

Free Transit: It All Depends on How

Project 2236
June 2022

Joshua Schank, PhD and Emma Huang

The idea of free public transit has grown more popular in recent years and has spurred substantial debate. It has become popular in large part because it is simple, direct, and easy to understand. The call to “improve transit service” means different things to different people and is often challenging to sort out. But everyone understands what “free” means. Adding to its popularity is that it is perceived as improving equity in most American cities, potentially helping low-income people and minority groups facing legacies of discrimination. These two things work together to make it a potentially winning campaign issue for some mayors in Kansas City, Boston, Los Angeles, and others.¹

As is often the case, a winning political issue does not always create the outcomes that people might be seeking. Free (or fareless) transit is presented as part of a solution to many problems — low ridership, growing income inequality, racial discrimination, and even climate change. While it is wholly unrealistic to expect fareless transit to solve any of these challenges on its own, the fact that it is a popular idea presents a substantial opportunity. It is worth asking — how can the ideas behind free transit be combined with other policies to make a dent in some of these goals? Below we present some ideas, grounded in real research, that show promise. Choosing one of them ultimately depends on the goal policymakers are trying to achieve.

Off-Peak Fareless Transit

One of the challenges with fareless transit is the most obvious one – it means forgoing revenue for transit agencies that are typically scrounging for every operating dollar they can find. This challenge is exacerbated by the concern of subsidizing riders who may not need it. Even in Los Angeles, where the average household income of transit riders is approximately \$32,000, Metro Board members have objected about those who are not low-income riding for free under a fareless pilot.^{2, 3} This reaction is much more of an issue in cities with far higher percentages of riders who can afford to pay, especially cities that depend on fare revenue for a large portion of their operating budget. Concurrently, there are also concerns about mandating “means-testing” for low-income riders, where they must demonstrate proof of need with supporting documentation in order to qualify for a low fare or free transit.⁴ This puts the burden of proof on low-income people to demonstrate that they are low-income, which is considered inherently unfair.

Transit agencies are also concerned that free transit will encourage more riders during peak times, forcing the agencies to add service to accommodate them with funds they do not have.⁵ While ridership is typically a primary goal for transit agencies, there is also a tension within agencies between encouraging ridership and escalating costs. Typically, additional transit riders during peak times incur additional costs that exceed revenues.

Finally, another concern with fareless is that eliminating fares will invite more problems onto a public transit system already experiencing plenty of them. Transit systems are already struggling to keep

trains clean, dealing with an increasing homeless population that deters customers, and seeing rising crime rates.⁶ While it is unclear whether fareless transit would increase these challenges and more research is needed to examine the impacts of a fareless program, there is a perception that it could.⁷

Off-peak fareless avoids these problems. Fares remain in place for peak times when demand is high, preserving most of the revenue collected. While off-peak revenue is still lost, that loss is by definition more manageable than losing all fares. Also, it is unlikely that agencies implementing off-peak fareless would need to add service to meet demand because off-peak service levels often exceed demand.

Most critically, off-peak fareless helps low-income people more without calling them out or making them do extra work. Low-income people often face a time tax to qualify for social benefits and are subjected to intrusive and burdensome application processes. Low-income people ride more during off peak times, so this scheme helps target them directly but without any stigma, and it might also attract new off-peak riders who then become peak-hour riders.⁸

Finally, off-peak fareless is simple and easy to implement and understand. Washington Metro has been charging higher peak than off-peak fares since inception, and fare payment technology has only improved since then.⁹ A simple change in code would enable off-peak free fares — agencies could still require the use of fare cards, but no fare would be deducted during off-peak times. This would simplify the process, allow for data gathering to continue, and keep operators from being adjudicators of who gets on free and who doesn't. It would also prevent people from just wandering onto the system — barriers such as turnstiles could remain in place and only be opened with a farecard.

Fareless Transit and Priced Roads

The issue of free or lower-cost transit has been present in the transit industry for as long as the industry has been around. In New York City, the transit fare was kept at 5 cents from inception of the system until World War II — over four decades — because to be elected and re-elected Mayor of New York meant keeping the fare where it was.¹⁰ Naturally, given inflation, keeping the fare low had consequences, as it meant effectively lowering the fare, and this helped lead to the bankruptcy of the private companies running the subway, as well as decades of neglected maintenance that New York City is still dealing with today.

The New York example provides a great lesson for us in this area — don't cut or eliminate transit fares without a revenue source to replace those dollars. Otherwise, you are likely to damage transit more than you help its customers. One potential revenue source with lots of synergies is charging drivers to drive at peak times. This is, in effect, what New York City will be doing if and when it implements congestion pricing for those entering Manhattan, as New York MTA will be using the fees from road pricing to pay for transit improvements.¹¹ While the transit fare will not be eliminated, it will likely be kept lower than otherwise might be required due to this additional revenue stream.

