

Mass Transit Sustainability

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Purpose

- Examine the financial sustainability faced by mass transit systems
 - St. Louis Metro
 - Chicago Regional Transit Authority (RTA)
- Determine Sustainability
- Examine Current Alternatives
- Advance Solutions

History

- 1950's
 - Privately owned and operated
 - Competition with automobiles
- 1964 - Urban Mass Transportation Act
 - \$375 million in capital assistance
- 1970 - Urban Mass Transportation Assistance Act
 - \$11.8 billion over a six year period
 - capital and operating costs

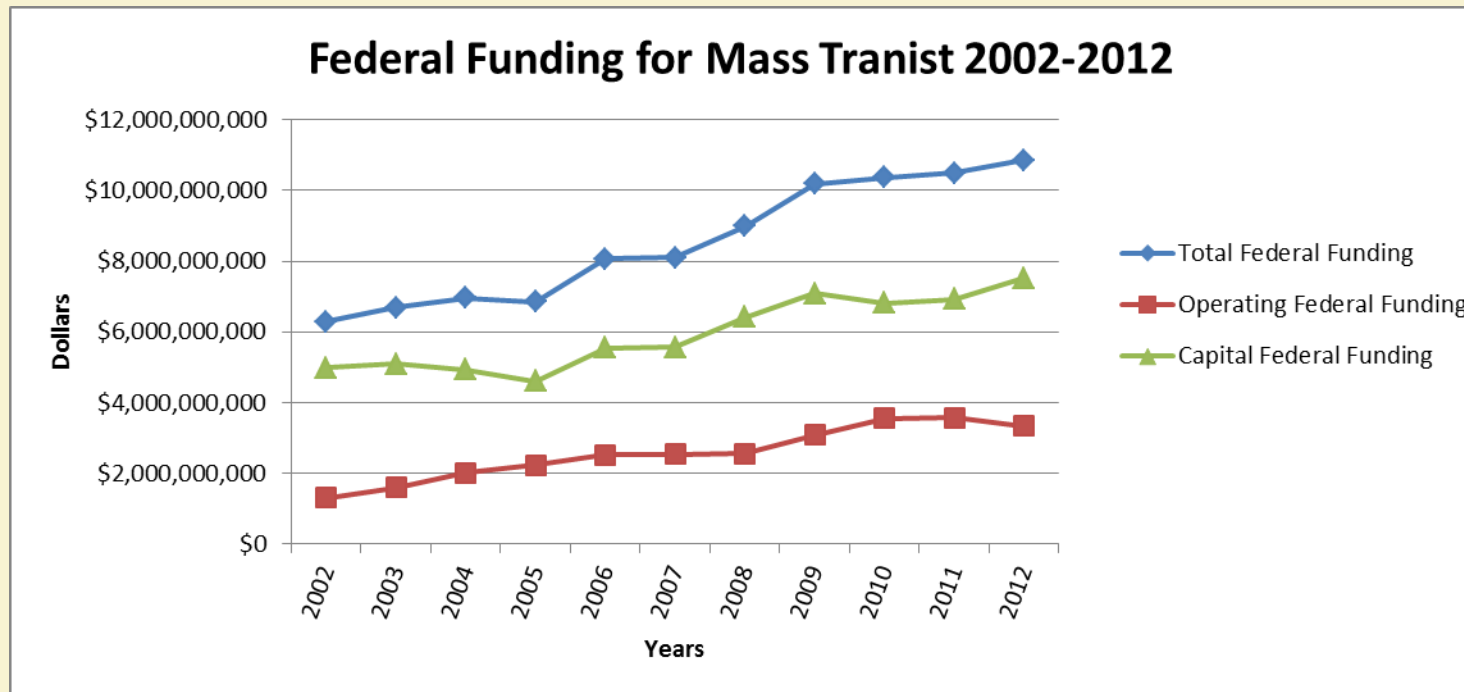
Research Question: Is Mass Transit like Police and Fire Service?

