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TESTIMONY

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PROPOSED METRO FARE INCREASE: DISCUSSING THE OPTIONS

By Joseph Miller

Testimony Before The Metro Transit Board of Commissioners

To The Honorable Members of the Commission:

Ladies and gentlemen, thank you for the opportunity to testify today. My name is Joseph Miller and I am a policy researcher for the Show-Me Institute, a nonprofit, nonpartisan Missouri-based think tank that supports free-market solutions for state policy. The ideas presented here are my own. This testimony is submitted as part of the public comment period regarding the proposed fare increase for the Metro transit system in Saint Louis. The ideas presented here are my own. This testimony is intended to summarize research that the Show-Me Institute has reviewed on the effects of transit fare increases and the various methods of implementing them.

Metro fares represent a significant portion of the revenues that the Bi-State Development Agency depends on to operate and expand the Metro transit system. Moreover, as these fees are imposed directly on passengers who benefit from the system, raising Metrobus and Metrolink fares are a reasonable and, depending on the elasticity of transit demand, often an effective method for increasing transit revenues. With increasing costs for fuel, materials, and labor, Metro fares must also rise if the revenues from fares continue to fund the same portion of transit expenses. For this reason, Metro is proposing to raise selected fares starting in 2015.[1] If Metro targets these fare increases at those least likely to change their behavior based on that fare increase, the agency may receive more revenue while still attracting new riders to the system. However, Metro might also consider transforming its fare structure to incorporate time or distance variable rates as well as peak pricing. This option could allow more fare maximization in a way that

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draws greater revenue from those who use more transit, but also from those who use it sparingly but at very popular times, e.g., Cardinals baseball games. Metro also could allow greater flexibility in how it serves its least profitable routes, such as the increased use of van share programs, to alleviate the pressure to raise prices.

