

PERFORMANCE MEASURES

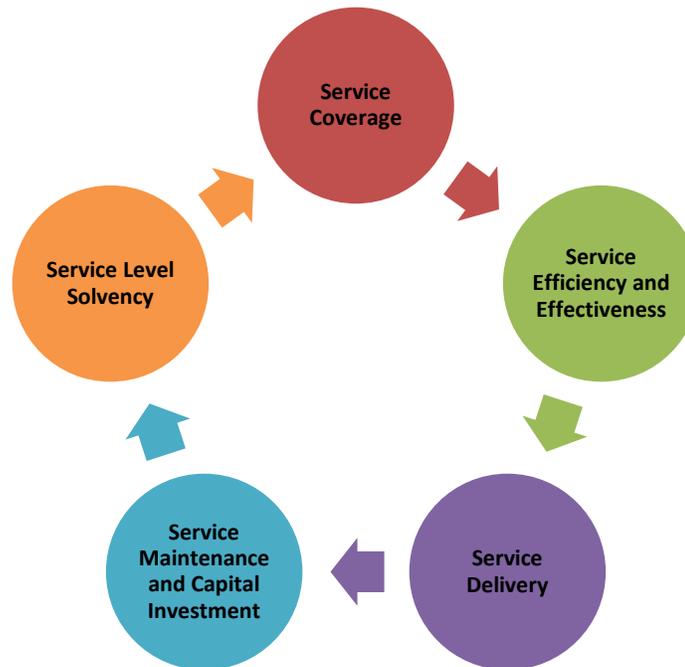


Regional
Transportation
Authority

September 2014
Prepared by the Department of
Finance & Performance Management

REGIONAL PERFORMANCE MEASURES

RTA staff has undertaken the development of a performance measurement and reporting program to evaluate the impact and effectiveness of public transit in Northeastern Illinois. Overall regional performance is a function of five major areas:



- **Service Coverage** - monitors both how much service is available to people in the region (in terms of population and square miles) and how much of that service capacity is used.
- **Service Efficiency and Effectiveness** - evaluates the level of resources spent on delivering service in relation to the level of service provided and the extent to which passengers are using that service.
- **Service Delivery** - reflects the quality of the service delivered.
- **Service Maintenance and Capital Investment** - indicates the allocation of capital funds and the replacement and maintenance of infrastructure components on a schedule consistent with their life expectancy.
- **Service Level Solvency** - assesses financial condition to ensure that there are sufficient resources to meet current and ongoing budgetary needs (both operating and capital).

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EXECUTIVE SUMMARY

The Regional Report Card was created in response to enactment of the 2008 RTA Act amendment. In the interest of increased public accountability and transparency, the Act amendment required the development of performance measures for regional transit that are reported on an annual basis. With cooperation and input from the region's three Service Boards (CTA, Metra, and Pace) a set of nineteen measures were selected for reporting across five service areas: coverage, efficiency and effectiveness, delivery, maintenance and capital investment, and solvency. The results from each Service Board are aggregated for the purpose of describing the performance level of the Chicagoland transit system as a whole for the five-year period 2009-2013. Overall, results for 2013 indicate that the positive turnaround of transit performance that began in 2011 and continued throughout 2012 was followed by a downturn in 2013. Ridership fell subsequent to the CTA fare increase in January 2013, the five-month shutdown of the south branch of the Red Line for complete reconstruction from May through October, and the coldest fourth quarter in over a decade – factors that produced ripple effects throughout the RTA system.

Service coverage indicators monitor both how much service is available to the region's residents (supply) and how much of that supply is actually used by the public (consumption). This report describes supply in terms of transit capacity per area resident, which takes into account the vehicle revenue miles of service offered by the transit agencies and the seats available to be filled within those vehicle miles, expressed on a per-person basis. Another measure is vehicle revenue miles per service area square mile, which illustrates the total sum of service provided by the transit agencies per mile of the Chicagoland area. Since the average passenger capacity of the system's transit vehicles has varied by 0.8% over the five years under review, and the region's population has grown by only 1.2%, the fluctuation in vehicle revenue miles drives the changes for both of these coverage measures.