Mass Transit Funding

Year	Total Federal Funding (in billions)	Total Capital Federal Funding (in billions)	Total Operating Federal Funding (in billions)
2002	\$6.29	\$4.99	\$1.30
2012	\$10.86	\$7.52	\$3.34
Increase in Funding	\$4.57	\$2.53	\$2.04
% increase	72.5%	40.1%	32.4%

Source: National Transit Database – Operating and Capital Funding:
(<http://www.ntdprogram.gov/ntdprogram/data.htm>)

Mass Transit Funding



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Fare box Recovery

St. Louis Metro	Fare box recovery (2013)
Metro Bus	20.80%
Metro Link	27.20%
Call-a-Ride	4.90%

Source: Bi-State Agency CAFT for the year ended June 30, 2012 and 2013 CAFR, p. 25

Chicago RTA	Fare box recovery (2012)
Chicago Transit Authority	42.9%
PACE	13.3%
Metra Rail	47.5%

Source: National Transit Database (2012)- Top 50 Agencies
http://www.ntdprogram.gov/ntdprogram/pubs/top_profiles/2012/Transit%20Profiles%20Top%2050%20Agencies.pdf

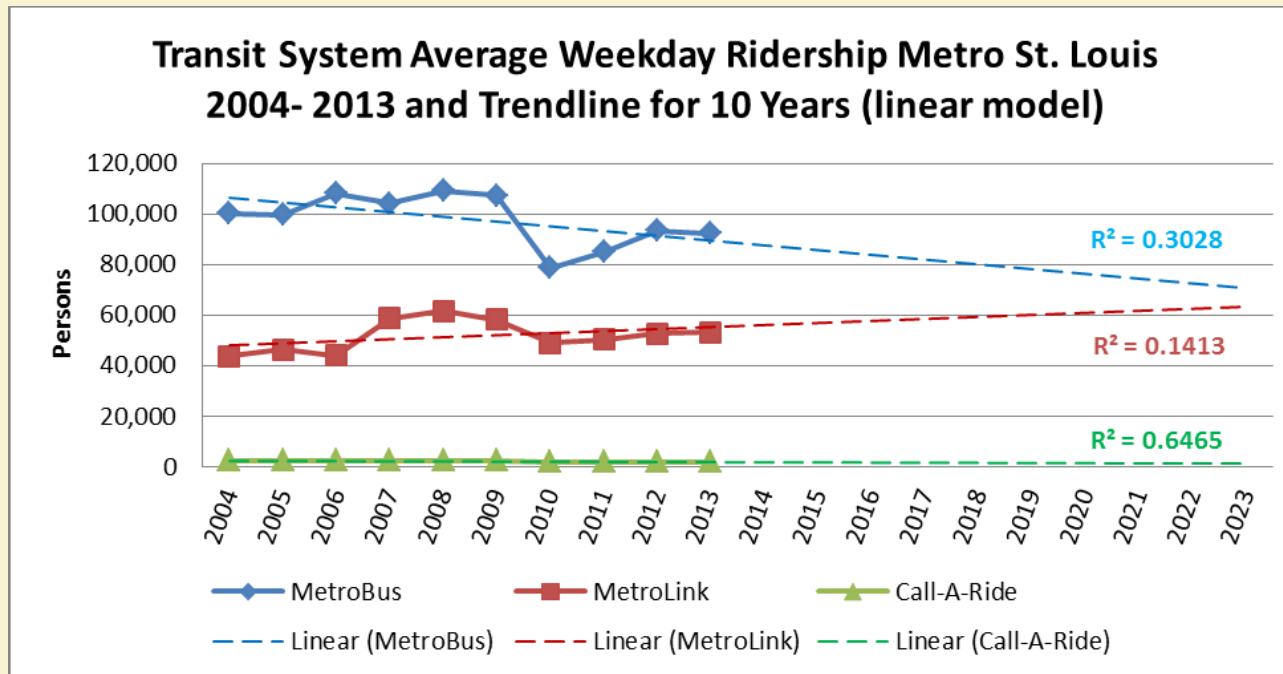
Sustainability of U.S. Mass Transit Systems ???