If there is a desire for free transit, this example is illustrative — it will be more sustainable if combined with a new revenue source. While there may be grants made available for free transit pilots, without an ongoing source of revenue, those pilots cannot be sustained, or worse, could lead to a greater drain on the limited resources available for operating funds.

But more critically, free transit will be far more effective in increasing ridership if combined with a concurrent price on driving. Public transit ridership is relatively inelastic, meaning it does not respond dramatically to changes in price.¹² Lowering transit prices does not typically increase ridership meaningfully enough to have an impact on the outcomes that transit agencies typically desire — lower emissions and greater mobility, for example. Free transit can be an effective way to improve equity, by reducing the transportation cost burden for low-income households, but if that is the main goal, there are probably better ways to achieve it. For example, giving out cash to low-income households to use how they see fit has generally been shown to be an effective way to help.¹³ There is no good reason to force low-income people to spend this cash on transit, which is in effect what free transit would do.

Therefore, free transit is much more likely to be successful in improving mobility as part of a program that simultaneously raises the cost of driving. The current out-of-pocket cost of driving on a given road in a city is effectively zero. Yes, people need to pay for the car, registration, maintenance, gas, and insurance. But these are investments people make long before they decide to drive on a given road at a given time. Once this upfront investment is made, in the form of sunk costs, it feels counterintuitive to squander it, avoid driving, and pay to take transit instead.

Meanwhile transit is the opposite. People make no personal upfront investments in transit. Their tax dollars help fund and operate it, but they have little choice in that matter outside of the occasional ballot measure, so they do not see it as their decision. Their daily decision is about whether to use it, and that is what directly costs money. This means we have the incentives all wrong. We have created a system where there is an out-of-pocket and immediately collected fare for transit without which people are barred from the system, and nothing is collected for driving at any time or place so people can use as much of it as they want. Reversing these incentives will create a huge shift in outcomes and is one way to make free transit successful, and there is some evidence that congestion pricing becomes more politically acceptable when coupled with free transit.¹⁴

Fareless Transit as Part of Universal Basic Mobility

An oft-cited goal of fareless transit is to improve equity by reducing the cost of transportation for low-income individuals. Since in many metropolitan regions the majority of transit customers have very low incomes, this seems like an easy way to provide a simple and direct equity benefit. There are a few challenges with this idea in practice, however. As mentioned above, there is the issue of replacing the lost revenue. When the revenue is not replaced and transit service deteriorates further, the burden falls mostly on low-income people. Another issue is that in some metropolitan areas such as New York, where subway riders have higher incomes than the general population, fareless transit would be a substantial subsidy for people who do not need one and can well afford their transit rides.¹⁵

But one often overlooked challenge with fareless as an equity improvement is that public transit is often not a very effective means of transportation for low-income people. In an area like Los Angeles, where most people do not ride transit primarily because it is too slow or inconvenient and doesn't go where they need to go, eliminating the fare will not help low-income people for whom existing transit services are insufficient.¹⁶ Many of these folks are likely struggling due to the cost of maintaining or owning an automobile, or perhaps they are using transit, but the time required to use it eats up a huge portion of their day, also limiting their economic and social options.

A far better way to address the inequities in our mobility offerings is to think about providing a mobility subsidy to low-income people, sometimes termed Universal Basic Mobility (UBM). UBM is based off the concept of Universal Basic Income (UBI), which has gained some traction through pilot programs but still appears to be a long way off.¹⁷ In lieu of UBI, UBM can provide a subsidy for low-income people to use as they see fit.¹⁸ Given smartphone technology, and the ubiquitous nature of smartphones even among low-income people, providing UBM can be relatively seamless. People who sign up through an app can get a regular deposit of cash that can only be spent within the app, but that app can be connected to all possible modes including transit, rideshare, taxi, bike/scooter share, vanpool, or carpool. Enrollees could also potentially determine that they would rather accumulate the cash to purchase a bike or e-bike. The idea is to provide maximum flexibility in mobility options for those who need them the most.

The benefits of UBM, when compared to fareless transit, can be substantial. The mobility benefits for users are obvious; having options provides greater levels of mobility and accessibility. But there could also be wider mobility benefits for society, as UBM might enable some people to give up their expensive cars and use alternatives that put less stress on the transportation network and the environment. The equity benefits are also greater than fareless transit, as the subsidy to low-income people would be much greater and result in far better mobility. Finally, using UBM instead of fareless shifts responsibility for equity and mobility away from being the sole jurisdiction of the transit provider, which cannot possibly undertake and fulfill this responsibility on its own. However, it will also require transit agencies to develop more open and flexible fare payment systems to enable all providers to seamlessly make their services available to potential customers.

