



# ALLEGHENY INSTITUTE

FOR PUBLIC POLICY

May 14, 2014

Policy Brief: Volume 14, Number 25

## Measuring PAT's Light Rail Performance

Two years ago (see *Policy Brief Volume 12, Number 17*) we outlined the key data for the Port Authority's (PAT) light rail system as it existed in Fiscal Year 2010-11 (FY11) prior to the opening of the North Shore Connector extension of the system. The Connector opening has come at a time of significant structural changes (board structure, CEO, pension and health benefits, and state funding package) to PAT.

The Connector opened in March 2012 (in FY12) and was up and operating for a full fiscal year (all of FY13). Data submitted by PAT to the Federal Transit Administration and reported through the National Transit Database shows the performance of the light rail system over those past three fiscal years. It should be noted that the FY13 data is, as of this writing, unofficial. However, we believe it will match closely the final data when it is released.

Measurements	FY11	FY12	FY13	Change from FY11 to FY13
Total Unlinked Trips	6,918,141	7,130,433	8,032,051	1,113,910
Total Fare Revenue	\$8,670,803	\$8,711,024	\$9,786,533	\$1,115,730
Total Operating Expense	\$48,143,059	\$52,043,343	\$51,528,512	\$3,385,453
Total Rail Employees	462	463	447	-15
Fixed Directional Route Miles	47.4	49.6	49.6	2.2
Vehicles Available for Maximum Service	79	83	83	4
Vehicles Operated in Maximum Service	48	56	56	8

How have measurements changed from FY11 to FY13? Total unlinked trips stood at more than 8 million, which was 1.1 million (16%) above the baseline year amount of 6.9 million. Total fare revenue was up \$1.1 million (13%). Total operating expenses for light rail rose \$3.3 million (7%). The number of rail employees fell. System length now includes the Connector extension and the number of light rail vehicles available for service and operated in maximum service were up slightly over the time frame.

As mentioned in the 2012 *Brief* we can calculate performance on a per rider basis. In FY11, the operating expense per unlinked trip was \$6.96. Two years later the operating expense per trip had fallen \$0.55 to \$6.41 as ridership grew faster than operating expenses. Fare revenue per trip was \$1.25 in FY11. It fell to \$1.21 while ridership was rising significantly and faster than total fare revenue.

If we compare the expense per trip to the fare revenue per trip we can arrive at a subsidy per trip—the amount per rider that PAT must cover from other sources to close the gap. In FY11 this amount was \$5.71 and in FY13 it was \$5.20, a decrease of \$0.51. Based on the amount of the subsidized cost per rider, FY13 was the best operating result for the light rail system over the time frame.

Indicators	FY11	FY12	FY13	Change from FY11 to FY13
Fare/Trip	\$1.25	\$1.22	\$1.21	-\$0.04
Expense/Trip	\$6.96	\$7.29	\$6.41	-\$0.55
Subsidy/Trip	\$5.71	\$6.07	\$5.20	-\$0.51

The agreement between PAT and several sponsors to add the new North Shore stations to the Downtown free fare zone deserves analysis. The current agreement provides for amounts of \$360,000, \$365,000, and \$370,000 (less \$40,000 in advertising per year) for three years beginning in March 2012 (see *Policy Brief Volume 12, Number 10*). Thus, the funding agreements will have to be renewed before next March.

PAT staff estimates that 1.7 million rides occurred in the free fare zone in FY13, about 20 percent of the total trips on the light rail system. The estimated total of rides in the free fare zone in FY 11 was 1.1 million. Presumably, the North Shore free ridership for the first year of operation was in the range of 600,000 per year.

If the FY13 sponsorship amount for providing free rides on the North Shore Connector was \$325,000 and if the net free ridership in the light rail free fare zone attributable to the Connector was 600,000 above FY11 and if riders rode round trips (300,000 riders), the agreement makes sense if the alternative was to ask riders to pay a nominal \$1 per ride as it would have netted PAT \$25,000. However, if the North Shore stations were part of Zone 1 and riders were paying \$2.50 then the exiting sponsor agreement amount would be well below the amount that could otherwise be collected—assuming no major decline in ridership.

The current fiscal year wraps up at the end of June, and when data through the National Transit Database becomes available that will serve as another year of evaluation for light rail performance.

---

**Eric Montarti, Senior Policy Analyst**

---

*Policy Briefs may be reprinted as long as proper attribution is given.  
For more information about this and other topics, please visit our website:  
[www.alleghenyinstitute.org](http://www.alleghenyinstitute.org)*

<p>Allegheny Institute for Public Policy 305 Mt. Lebanon Blvd.* Suite 208* Pittsburgh PA 15234 Phone (412) 440-0079 * Fax (412) 440-0085 E-mail: <a href="mailto:aipp@alleghenyinstitute.org">aipp@alleghenyinstitute.org</a></p>
---