- Conveniences provided by automobiles
- Low productivity and higher costs
- Stagnant ridership
- Aging infrastructures
- Federal, State, and Local Taxi Burden

Methodology

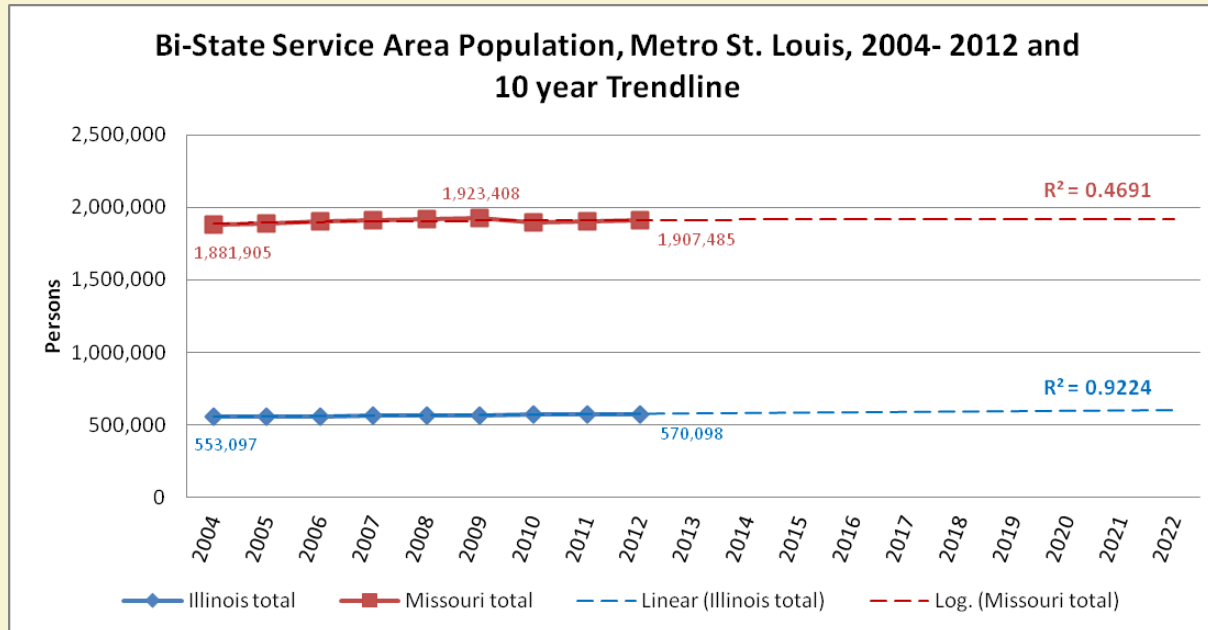
- Use of data from Comprehensive Annual Financial Reports (CAFR)
- In-sample estimation of linear regressions to determine the relationship between time and other single dependent variables
- Out-of-sample relationships projected over a 10-year period, using the previous estimated to calculate out-of-sample forecasts

St. Louis Metro: Transit Ridership



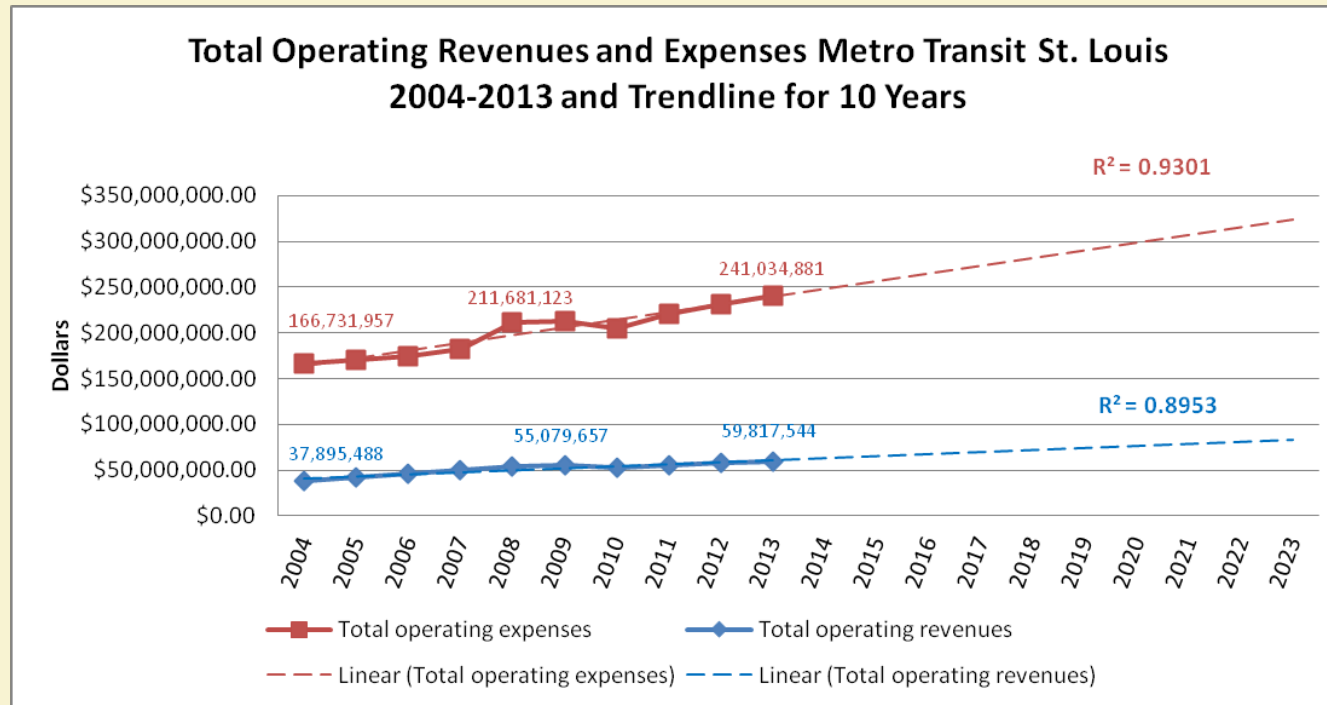
Source: Bi-State Development Agency, 2013, p. 149.