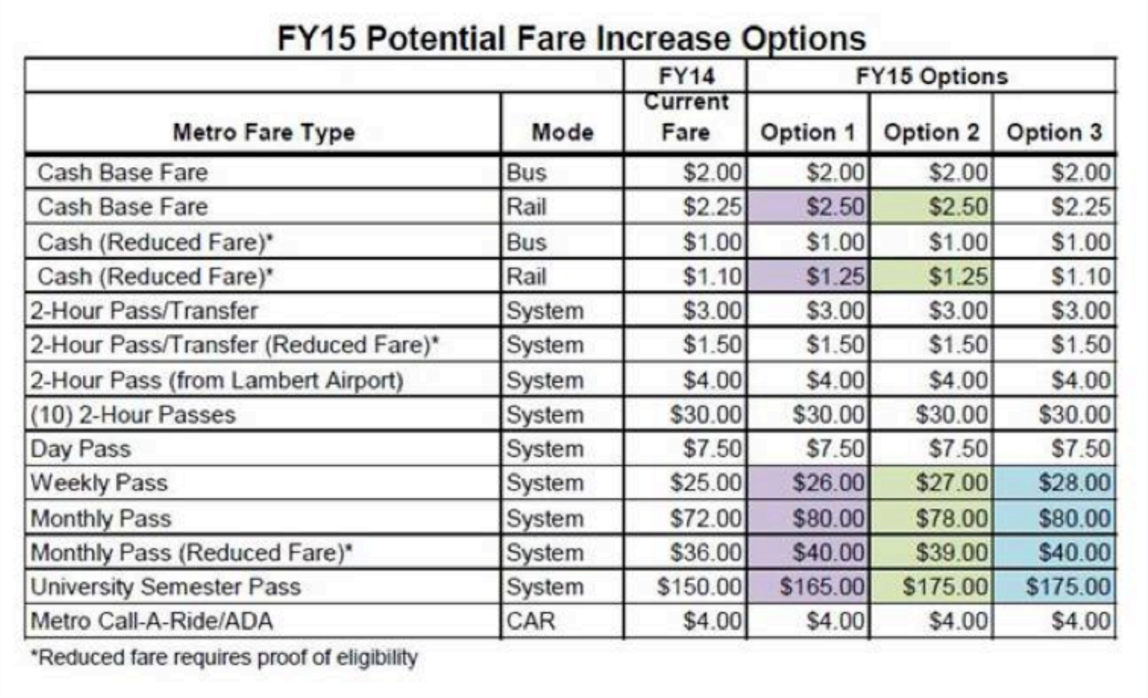
Metro Fare Proposed Options

What are the goals Metro can attempt to achieve with its fare structure? Metro can try to maximize area coverage, increase ridership, serve disadvantaged communities, or minimize the system's financial losses. Some of these goals are complementary while some are contradictory. Raising fares may lower the overall deficit of the system, but it may depress ridership and burden low-income individuals. As it stands, Metro's policy incorporates all these motives, so the system's financial health, and hence fare revenues, should not be ignored.[2]

As of 2012, fares that Metro collected covered very little of the transit system's **total** costs. In the last 20 years, Metro fares ($746 million) have accounted for only 14 percent of the total costs of building and operating transit in the Saint Louis area ($5.5 billion).[3] However, because Metro receives significant aid from the federal government, fares make up a more sizable share of **local** costs, or the amount that Saint Louis residents spend to fund Metro beyond federal government aid. In 2012, fares ($49 million) made up almost 22 percent of local operating funds ($217 million) and 21 percent of all locally paid expenses ($227 million).[4]

Unfortunately, the percentage of operating costs that fares cover has been on a steady downward trajectory over the last two decades. In 1991, fares ($23 million) covered approximately 28 percent of local operating costs ($83 million) while today they only cover 22 percent.[5] Increasing ticket revenue is not keeping up with the rising costs of operating, much less improving, the Metro transit system. To illustrate this, fare revenue has increased an average of 3.6 percent per year over the last two decades. However, local operating costs have increased faster, more than 5 percent per year.[6] Many factors contribute to this increase, including the rising cost of fuel, construction material, general administration, and employee wages and benefits.

By increasing fares through one of three possible options, Metro assumes it can generate $2.2 million in revenue (or an increase of about 5 percent).[7] These options are shown in the chart. However, before Metro increases fares, it should analyze how those increases will impact the number of people who choose to ride transit. Various studies suggest that a 5 percent increase in fares will result in an overall immediate .1 to 2.5 percent decrease in ridership and a long-term 3 to 4.5 percent decrease in ridership.[8] These elasticities are not equal among all ticket types. An increase in one-way fares could have a much larger negative impact on demand than package deals or monthly passes.[9] Increasing fares for suburban commuters, or those who own vehicles, might depress demand for transit much more than increasing fares on city dwellers and those with



FY15 Potential Fare Increase Options

		FY14	FY15 Options		
Metro Fare Type	Mode	Current Fare	Option 1	Option 2	Option 3
Cash Base Fare	Bus	$2.00	$2.00	$2.00	$2.00
Cash Base Fare	Rail	$2.25	$2.50	$2.50	$2.25
Cash (Reduced Fare)*	Bus	$1.00	$1.00	$1.00	$1.00
Cash (Reduced Fare)*	Rail	$1.10	$1.25	$1.25	$1.10
2-Hour Pass/Transfer	System	$3.00	$3.00	$3.00	$3.00
2-Hour Pass/Transfer (Reduced Fare)*	System	$1.50	$1.50	$1.50	$1.50
2-Hour Pass (from Lambert Airport)	System	$4.00	$4.00	$4.00	$4.00
(10) 2-Hour Passes	System	$30.00	$30.00	$30.00	$30.00
Day Pass	System	$7.50	$7.50	$7.50	$7.50
Weekly Pass	System	$25.00	$26.00	$27.00	$28.00
Monthly Pass	System	$72.00	$80.00	$78.00	$80.00
Monthly Pass (Reduced Fare)*	System	$36.00	$40.00	$39.00	$40.00
University Semester Pass	System	$150.00	$165.00	$175.00	$175.00
Metro Call-A-Ride/ADA	CAR	$4.00	$4.00	$4.00	$4.00

*Reduced fare requires proof of eligibility

no vehicles.[10] Increasing prices for peak-period travel often has less of a negative impact than raising prices for off-peak periods.[11]

If Metro planners are correct in assuming that each of the options detailed in the chart will result in the same revenue, the third option appears superior in terms of maximizing overall demand. Options 1 and 2 both raise fees on the Metrolink single passes as well as on weekly passes, monthly passes, and University semester passes.

