FAIR FARES: EQUITY IN 2022 AND BEYOND

Public transit and equity are inextricably intertwined. Public transportation exists primarily to equalize mobility, providing physical access to employment, health services, other public services, and recreation.

Transit fares should be fair, meaning everyone pays the right amount. Access should be fair, meaning we all have the ability to board, and we aren't limited based on our payment method. And finally, all communities should have access to transit.

In theory, public transit access is available to everyone, regardless of any socioeconomic or physical differences. In practice, however, ensuring equitable access to public transit is a complicated task.

Public transit provides enormous benefits but also requires enormous resources. A sustainable transit system requires fare collection, but how do you ensure those who can't afford that fare can still access employment, or health services?

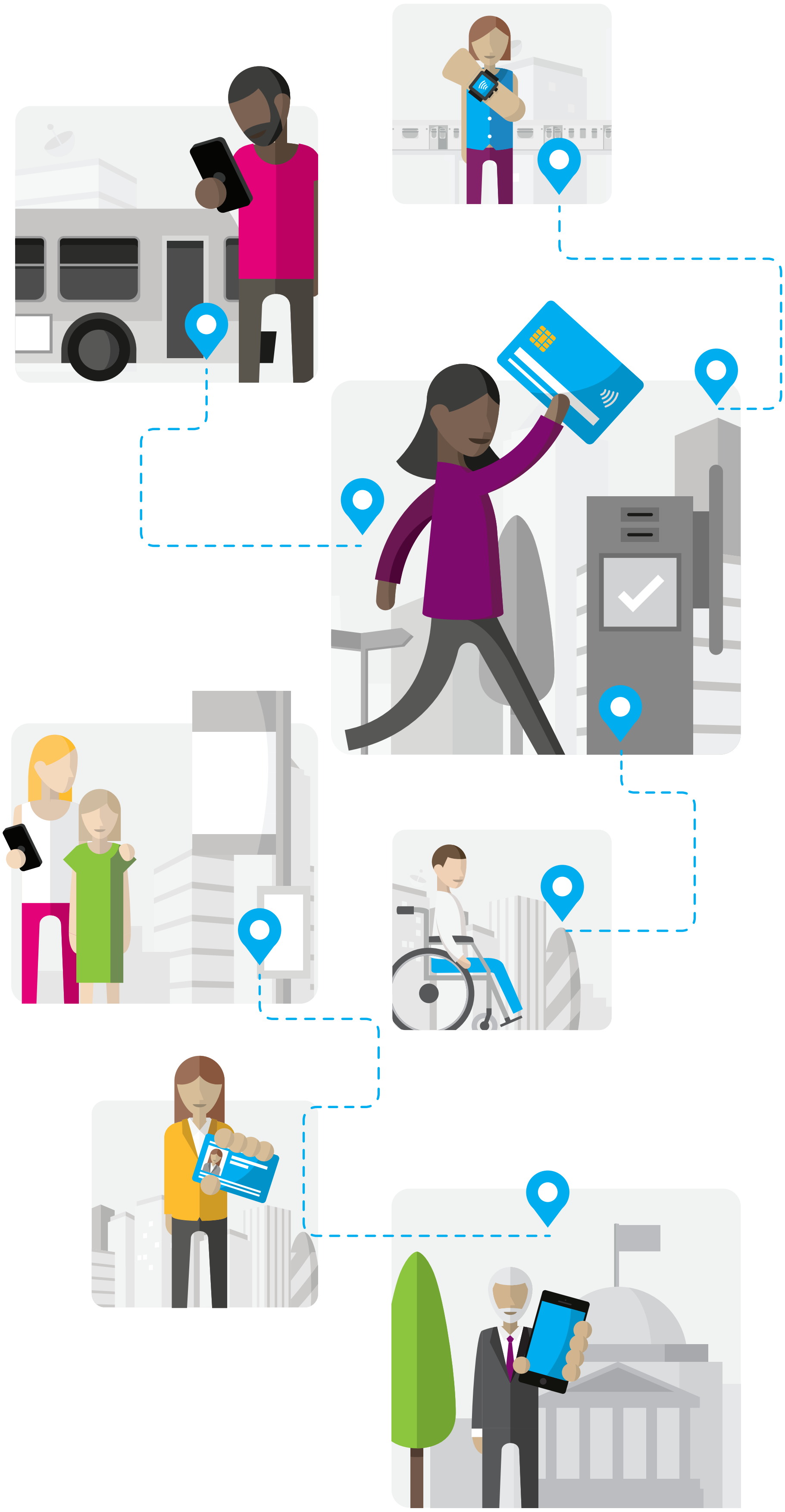
For transit equity to work, there must be a fair distribution of both the benefits and burdens, which is complicated to unravel. For example, understanding how much a low-income rider can reasonably be expected to contribute in terms of a single fare isn't as easy as one might imagine. To some, a daily bus fare may seem a pittance, whereas it can and does today pose an insurmountable barrier to others. Daily fares add up quickly, particularly for riders needing to take multiple transit modes to get to work. Factoring in the needs of elderly riders, students, essential workers, and lower income riders, determining and managing fare policies and schedules to ensure that all riders pay a 'fair fare' is complex.