St. Louis Metro: Service Area Population



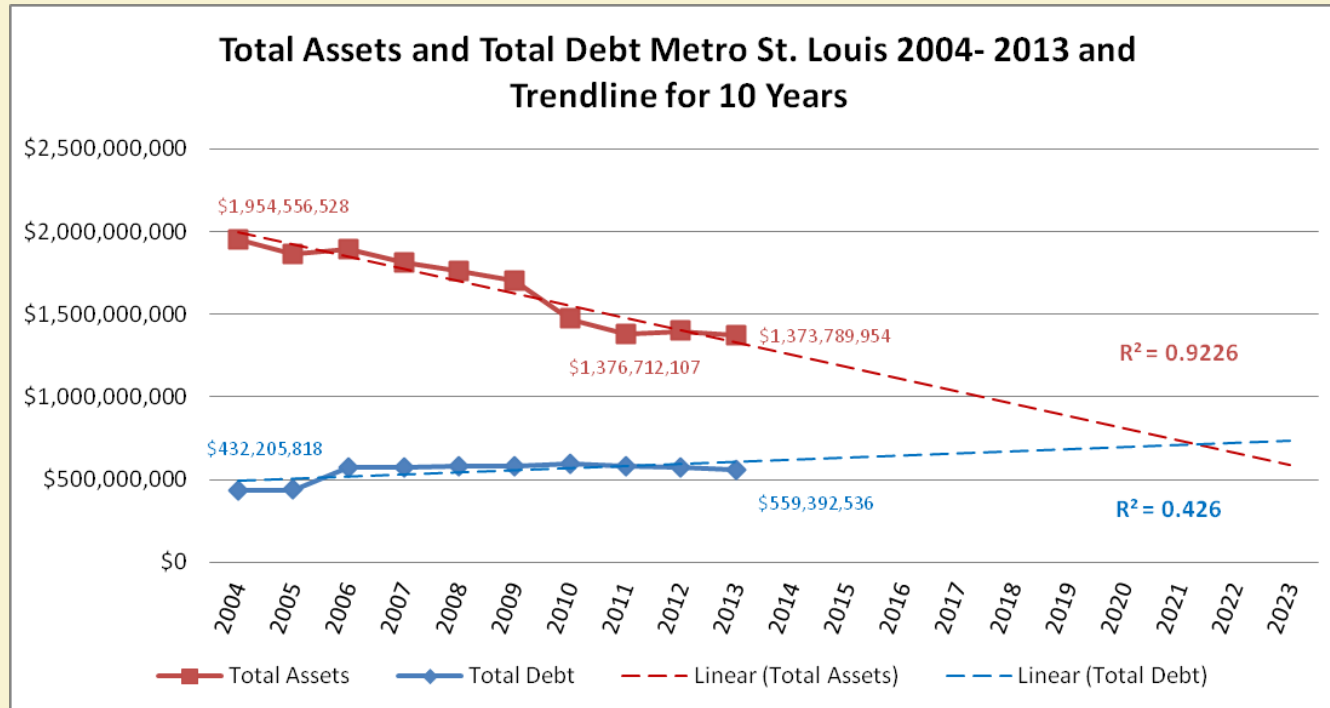
Source: Bi-Stat Development Agency, 2013, p. 156.

