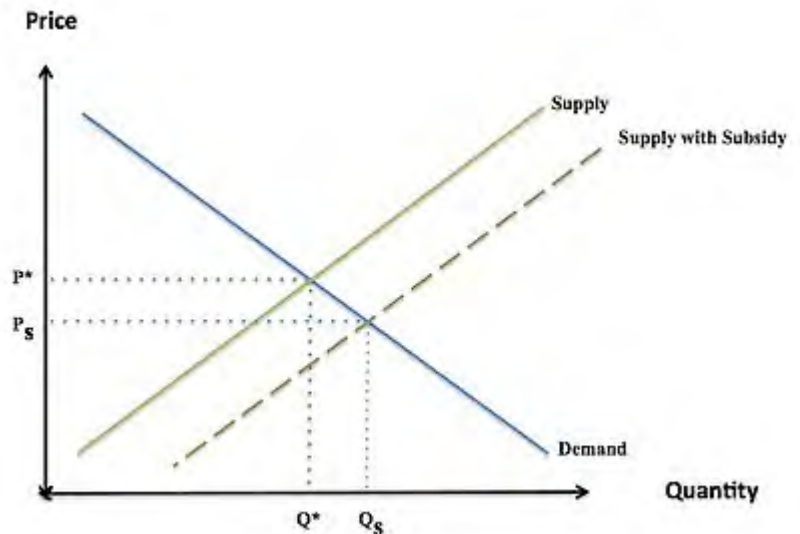
- Typically, social welfare is assumed to be maximized when price equates to *marginal cost*+
 - The fare should be equal to the cost of the additional effort required to serve the passenger +
 - Capital/fixed cost recovery +
 - Surcharges to ensure adequate capacity (reduce overcrowding)
- However, **this only holds if all transport sectors set their prices the same way**
 - Road and parking subsidies violate the assumptions
- Thus, use marginal cost as a guide, but adjust pricing to overcome other transport sector subsidies

Source: Button, Transport Economics

Economic Theory of Pricing: Summary

- In areas with tolls and parking charges that set driving and transit subsidies on equal footing, set fares to the *marginal cost*+
- Absent tolls and parking charges that overcome the subsidy inequities, **fares should be set to realize public goals**

Sources: Button, *Transport Economics*;
<https://en.wikipedia.org/wiki/Subsidy>



**...We are free to set fares where they
achieve our goals...**

Typical Public Transportation Goals

- Reduce operating subsidy per passenger
- Reduce total operating subsidy
- Save travel time for transportation system users
- Relieve congestion bottlenecks...
- Focus development in selected areas
- Transform a locale into a different type of environment
- Improve mobility for people who do not own automobiles
- Improve transport system safety and security
- Reduce travel time to improve scheduling efficiency
- Provide alternatives under road congestion pricing
- Reduce energy consumption and greenhouse gas generation
- Reduce pollution and preserve ecological services

Impact of Charging Fares on Goals (on a system without capacity constraints)

- - Reduce operating subsidy per passenger
- +Reduce total operating subsidy
- - Save travel time for transportation system users
- - Relieve congestion bottlenecks...
- - Focus development in selected areas
- - Transform a locale into a different type of environment
- - Improve mobility for people who do not own automobiles
- ? Improve transport system safety and security
- - Reduce travel time to improve scheduling efficiency
- - Provide alternatives under road congestion pricing
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**...Charging fares does not do much
toward achieving transit goals...**

Hidden Costs & Visible Transport Costs

- Most costs associated with owning and operating a personal vehicle are fixed and, as a result, hidden on a per-trip basis
 - Purchase price, taxes, insurance, maintenance, etc. occur infrequently
 - Gasoline is a visible cost, but even this takes on characteristics of hidden (fill up once and drive 400 miles)
- Thus, most drivers are not aware of the cost of the trip
- However, the cost of the trip is very visible to transit users paying a fare
- The difference in visibility is a deterrent to transit use

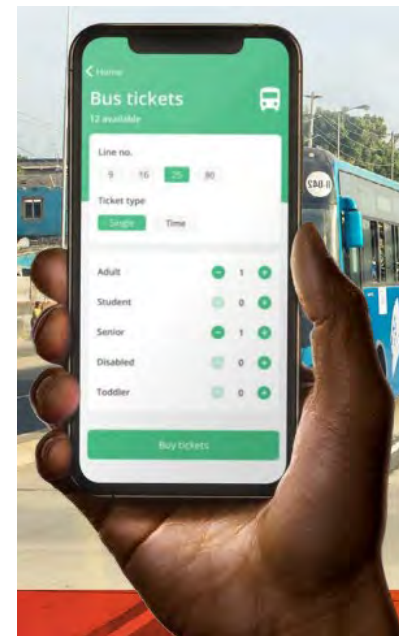
...Transit fares should not exceed visible driving costs...

Arguments for Cashless Fare Collection

- More convenient for the user
- Enable quicker boarding, improving journey times and bus use efficiency
- Help curb fare evasion, fraud, and theft
- Requirements for handling on-board cash payment are reduced

Are these arguments even more valid for fare free systems?

Source: Innovation in Fare Collection Systems for Public Transport in African Cities



Other Costs Related to Fare Collection

Most of the arguments for Automated Fare Collection, **plus fare free...**

- Makes the transport system more understandable and easier to use
- Removes economic barriers to riding
- Eliminates the need for physical fareboxes, farecards and related technologies
- Reduces or eliminates cash management procedures and armored car contracts

In an environment of operator shortages, can eliminating fares reduce operator responsibilities, increase job satisfaction, and operator retention?