Other factors affect transit equity in terms of access.

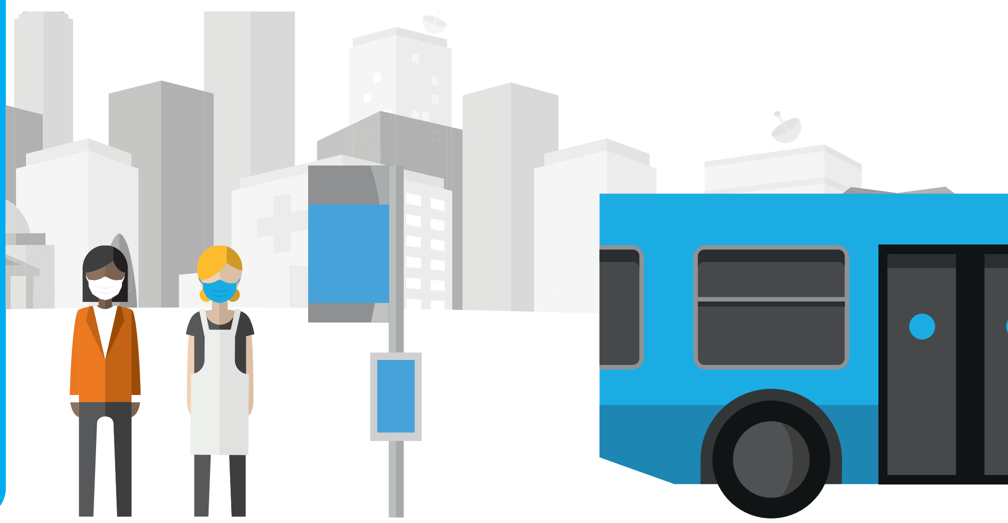
For example, while some riders can immediately adopt cost and time saving measures like smartphone applications and monthly prepaid smartcards, other riders still need to pay with cash, meaning that payment methods can become a barrier to transit equity, too.

True transit equity involves far more than just establishing and collecting fares equitably. Mobility equity also requires public transit to make decisions about routes, frequency, hours of access, and other factors that affect our ability to access transportation freely and fairly.

We must work to serve all communities equitably, whether those communities are nine-to-five office workers commuting from the suburbs, third shift essential employees, school children, or weekend riders attending a sporting event. It's the function and responsibility of public transit to reach all communities, serving their needs in terms of fare equity and accessibility.



COVID-19'S IMPACT ON TRANSIT EQUITY



When the world shut down for many in early 2020, with office workers transitioning to remote work with Zoom meetings while wearing pajama bottoms, there were millions of people for whom public transit remained critical, to get to work, to access education, and to access healthcare.

Julie Timm, CEO of Greater Richmond Transit Company (GRTC) , characterized the plight of many of the riders who relied on GRTC throughout the COVID-19 pandemic:

"The people in our service could not stay home. They had to ride, they had to get to work. They needed the income to be able to pay their rent, to buy food, to get to the hospital, to get the healthcare."[1]

COVID-19 required every one of us to reevaluate priorities, cope with unexpected difficulties, and find ways to adapt. Ridership may have plummeted, but the riders who remained were the ones who need transit most, and transit agencies worked tirelessly throughout the pandemic to serve them. [2]

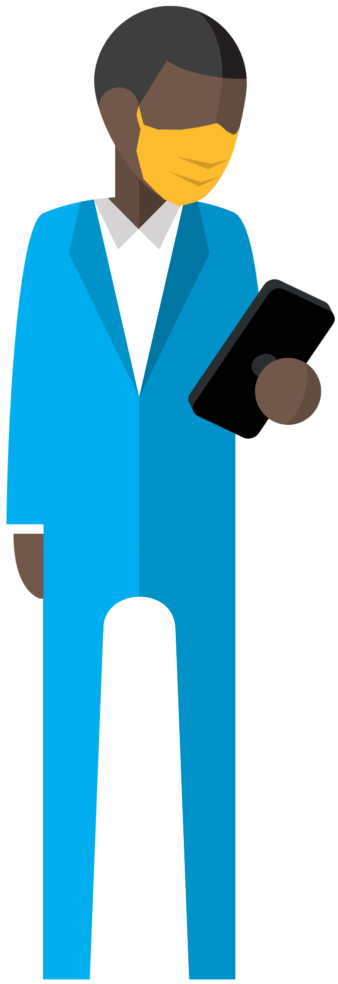
Not only did agencies have to find ways to operate safely, sanitizing frequently and limiting capacity due to COVID-19 restrictions and guidance, but the catastrophic economic effects of the pandemic prompted many transit agencies to take a closer look at the best ways to fairly distribute the benefits of public transit.