St. Louis Metro: Operating Data



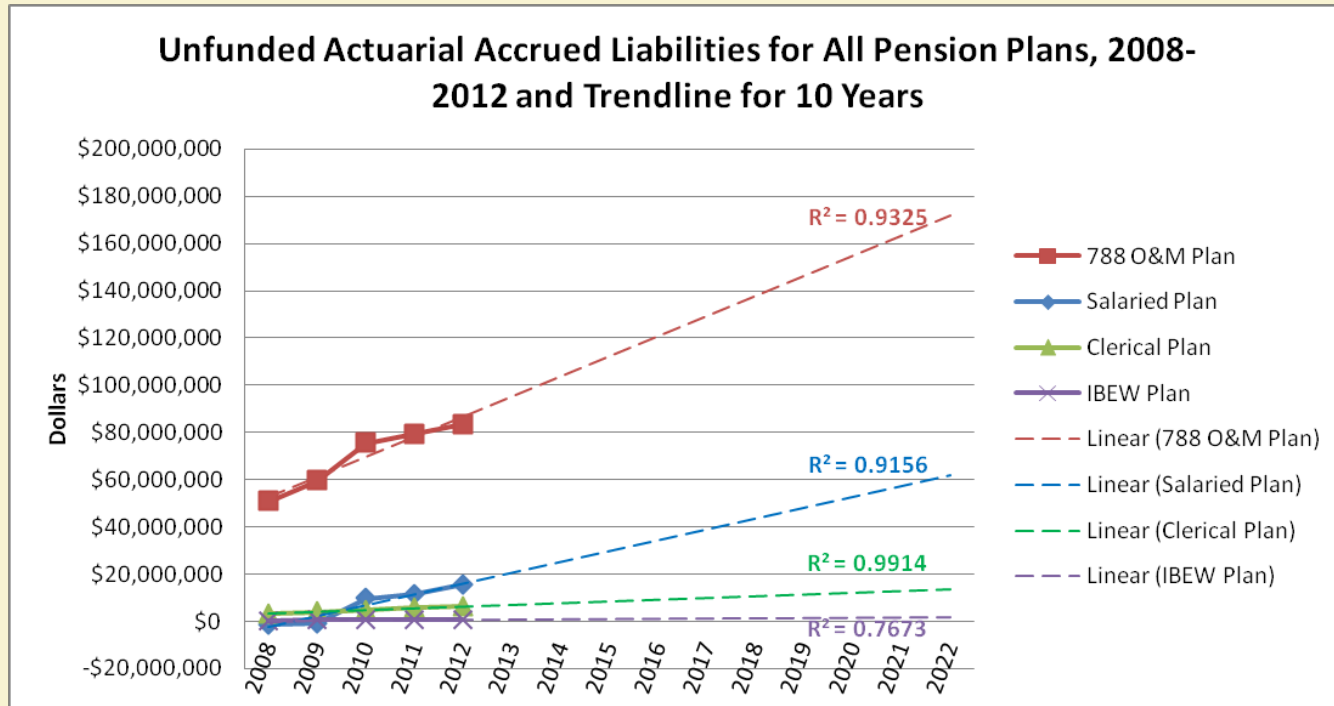
Source: Bi-State Development Agency, 2013, p. 140.

