

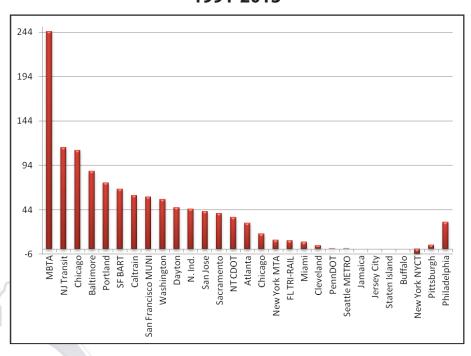
MBTA is the Fastest Expanding Transit System

by Gregory W. Sullivan

Pioneer has previously written that rapid expansion was a major cause of the MBTA's recent meltdown. More recently, we wrote that MBTA is the only American commuter rail system that lost ridership between 2003 and 2013. In a recent blog post, the Frontier Group questioned Pioneer's assertion that the MBTA "has expanded more than any other major transit system in the country over the past 25 years."

To back up our assertion, here is a table based on National Transportation Database data demonstrating that, since 1991, the MBTA has added more than twice as many rail miles, counting commuter rail, subway, and trolley lines, than any of the other 28 other transit systems operating at that time.

Figure 1. Rail miles added by transit authority, 1991-2013



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The Frontier Group calculated that the MBTA had expanded more slowly that many other systems. Let's examine how they reached that conclusion.

Their principal methodology was to measure by percent rather than actual growth. For example, one transit system that the Frontier Group ranked ahead of the MBTA in system expansion is the Connecticut DOT commuter rail transit system. In 1995, CDOT added 35.6 miles of track to the 65.6 miles it had in 1991, bringing its total system track mileage to 101.2 miles. It had no further rail expansion through the most recent federal reporting period of 1991.

By contrast, the MBTA operated 529.8 directional commuter rail miles in 1991. It increased its total commuter rail mileage by 44.5 miles in 1995, by another 117.3 miles in 1998, another 17.9 miles in 1999, another 1.3 miles in 2002, another 35.8 miles in 2008, and another 38.38 in 2012. In total, the MBTA added a 246.3 directional rail miles over this period, seven times as many new track miles as CDOT added. In fact, the MBTA in fact added more than twice as many rail miles than any other commuter rail system in the nation that was operating in 1991.

The MBTA dwarfs CDOT in spending and ridership, with 35.2 million annual commuter rail passenger trips versus 871,000 for CDOT. Over the same 1991 to 2013 period, the MBTA received 30 times more capital funding than did CDOT, \$9.8 billion versus \$325 million.

But according to Frontier Group, CDOT expanded more than the MBTA did because its 35.8 mile rail expansion was greater by percentage than the MBTA's 246.3 miles. I think that would have been worth noting for readers.

Expanding Commuter Rail

The MBTA has concentrated much of its expansion on commuter rail. Figure 2 on the next page demonstrates that the MBTA spent more per passenger mile travelled in capital expenditures between 1991 and 2013 for expansion and facilities upgrades than any of the nation's other major commuter rail systems; i.e., those with 100 or more commuter rail vehicles.

Frontier Group wrote that "Among 21 commuter rail agencies we reviewed, the MBTA ranked fifth for the number of route-miles of service added in the last 15 years, trailing new systems in Albuquerque, Salt Lake City, Seattle and Silicon Valley."

Let's assess that claim.

Here are the additional commuter rail track miles, according to published federal transit data, added by the five systems cited by Frontier Group using a time period of 15 years and a second time period of 16 years. (See Figure 3).

Notice that the MBTA ranked first in added rail miles added period from 1997 to 2013.

Frontier chose 1998-2013 for its comparison, reporting that the MBTA ranked fifth in added rail miles. By choosing 1998 as its base year, Frontier left out of its analysis the MBTA's 117.3 mile commuter rail expansion that occurred the previous year. This was the MBTA's new Middleborough/Lakeville Line from Boston to Holbrook, Brockton, Bridgewater, Lakeville and Middleborough, and the new Plymouth/

Figure 3. Rail Miles added by transit authority, 1997-2013 and 1998-2013

	1998-2013		1997-2013		
Area	Transit System	Miles	Rank	Miles	Rank
Boston	Massachusetts Bay Transportation Authority(MBTA)	83.8	5	201	1
Albuquerque	Rio Metro Regional Transit District(RMRTD)	193	1	193	2
Salt Lake City	Utah Transit Authority(UTA)	175	2	175	3
Seattle	Central Puget Sound Regional Transit Authority(ST)	164	4	164	5
Silicon Valley	Altamont Corridor Express(ACE)	172	3	172	4