Jarrett Walker, public transit planning and policy consultant, explained that following the contraction of services due to the pandemic, "Agencies are starting to put services back, but they want to be thoughtful about what they put back." He continues, "There's a potential for a shift here from a tradition of overwhelming volumes of rush hour service, to something more like a constant, all day service pattern."[1]

One unexpected benefit of the pandemic was having brought to light the degree to which previous transit schedules, fares, and policies may not have adequately served all riders equitably. Historically, many resources have been directed to better serve commuting riders, those who move from suburban areas or the edges of a metro area.[2]

Fares and even fare-capping measures historically benefitted these riders, who were able to capitalize on the benefits of purchasing a block of rides, say for a month, all at once in order to obtain a cost savings.

We can and must do better.



1. Ramachandran (2021)
2. Marshall (2022)

FAIR FARES - EQUITY IN FARE COLLECTION

How do we ensure that everyone who needs public transit can access it affordably? And how do the ways in which we collect fares and discount fares impact equity?

Fare capping – providing discounts for the riders who use transit the most – is critical to equalizing the cost of transit. Fare capping in practice predominantly takes one of two approaches, and they have radically different effects in terms of fare equity.

The first kind of fare capping is pre-purchase. In this model, riders purchase a pass – for a day, week, or month, for example – and in exchange for their up-front purchase, the cost of each ride is reduced. So, if a round-trip fare is $2.00, a 30-day pass might cost $45.00, savings of 25%. While the intent is to benefit those who use transit the most, the problem is it happens to disadvantage the riders unable to afford it, and who may need transit the most. In fact, pre-purchased fare capping in many circumstances widens the fare equity gap, and the riders who can most easily afford to pay more end up paying less.

Account-based fare capping also shares the goal of reducing the per-ride cost for riders who use public transit the most. The difference is that an account doesn't have to be pre-loaded with a full month's fare; the savings can be realized even with riders who pay as they go.

Peter Yeung[1] explains account-based fare capping in an article about an upcoming pilot program in New York City that begins on February 28, 2022, and is intended to increase ridership: "riders who pay the $2.75 fare with the same card or smartphone a dozen times between any Monday through the following Sunday will get all their remaining rides that week free. Until now, riders have had to pay $33 upfront to get unlimited weekly rides."

New York City is one of the biggest transit agencies to join cities like London that already have weekly fare caps, and there's hope that the program may expand to include monthly pass benefits without the burden of having to pre-purchase that fare.[1]

Account-based fare capping benefits for riders and agencies are clear: significant cost savings, particularly for the riders who need it most, along with alleviating the difficulty of riders struggling to figure out whether it makes financial sense to invest in a pre-purchased card or pay as they go.

As Maria Kamargianni, professor of Transport Systems Innovation and Sustainability at University College London explains: "Travelers can feel trapped when they buy a weekly pass or monthly pass...They are not sure if they will use it or waste their money. Fare caps create trust and assure them that they can travel as much as they want."[1]

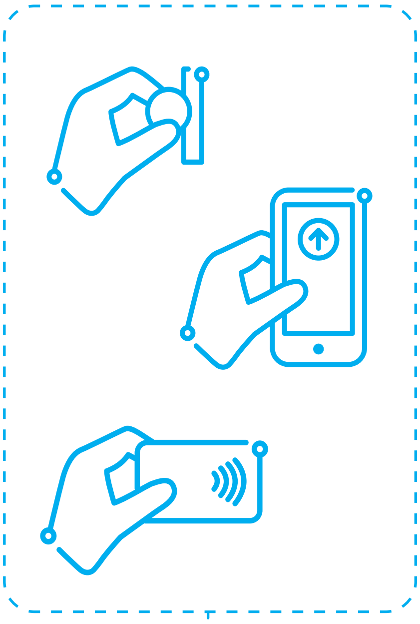
Account-based fare capping can bring loyalty, encouraging modal shift and thus increased ridership. Owing the need for an account, it can enable fare concessions. Furthermore, the data that feeds into account-based ticketing systems enables operators to personalize offers specifically for individual passengers.