St. Louis Metro: Assets and Debts



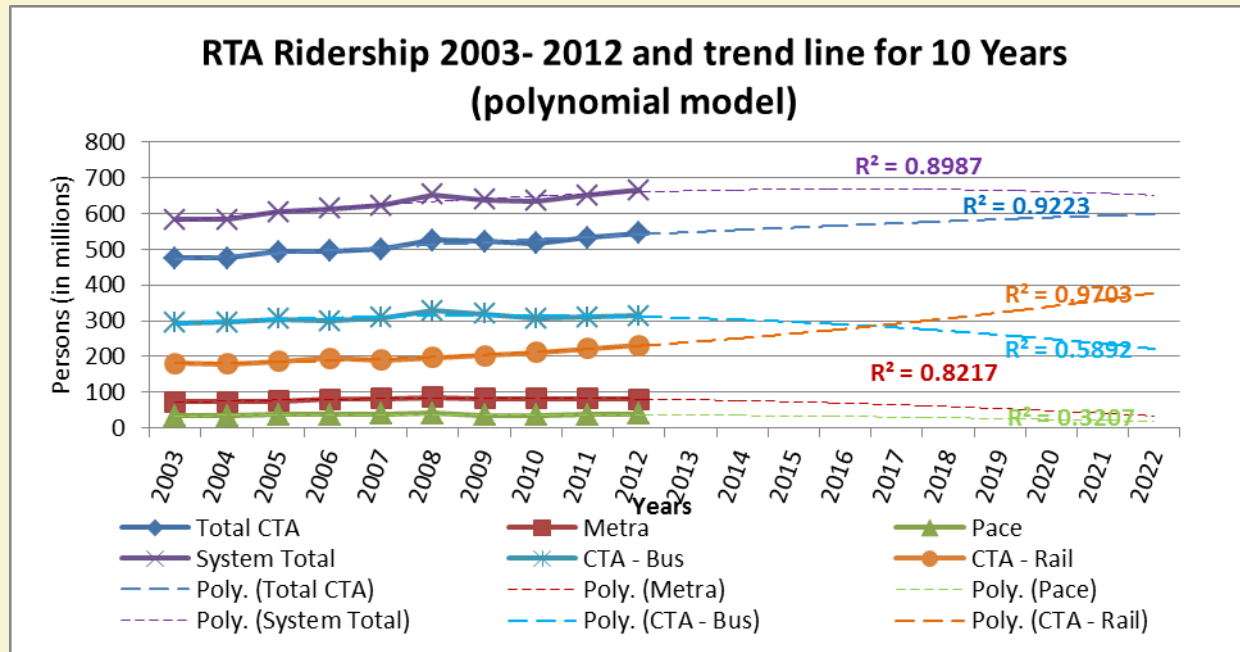
Source: Bi-State Development Agency, 2013, p. 140.

St. Louis Metro: Pension Plans



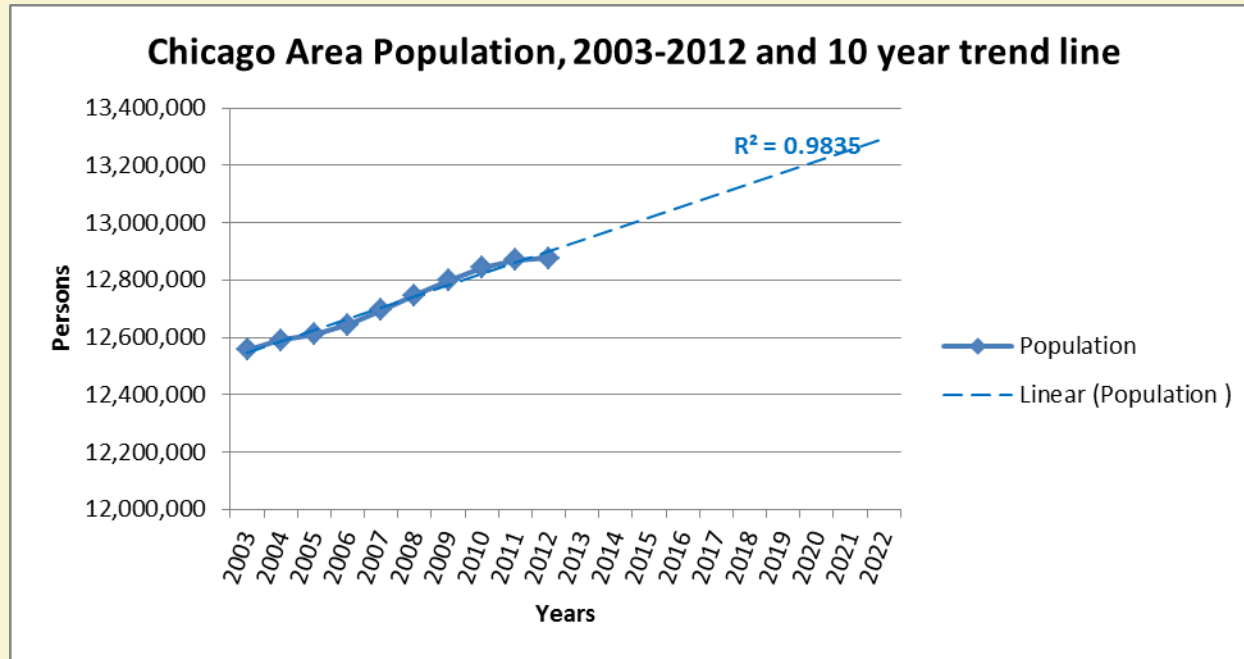
Source: Bi-State Development Agency, 2013, p. 119.