**...Arguments for cashless fare collection
support zero fare collection...**

Focus of Modern Transit

- Prices for low income individuals are highly inelastic, meaning they will pay more because they have no choice
- Prices for higher income individuals (choice riders) are highly elastic, meaning they will compare costs and choose the mode most beneficial to them

Source: Button, Transport Economics

Focus of Modern Transit

- *Despite the fact that transit dependents are the steadiest customers for most public transit systems, transit policy has tended to focus on recapturing lost markets through expanded suburban bus, express bus, and fixed rail systems. Such efforts have collectively proven expensive and only marginally effective. At the same time, comparatively less attention and fewer resources tend to be devoted to improving well-patronized transit service in low-income... areas serving a high proportion of transit dependents.*

Source: Garrett and Taylor, Reconsidering Social Equity in Public Transit

Focus of Modern Transit: Summary

- Transit has chased choice riders at the expense of transit dependent riders
- Chasing choice riders is more expensive than serving essential trips and reduces service to at-need communities, resulting in higher fare payments and increased travel times for essential trips

Source: Garrett and Taylor, Reconsidering Social Equity in Public Transit

- The pandemic has proven that essential trips are the core of public transportation

...Charging fares based on choice rider preferences has reduced access and affordability for essential trips...

Fare Evasion

- Fare evasion enforcement disproportionately impacts black and brown people
- King County Metro found ¼ of fare evasions warnings and citations were from housing insecure
- San Francisco decriminalized fare evasion in 2010

Sources: [*A Fare Framework*](#), TransitCenter;
<https://fordhamobserver.com/44332/recent/features/a-war-on-poverty-the-power-of-a-subway-swipe/#>



...And, fare evasion penalties have the greatest impact on the most vulnerable.

Summary of Fare Theory

- Fares don't equate to much compared to our expenses...
- We are free to set fares where they achieve our goals...
- Charging fares does not do much toward achieving transit goals...
- Transit fares should not exceed visible driving costs...
- Arguments for cashless fare collection support zero fare collection...
- Charging fares based on choice rider preferences has reduced access and affordability for essential trips...
- And, fare evasion penalties have the greatest impact on the most vulnerable.

National Experiences with Fare Free Transit

- Cites experiences in Trenton, Denver, and Austin to conclude...fare free may be appropriate in small, homogenous communities, but not in large ones
- Issues experienced with vandalism, graffiti, rowdy passengers, and overcrowding believed to have forced choice riders off of the systems
- Concludes that fares are less important than safety, service reliability, availability, and timeliness

Source: Advantages and Disadvantages of Fare Free Policies, CUTR 2003

National Experiences with Fare Free Transit

- 20-60% increase in ridership in a few months
- Improved effectiveness and productivity
- Rural expenses eligible for reimbursement are reduced by the fare amount, meaning charging zero fares increases federal funding in the community (assuming the match is available)

Source: TCRP Synthesis 101, Implementation and Outcomes of Fare-Free Transit Systems (2012)

NC Experiences with Fare Free Transit

Pre-COVID

- Chapel Hill Transit
- AppalCART
- Raleigh R-Line
- Rutherford County's Tri-City Express

COVID

- GoTriangle family
- Charlotte Streetcar
- And many others...

Reasons to be Fare Free

- Economic competitiveness of a region
- Economic mobility for individuals
- Social and political transformation
- Operational savings

Source: Why Not Abolish Fares, Kębłowski

Why do we collect fares?

Fares have 2 primary functions

1. Generate revenue
2. Exclude people for
 - a. clientele selection and/or
 - b. resource management

1. Substitutes for Revenue Generation

- Local sales taxes
- Local hotel/car rental fees
- Local business contributions
- Local general funds
- Non-profit contributions
- Federal non-FTA funds (some)
- Medical providers / MCO's / Insurance companies
- Advertising revenues
- Other transit revenues
- State funding (ROAP, SMAP, DHHS, other)

2a. Exclusion Based on Clientele Selection

- Housing-insecure and mentally ill clientele are most in need of our services, but sometimes create perceived security threats to other customers
- Vagrants and inebriated clientele are also cited as concerns
- These concerns apply to every person on the bus, whether they have the fare or do not
- Policies and enforcement may need to be increased, but there is no fundamental difference between fared systems and fare free systems

2b. Resource Management

- When resources are scarce, fares are a useful method for managing capacity and/or paying for capacity increases
- But, care should be taken to ensure that essential trips maintain access and are not out-priced by attempts to serve choice riders

Takeaway Messages

- COVID-19 has proven that public transportation's main purpose is to provide essential mobility
- Fare free transit is a real possibility that has widespread societal benefits
- Safety and security concerns with fare free systems must be properly addressed
- Policies should be in place to address capacity concerns
- In a fare free fixed-route system, ADA paratransit eligibility should be closely regulated
- In a fare free demand response system, trips can be prioritized based on purpose
- In both, premium services beyond essential mobility can and should be charged fares

Moving Forward

- Many factors influence the decision to go fare free
- Every community is different
- Consider how state and MPO funding formulas impact the decision to be zero fare
- Now is a good time to challenge long-held assumptions to prepare for the future, and charging fares may be one of them

Fare Free Transit: Why Charge a Fare?

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