However, there are three ways that an increase in one-way rail fares alone could affect Metrolink ridership. First, as mentioned before, raising prices on one-way tickets as compared to passes has a greater chance of negatively impacting ridership. Second, raising the price of rail and not bus fares may cause substitution away from the rail to the bus system.[12] Third, rail users are more likely to be suburban users with cars than bus users,[13] meaning rail users could be more sensitive to price fluctuations.[14] Option three will raise the $2.2 million while having the highest probability of maintaining ridership.

There may be some argument against this recommendation on the grounds of equity. That is to say, users who buy the passes tend to have less income than occasional riders. Their dependence on the system is the reason that increasing fares will have less impact on total passengers than other types of fare changes.

Two points should be noted. First, the monthly, weekly, and student passes increase in all three options. With respect to monthly passes - the ticket type most logical for dependent low-income riders - the fare increase in option three is no greater than option one and only slightly higher than option two. Second, even with these fare increases, Metro ticket

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prices will still be highly subsidized. As mentioned earlier, the increasing costs of the system mean fare prices must increase just to maintain the percentage of total Metro expenses that fares cover. If Metro wants to simultaneously increase revenue from fares, maintain ridership levels, and not raise prices for those with lower income, the agency needs to rethink its entire fare structure.

Variable Fare Options

If Metro is willing to consider other forms of fare alterations to increase revenue in a way that conserves ridership, controls costs, and enhances equity, then variable fares are an option.[15] Indexing fare prices to the distance traveled is a common practice on many transit systems.[16] For example, a Metrolink ticket from Clayton to 8th and Pine in downtown Saint Louis could cost more than a fare from the Central West End to 8th and Pine. By using this type of variable pricing system, Metro might be able to increase overall revenue while decreasing fares for those traveling short distances. This is not only a reasonable solution, as riders who use the system more will pay more, it also is beneficial for overall ridership. There is evidence that raising fares on longer trips (greater than 3 miles) has about half the negative impact on ridership than raising fares on short trips (less than 1 mile) does.[17] This means that by implementing a distance-indexed fare, Metro might see more riders and revenue with the same average fare. This approach also could have benefits for controlling costs and serving disadvantaged communities. By lowering demand for longer, and more expensive routes, and increasing demand on shorter, less expensive routes, Metro might be able to raise revenue while putting downward pressure on variable costs. As for serving disadvantaged communities, poorer residents disproportionately use the bus and use it for shorter trips more often than their higher-income transit peers, meaning they could enjoy cheaper fares on average.[18]

Another innovative method of transit pricing that Metro should consider is peak pricing. Demand for Metro peaks during rush hour and for special events such as Cardinals games. If prices increased for only certain periods of the day or around special events, Metro could capture much more revenue without significantly depressing demand.[19] If Metro chooses to raise fares by 5 percent in a blanket fashion, studies suggest that the system may lose twice as many off-peak passengers as commuters.[20] If Metro were to implement peak pricing, it could reduce the cost of traveling at off-peak hours, to which riders are more sensitive, and increase costs during peak periods, to which riders are less sensitive. During special events, such as Cardinals games, the Metro has a very high competitive advantage over other forms of transportation, because most stadium-goers have comparatively high incomes. Metro could raise its fare to surrounding bus and Metrolink stations to capture the monetary value of the convenience it provides. Even with increased fares, Metrolink can still be a very cost-effective solution for Saint Louis sports fans compared to the typical cost of congestion, parking, and gasoline.[21]

However, before Metro increases fares, it should analyze how those increases will impact the number of people who choose to ride transit.