RTA: Ridership



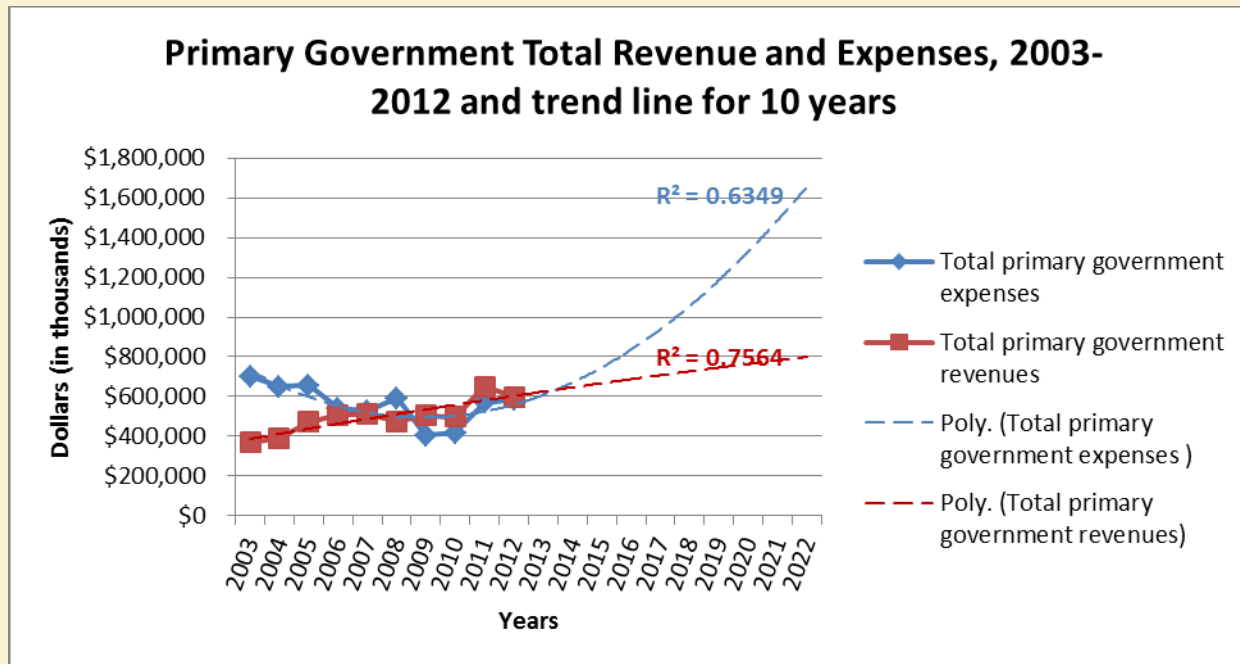
Source: Regional Transportation Authority, 2012, p. 107 (National Transit Database)