Conclusions

Free transit is more of a campaign slogan than an effective public policy. It is relatively easy for political leaders to call for free transit, and much more challenging for them to identify what problem it solves or how it might be implemented. With transit services typically inadequate compared to private driving in most major cities most of the time, calling for free transit means making something free that most people have no desire to use.

However, packaged with other policy decisions, free transit has the potential to be a powerful tool to address some of our societal challenges. Free off-peak transit, when combined with commitment to improve those services, can help low-income people at a relatively low cost. Combining free transit and congestion pricing can provide a funding source for better transit and substantial mobility improvements. Universal Basic Mobility can provide low-income people with far better accessibility and do so much more effectively than free transit alone. Developing the right combination requires clear understanding of the goals transportation leaders are trying to achieve. This is where the conversation should ideally begin.

Endnotes

1. <https://www.boston.gov/news/mayor-wu-takes-steps-expand-fare-free-bus-service>; <https://la.streetsblog.org/2022/05/13/l-a-mayoral-candidates-on-transportation/>; <https://www.kcur.org/government/2020-02-13/mayors-speech-imagines-a-kansas-city-free-of-potholes-bus-fares-and-gun-violence>
2. http://boardarchives.metro.net/BoardBox/2019/190417_FY19_Fall_Customer_Satisfaction_OnBoard_Survey_Results.pdf
3. <https://la.streetsblog.org/2021/07/20/preview-of-this-weeks-metro-board-of-directors/>
4. <https://slate.com/business/2021/06/free-transit-is-not-a-great-idea.html>
5. [Volinski, Joel. Implementation and Outcomes of Fare-Free Transit Systems: A Synthesis of Current Practice. Transportation Research Board, Transit Cooperative Research Program, Washington, DC, 2012.](#)
6. <https://thecrimereport.org/2022/02/21/cities-focus-on-rise-in-transit-crime/>
7. <https://www.masstransitmag.com/technology/fare-collection/news/21266944/az-bus-drivers-say-lawlessness-abounds-on-farefree-tucson-transit-system>
8. https://transitcenter.org/wp-content/uploads/2019/02/TC_WhosOnBoard_Final_digital-1.pdf
9. <https://www.wmata.com/fares/basic.cfm>
10. McNickle, Chris. To Be Mayor of New York: Ethnic Politics in the City. New York: Columbia University Press, 1995.
11. <https://www.nytimes.com/2021/09/29/nyregion/nyc-congestion-pricing.html>
12. [Yaroslav Kholodov, Erik Jenelius, Oded Cats, Niels van Oort, Niek Mouter, Matej Cebecauer, Alex Vermeulen, Public transport fare elasticities from smartcard data: Evidence from a natural experiment, Transport Policy, Volume 105, 2021, Pages 35-43.](#)
13. <https://www.givedirectly.org/cash-research-explorer/>
14. <https://la.curbed.com/2018/12/6/18129258/congestion-pricing-free-fares-metro-los-angeles>
15. <http://blog.tstc.org/2014/04/11/nyc-bus-riders-tend-to-be-older-and-poorer-than-subway-riders/>
16. <http://libraryarchives.metro.net/DPGTL/publications/2018-metro-vision-2028-strategic-plan.pdf>
17. <https://apnews.com/article/stockton-health-coronavirus-pandemic-michael-tubbs-philanthropy-1227f2ab4a1bb7677a01b887ba91554f>
18. https://dot.la/la-metro-pass-pilot-2655761877.html?utm_campaign=post-teaser&utm_content=umnabeaw

Acknowledgement

The authors thank Editing Press, for editorial services, as well as MTI staff, including Executive Director Karen Philbrick, PhD; Deputy Executive Director Hilary Nixon, PhD; and Public Programs Coordinator Alverina Eka Weinardy.

About the Principal Investigator

Joshua Schank holds a PhD in Urban Planning from Columbia University and a Master of City Planning from the Massachusetts Institute of Technology. He is a Research Associate at the Mineta Transportation Institute, a Managing Principal at InfraStrategies, and a Senior Fellow in the Institute for Transportation Studies at the University of California, Los Angeles.

Dr. Schank previously served as Chief Innovation Officer of the Los Angeles County Metropolitan Transportation Authority (Metro), President and CEO of the Eno Center for Transportation, and Transportation Policy Advisor to Senator Hillary Clinton (D-NY).

Emma Huang is a Senior Consultant with InfraStrategies LLC. Emma previously worked as a Transportation Planner in the Office of Extraordinary Innovation at LA Metro. She has a Master of Public Policy from the University of California, Los Angeles.

This report can be accessed at transweb.sjsu.edu/research/2236



MTI is a University Transportation Center sponsored by the U.S. Department of Transportation's Office of the Assistant Secretary for Research and Technology and by Caltrans. The Institute is located within San José State University's Lucas Graduate School of Business.