Cost Reduction Methods

Metro could attempt to maintain its current fare level if it could find a way to reduce expenses. As stated earlier, Metro's local operating costs have increased more than 5 percent per year. Part of those costs is the loss from bus routes that serve few passengers. Metro currently has 22 bus lines that lose more than $5 in operating costs for every passenger who boards the bus. Combined, those routes cost Metro more than $12 million a year in operating costs.[22]

Eliminating those less-used routes may be impossible for various reasons and unfair to taxpayers in those areas, but finding a way to downsize or privatize these routes could have much larger financial benefits for Metro than raising fares. Areas with extremely low ridership might be able to replace bus lines with cost-efficient van share systems.[23] Of all modes of public transportation that the Department of Transportation tracks, van share systems have the lowest operating cost per vehicle revenue hour.[24] However, according to a report by the Transit Cooperative Research Program, most transit agencies do not view promoting van pools as part of their mission. Instead of being seen as a way to reduce costs and give economical service to sparsely populated areas, they are viewed as competition to other modes. Metro could become a national leader in this efficient form of public transportation if it integrates new technology to provide real-time matching between van pools and prospective riders.[25]

Public transportation is an integral component of the Saint Louis area. Given the current financial constraints on Metro, the agency could benefit if it increases fares. However, not all types of fare increases are equal. Metro likely could raise more funds and maintain higher passenger volume if it selects the third option, not the first or second. While raising fares often burdens the disadvantaged, all of the proposed options raise pass fares. To simultaneously increase ticket revenue, maintain ridership, and decrease cost burdens for the disadvantaged, Metro should consider transforming its fare policies. Such transformations could involve the implementation of variable ticket prices based on mileage, time of day, and predictable peak demand for special events. Finally, Metro could seek far greater flexibility in dealing with lesser-used routes, particularly longer routes that extend into the suburbs. These strategies, along with cost reductions, could put Metro on a healthier financial route for the future.

> ***Metro could seek far greater flexibility in dealing with lesser-used routes, particularly longer routes that extend into the suburbs.***

NOTES:

[1] Leahy, Joseph. "Metro Seeks Public Input On Proposed Fare Hikes." St. Louis Public Radio. Feb. 19, 2014. View online here: http://news.stlpublicradio.org/post/metro-seeks-public-input-proposed-fare-hikes.

[2] Metro. "Moving Transit Forward: St. Louis Regional Long-Range Transit Plan." P. i.

[3] National Transit Database. "TS1.1 -Total Funding Time-Series." View online here: http://www.ntdprogram.gov/ntdprogram/data.htm.

[4] Ibid.

[5] Ibid.

[6] Ibid.

[7] Leahy, Joseph. "Metro Seeks Public Input On Proposed Fare Hikes." View online here: http://news.stlpublicradio.org/post/metro-seeks-public-input-proposed-fare-hikes.

[8] Litman, Todd. "Transit Price Elasticities and Cross-Elasticities." P. 18.

[9] Ibid. P. 12.

[10] Ibid. P. 9.

[11] Courtesy of Metro.

[12] Litman, Todd. "Transit Price Elasticities and Cross-Elasticities." P. 12.

[13] American Public Transportation Association (APTA). "A Profile of Public Transportation Passenger Demographics and Travel Characteristics Reported in On-Board Surveys." P. 24.

[14] Litman, Todd. "Transit Price Elasticities and Cross-Elasticities." P. 9.

[15] Rand Corporation. "Commission Briefing Paper 5A-05 Evaluation of Fares as a Transportation Revenue Source." P. 1.

[16] Transit Cooperative Research Program (TCRP). "Bus Transit Fare Collection Practices." P. 14.

[17] Litman, Todd. "Transit Price Elasticities and Cross-Elasticities." P. 9.

[18] Farber, Bartholomew, Paez Li, and Nurul Habib. "Social Equity in Distance Based Transit Fares." Pp. 17-20.

[19] Smith, Matthew. "Public Transit and the Time-Based Fare Structure." Pp. 10-18.

[20] Litman, Todd. "Transit Price Elasticities and Cross-Elasticities." P. 7.

[21] The impaired driving argument also works the other way, as encouraging attendees at sporting events, festivals, etc., to use Metro by subsidizing fares has a strong public safety benefit.

[22] Data directly from Metro, available on request.

[23] TCRP. "Ridesharing as a Complement to Transit." Pp. 17-18.

[24] National Transit Database. "2012 National Transit Summaries and Trends." P. 22.

[25] TCRP. "Ridesharing as a Complement to Transit." Pp. 33-34.

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