But what about *how* riders pay?

[1] Peter Yeung, Freelance Journalist (2022)

MAKING IT EASIER AND MORE EQUITABLE TO PAY

Ensuring that everyone can access public transit, regardless of their method of payment, is an important component of transit equity.

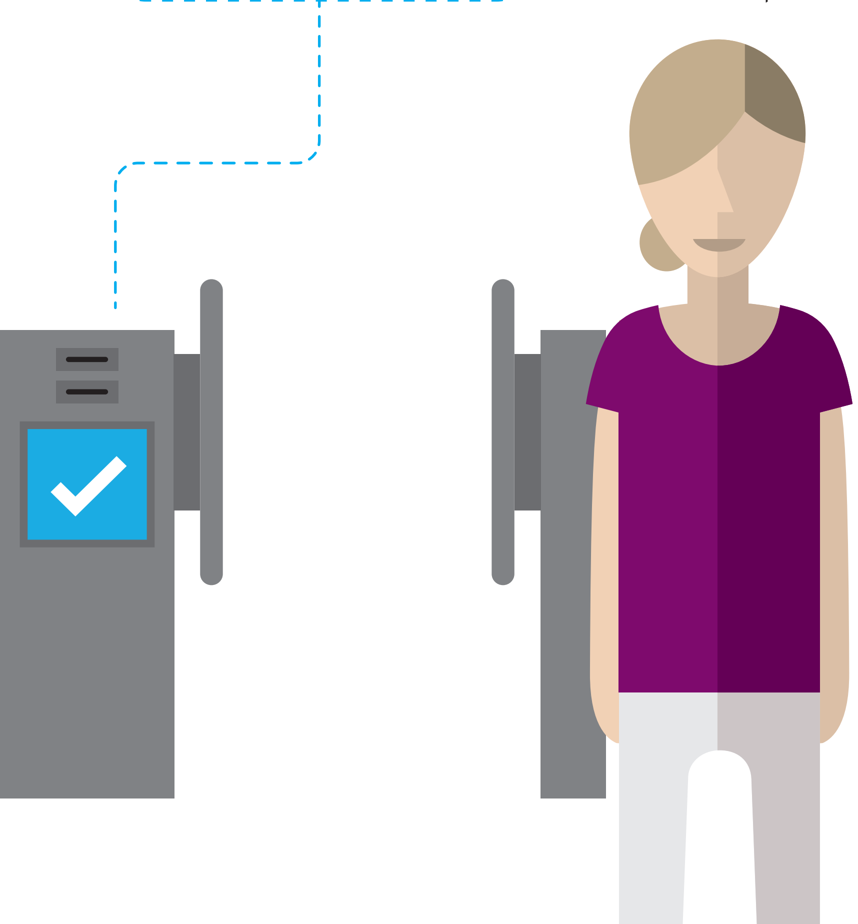


Globally, we've seen a shift away from physical cash to credit/debit cards and mobile apps. The benefits of cashless systems are significant to any service provider. Cash is expensive to collect and handle. Cash is slow. Fraud and theft are more likely to occur where cash exists. Electronic transactions on the other hand are far easier to track, yielding more data that can be used to help better guide decision making and planning.

The fact is that a significant number of public transit riders in nearly every country are unbanked or underbanked, meaning they either don't have or don't regularly use a bank account or traditional financial institution for transactions. Financial services analyst, Charlotte Principato shared 2021 data showing that 10% of US adults have no bank account at all, while 25% of US adults are underbanked. (2021) Worldwide, the Global Findex Database reports that 1.7 billion people worldwide are unbanked. (2017) Unbanked and underbanked users of public transit typically pay in cash, some because they have no other option.

Providing an example, researcher Lily Ko's work demonstrated that riders in the Massachusetts Bay Transit Authority (MBTA) system who pay transit fares in cash tend to be overwhelmingly concentrated in lower income areas. Ko showed that the MBTA's plans to move to cashless fare collection would disproportionately disadvantage riders who were low income, those who struggle with technology, or those who use public transit at non-peak hours. (2019)

What's true in Massachusetts may not be true everywhere, but it's clear that most fare collection systems in the world need a solution that allows riders to pay with any form of payment they may currently be carrying. In practice, this may call for a hybrid solution, like the one Vix deployed in Dallas, Texas for Dallas Area Rapid Transit (DART). DART's solution brings together the area's rail, streetcar, bus, paratransit, and microtransit infrastructure, allowing riders to use a single platform, DART's GoPass®, to pay for everything. Account-based fare capping is part of the solution, as is a network of retail partners, where riders can add value to their GoPass® with any form of payment, including cash, across major retail networks.



