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Fare-free? Reduced fares? What research tells us about strategies for pricing public transit

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Issue

Many analysts have argued for transit fares to vary with distance traveled and time of day to better reflect the highly variable costs of transit service provision on both efficiency and equity grounds. However, proposals for variable fares have garnered little traction among transit managers and their governing boards, who often worry that changing fares may be even less popular with riders than raising them. Until recently, variable fares were also difficult to implement from a technological standpoint. As a result, most fare experimentation has centered on "fare-free" or reduced-fare programs.

Free- and reduced-fare (FAR) programs have most commonly been targeted at specific groups of riders, like students or seniors. FAR programs may reduce the costs of collecting fares. Because they are, essentially, flat fares, FAR policies limit the ability of operators to charge different fares based on trip costs rather than traveler characteristics. Even so, FAR programs are increasingly being touted by advocates in recognition of transit's important social service role in providing mobility to those unable to afford or otherwise access private mobility, such as older adults who may face both physical and financial barriers to automobile use.

Key Findings

FAR programs are likely to improve ridership — if sustainable funding for the FAR program can be found. Identifying sustainable funding is the fundamental challenge of FAR programs. Ridership increases are likely to be more pronounced on systems with previously high fares and those with higher proportions of low-income riders, and less pronounced on systems with already low fares and/or higher-income riders.

The net fiscal impact of FAR programs on transit agency finances is uncertain, particularly with respect to increased costs that may be occasioned by increased rider demand. Fully understanding how FAR programs influence agency finances is a major research challenge but one worth undertaking. Without such information, recommendations about the wisdom of implementing FAR programs are necessarily speculative.

In California, state-level farebox recovery requirements present a major barrier to the further expansion of FAR programs. FAR programs would almost certainly be much more common than they are now if transit agencies were not bound by minimum farebox recovery requirements, such as those under California's Transportation Development Act (TDA). However, eliminating or relaxing farebox recovery requirements would represent a significant move away from a user fee-funded transit system and toward one that functions more like a park or school, where a baseline level of access is expected for every community member. Accordingly, FAR programs have the potential to enable some level of transit access for all.

All else equal, service improvements are likely to be a more effective use of resources than fare reductions, even for low-income riders. The vast majority of transit research that compares fare elasticities with service elasticities finds that service elasticities are greater. This implies that, at the margin, increased spending to improve

transit service is likely to attract more riders than similar expenditures to make transit cheaper, though there can be exceptions to this general rule.

FAR programs may generate a host of societal benefits to the extent that they decrease vehicle use. These benefits include reducing vehicle miles traveled (VMT) and associated greenhouse gas emissions. Mode shift and environmental benefits are likely to be modest, however, because the most price-sensitive riders tend to have less access to cars and trucks. Again, increased spending on transit service improvements may lead to more of these benefits than FAR programs.

For the foreseeable future, transit agencies that reduce the financial barriers to transit access will face challenges related to holes in the social safety net. By reducing the financial barriers to transit access, FAR programs may risk increasing the presence of individuals engaging in antisocial behavior such as active, in-vehicle use of illicit substances, not maintaining acceptable hygiene standards, and not engaging other riders respectfully. Some transit agencies, such as LA Metro, San Francisco's BART, and Philadelphia's SEPTA, are responding to these challenges by dedicating funding to (1) "transit ambassador" programs designed to both improve the experience of riding transit and (2) increasing agencies' abilities to support unhoused individuals and members of other vulnerable rider groups.

One size does not fit all. If fare-free transit is to be adopted, the cost (in foregone fare revenue) is lower on systems that already recover a relatively small share of their operating costs out of the farebox. Such systems tend to operate in less transit-friendly environments and carry larger shares of lower income and mobility disadvantaged riders. On systems with higher farebox recovery rates, especially those serving large downtowns, the opportunity cost of fare-free programs is much higher, and such systems often carry proportionally larger shares of non-poor riders. On these systems, targeted fare-reduction programs aimed at particular rider groups (low-income, students, etc.) are a less costly way of providing fare reductions to riders who need them most.

More Information

This policy brief is drawn from the report "Considering Fare-Free Transit in The Context of Research on Transit Service and Pricing: A Research Synthesis," prepared by Hannah King and Brian D. Taylor at the UCLA Institute of Transportation Studies. The report can be found here: www.its.ucla.edu/project/innovative-transit-fares.

For more information about findings presented in this brief, please contact Hannah King at hrking@ucla.edu. Readers interested in learning more about FAR programs in California can refer to "A Review of Reduced and Free Transit Fare Programs in California," prepared by Jean-Daniel Saphores, Deep Shah, and Farzana Khatun at the UC Irvine Institute of Transportation Studies. The report can be found here: https://doi.org/10.7922/G2XP735Q.

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