RTA: Chicago Area Population



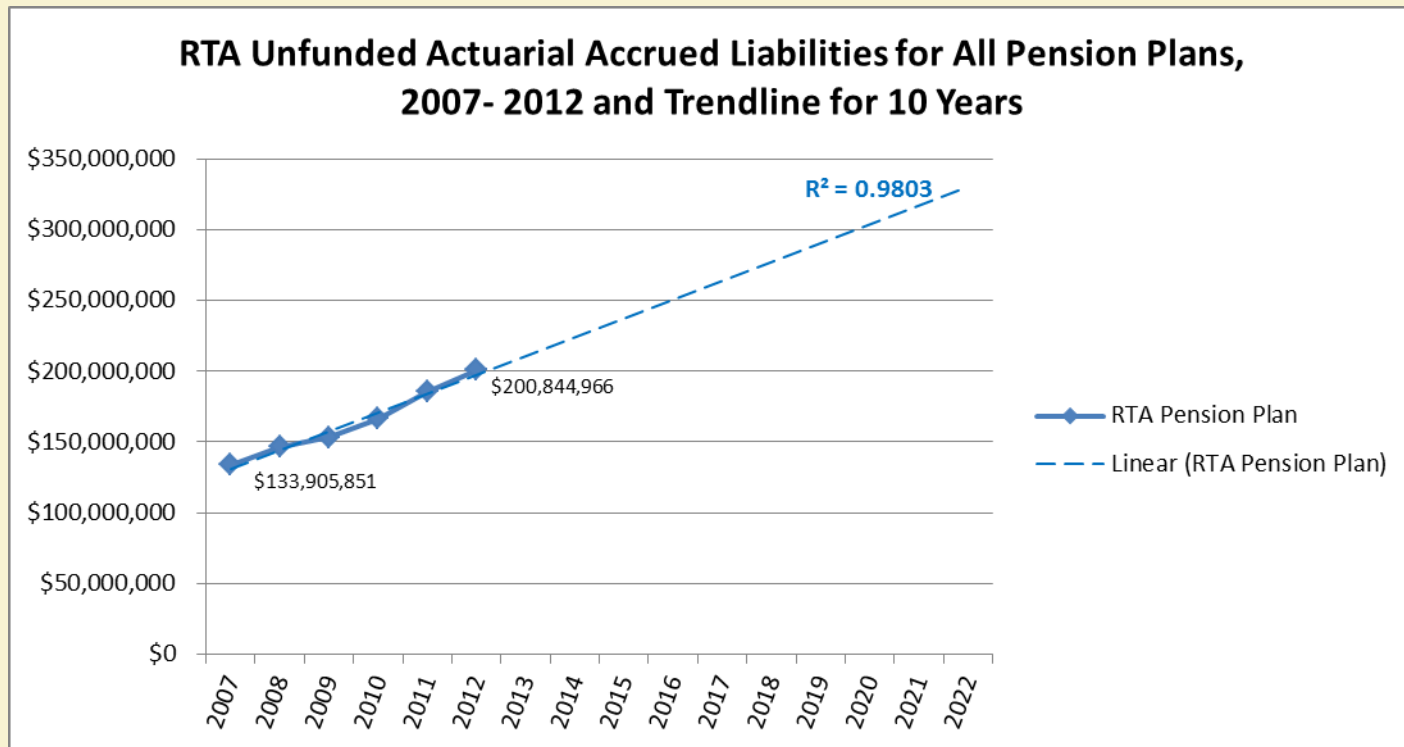
Source: Regional Transportation Authority, 2012, p. 104 (Bureau of Economic Analysis U.S. Department of Commerce and Bureau of Labor Statistics Data U.S. Department of Labor)

RTA: Revenue and Expenses



Source: Regional Transportation Authority, 2012, p. 93

RTA: Pension Plans



Source: Regional Transportation Authority, 2012, p. 75

Viable Alternatives

- Utilization of public-private partnership
- Reducing costs and increasing revenue
- Contracting out transit services to private parties
- Use of competitive tendering of routes
- Introduction of competition for innovative services
- Strategy to rein in growing debt

Improved Sustainability Through Case Studies

Four major factors exemplified elsewhere:

- Identify the core consumers
- Redirect services from suburbs to urban areas
- Change labor agreements related to pension plans
- Use of private sector

Potential Public Police Research Areas

- Is it fair to fund mass transit from a federal level when the usage are mostly at local?
- How to increase mass transit ridership & decrease public subsidies?
- What was original purpose of transit funding by the federal government? Can it be achieved?
- How are the European and other countries funding their mass transits?

Is U.S. Mass Transit Sustainable???

Questions