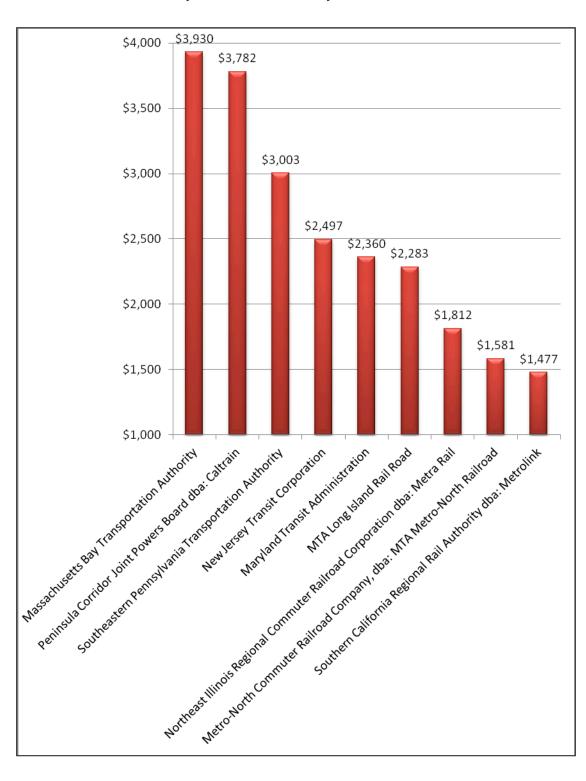


Figure 2. Capital expenditures per passenger mail travelled, by transit authority, 1991-2013

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Kingston Line from Boston to Braintree, Weymouth, Abington, Whitman, Hanson, Halifax, Kingston and Plymouth.

I presented data above showing that the MBTA added more than twice as many rail miles, counting commuter rail, subway, and trolley lines, than any other transit systems operating in 1991. If we take into consideration commuter rail systems that began operating after 1991, there are just two systems in the country that began operating with more rail miles, the Southern California Regional Rail Authority (Metrolink) and the Northern New England Passenger Rail Authority (NNEPRA).

Metrolink began by purchasing 175 miles of existing track, maintenance yards and stations from Southern Pacific Railroad in 1990, and 336 miles of existing track from the Atchison, Topeka and Santa Fe Railway (ATSF) in 1992. In 1994, Metrolink purchased an operating 87.2 mile commuter rail line from Amtrak, including equipment. Since these initial acquisitions of rail lines and equipment, Metrolink has added 109.4 miles. During the same period, the MBTA has added 246.3 rail miles. Metrolink has had commuter rail capital expenditures of \$2.1 billion over this period, 58 percent of the MBTA's \$3.6 billion in commuter rail expenditures from 1991 to 2013.

NNEPRA did not expand rail mileage per se, but instead restored commuter rail service on 199.9 miles of previously existing track between Portland and Boston in 2005 under contact with Amtrak. In 2013, NNEPRA added 57 miles of directional track after purchasing the Brunswick line from Maine Central Railroad. By contrast, the MBTA added 246.3 miles, more than four times as much. NNEPRA had commuter rail capital expenditures of \$48.8 million over this period, 1.4 percent of the MBTA's \$3.6 billion commuter rail expenditures from 1991 to 2013.

According to the Frontier Group, "Note that the number of directional route-miles reported by the MBTA increased discontinuously in 1997 and decreased discontinuously in 2010. It is unknown whether these changes are the result of changes in

reporting, actual changes in service, or a combination of the two."

As a point of edification, all of the MBTA's route mile data is in fact included in the NTD database, but the methodology employed by Frontier Group apparently was unable to locate it.

Here is the MBTA's commuter rail directional route mileage from 1991 to 2013 from NTD Table TS3.1 - Capital Expenditures Time-Series:

Figure 4. Commuter rail directional route miles, MBTA commuter rail, 1991-2013

Massachusetts Bay Transportation Authority				
YEAR	Directional Route Miles			
1991	529.8			
1992	529.8			
1993	529.8			
1994	529.8			
1995	574.3			
1996	574.3			
1997	575.0			
1998	692.3			
1999	710.2			
2000	710.2			
2001	710.0			
2002	711.3			
2003	702.1			
2004	702.1			
2005	702.1			
2006	702.1			
2007	702.1			
2008	737.5			
2009	737.5			
2010	737.5			
2011	737.5			
2012	776.1			
2013	776.1			

Conclusion and a Suggestion

Pioneer has never suggested that all of the MBTA's current woes are attributable to its remarkable history of expansion. We have made data-based assertions that we believe have important implications for the operations of the MBTA. For that reason, Pioneer consistently asserted that the MBTA is the fastest growing "major" transit authority in the country. We compared major systems because we are interested in apples-to-apples analyses that inform our operational decisions about how to improve the quality of transit services available to the public. We believe that improving the quality of service will increase ridership (an important public objective) and increase fare revenues (an important operational objective).

Frontier Group, instead, is attempting to make an ideological point with no relation to the operations of the system. Unfortunately, as the above analysis demonstrates, our assertion that the MBTA is the fastest growing system holds not only for major but in fact for all transit systems. The MBTA has added the most new miles of track as far back as National Transit Data reports in 1991. We would urge Frontier Group and all participants in this public conversation about how to raise the level of service at the MBTA to be a little less ideological, to check their numbers and finally to avoid playing with dates to achieve statistical outcomes that they find attractive.

For six weeks, the lives and livelihoods of 1.3 million riders, as well as thousands of businesses, have been disrupted. If we want to have an MBTA that is worthy of this great state, we have to have a debate that is worthy of this great state.



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