PARTNERING WITH OTHER REGIONAL TRANSPORTATION AGENCIES

Equitable transit doesn't end at the last bus stop, though, and in many regions of the world, public transit functions as a web of interconnected and overlapping agencies and Transit Network Companies (TNC).

As complex as fare collection can be for a single agency, it's that much more challenging when agencies strive to deliver the ultimate rider experience by simplifying fare collection for multi-modal transportation (where two or more transport journeys are made – a bus ride, then a metro journey, perhaps) with touchpoints among different regional providers.

Riders in cities where transit routes are all managed by a single transit agency are often delighted to be able to tap a single smart card or book a journey on a smartphone app that requires a single payment. But for those cities with multiple agencies running a variety of transit modes, untangling the fare apportionment for the agencies in that partnership, deciding who gets what portion of each fare, is critical to make those seamless journeys happen. This can only be done with a centralized clearing function that sees payments automatically and securely apportioned, settled, and reconciled.

Multi-modal single-fare transportation, when deployed correctly, stops the passenger who has to take two bus routes and a metro stop during off-peak, night shift hours, from paying exorbitantly high transit fares, compared with a commuter who can afford to live just two stops away from the office.

THE PROBLEM WITH FARE-FREE PUBLIC TRANSPORTION

Given the fact that there are many riders who rely on public transit and who struggle to afford it, we must ask the question: Why not do away with transit fares altogether?

Fare-Free Public Transport (FFPT) is, of course, the surest way to make transit costs equal for all riders. But fare parity isn't necessarily equitable. FFPT has been implemented in a number of ways in a number of cities worldwide, with a range of results. Some programs are limited, meaning that free fares are offered to certain groups, like the elderly, low-income residents, or students. Other programs have been extended to cover all public transit users or a specific district of a city.

Transit requires resources. It consumes funding and it yields a precious and vital resource. Buses must be maintained. Fuel isn't free. While FFPT does equally eliminate fares for all riders, the funding to run the transit system must come from somewhere.

In New York City, for example, nearly forty percent of the transit budget comes from rider fares, a sum that can and should appear daunting to a government agency attempting to fund FFPT in the city. (Ley 2021) For 2019, New York's MTA brought in $16.725 billion, making the rider revenue valued at nearly $7 billion. (MTA)

Hannah Figg wrote a case study that examined the effects of these FFPT trials. It's important to note that fare equity wasn't the sole reason for many. Several cities sought to reduce car use and increase transit use in order to lessen the impact on the environment and reduce employment costs both for employers and workers.

Figg discovered that while some of these goals were achieved, they came at great cost. Even for cities whose transit budgets don't rely heavily on rider fares, there must be a significant investment on the parts of cities, states, and federal governments to make up the shortfall resulting from eliminating rider fares. (2021)

In addition, assuming that FFPT increases use of public transit, existing budgets will be insufficient to support maintenance of existing infrastructure, let alone provide for upgrading or expanding infrastructure. Even the simplest arguments for FFPT – like the possibility of speeding up the boarding process – is complicated by the fact that we'll still need to collect data on ridership, data that's currently aggregated as part of the fare collection process.

The fact is that some riders can and should pay for the use of transit. We value the things we pay for, and automated fare collection can improve trust between passengers and agencies. Riders value high-quality transit services, and to encourage incremental shift away from private vehicles, passengers with choice need to be presented with a service worth paying for. Those without choice deserve a service of that very same quality.

FINAL THOUGHTS

The global pandemic served to make the important and challenging work of public transit even more indispensable.

When the world was paralyzed by a pandemic that deepened socioeconomic inequity, our trains and buses continued to deliver workers to their places of employment, patients to their physicians, and children to their schools.

Public transit is a critical service that must be provided in an equitable way. This means fair fares for all riders, fair access to transit, fair service from transit, along with the ability to pay for transit with a variety of methods, including cash. Agencies and their partners must strive to extend the benefits of transit to every rider in need, assessing routes and hours of operation to ensure fair access. In return, it must be sustained by the public it serves.

Fortunately, account-based ticketing systems provide agencies with the most flexibility and all the infrastructure they need to address fare equity. Empowering riders with the ability to pay with their method of choice, while also being guaranteed the best fares, and where applicable the right concessions, balances rider-oriented benefits with agencies' need to collect revenue. When you add the ability for agencies to partner with others in their region and provide multi-modal transit options, the benefits to all riders and agencies become clear.