The years 2009-2013 show two years of decreases for vehicle revenue miles in 2010 and 2011, followed by two years of increases in 2012 and 2013. Regional figures are greatly impacted by CTA service, which implemented significant service reductions in 2010; CTA's overall vehicle revenue miles was down 10.0% compared to 2009 levels, whereas Metra maintained its service levels throughout the recession and recovery period, increasing vehicle revenue miles by 0.6%. Pace bus also implemented some service reductions, in an effort to streamline service, and ended the five-year period with a net 0.5% reduction in vehicle revenue miles. Other Pace modes (dial-a-ride, vanpool, and ADA paratransit) each increased service coverage measures for 2013 and for the five-year period under review. On a system-wide basis, service supply measures improved in 2013 but have not recovered to 2009 levels.

Service consumption is described in this report in terms of passenger trips (ridership) and passenger miles traveled. Although the level of service is lower compared to 2009, system-wide ridership increased 2.3% over the five-year time period. Ridership peaked in 2012 -- the highest ridership figures seen since 1990 -- followed by a 2.5% reduction in 2013 resulting from a CTA fare increase, shutdown of the Red Line for six months, service streamlining and coordination initiatives, and unusually cold winter weather. Passenger trip lengths increased as well; in 2013, transit riders traveled over four billion miles for the third consecutive year, with each of those years surpassing passenger miles traveled in 2008, the previous record-high year. Higher ridership, occurring in conjunction with reduced service, resulted in a 4.7% improvement in the service effectiveness measure passenger trips per vehicle revenue mile compared to 2009. The other consumption measure, passenger trips per area resident, also improved 1.1% over the five-year period. Thus, despite a reduction in service supply, service consumption generally improved over the five-year time period.

Service efficiency and effectiveness measures evaluate the cost of supplying transit services. In 2013, regional operating costs increased by approximately \$48.2 million, a 2.1% increase that exceeded inflation rates for the year. In 2013, increased operating cost occurred in conjunction with decreased ridership and passenger miles traveled, reflecting lower cost effectiveness. However, increased operating costs spread out over the larger increase in vehicle revenue miles served to maintain service efficiency results for operating cost per unit of transit capacity and improve the operating cost per vehicle revenue mile. The five-year trends demonstrate the same or improved cost effectiveness once adjusted for the effects of inflation: operating cost per passenger trip stayed at \$3.38 and the cost per passenger mile decreased from \$0.55 to \$0.53. The cost-efficiency measures, impacted by service reductions with costs spread over fewer units supplied, trend upward over the five-year period, with a \$0.005 increased operating cost per unit of transit capacity and a \$0.42 increase in operating cost per vehicle revenue mile; after adjusting for inflation, each of the two measures increased roughly 4.5% from 2009.

Service delivery indicators focus on customer service and safety. On-time performance is a key indicator of service delivery, and although the Service Boards use different methodologies to assess on-time performance for each mode, weighting their values by ridership provides a regional measure that shows an improving trend over the past two years. After two consecutive years of increases, the number of reportable safety and security incidents per passenger decreased in 2013 to 0.089 incidents per 100,000 passenger trips. These two measures, taken together, point to a public transit system in the Chicago region that is safe and reliable.

Service maintenance and capital investment indicators evaluate reliability and state of good repair of transit assets. Following a spike in 2012 that correlated to the purchase of new CTA rail vehicles and the rebuild of the Dan Ryan branch of the Red Line, the regional capital program sharply decreased by 59.1% in 2013. Each Service Board faced substantial reductions: CTA 70.2%, Metra 27.9%, and Pace 14.8%. At the same time as capital program funding shrank, ten-year capital needs continued to grow. As of December 2012 (the most current data), the RTA system has a capital need exceeding \$33.5 billion over the next ten years to achieve and maintain a state of good repair for all of its assets. A significant portion of that total, \$20.0 billion, is needed to address already past-due projects; known as the backlog, this amount illustrates the severity of deferred capital projects that has occurred over the years as federal and state funding has been inconsistent and inadequate.

The number of miles between major mechanical failures has experienced alternating years of increases and decreases with the five-year trend showing a 6.7% improvement compared to 2009. There was an average of 25,348 miles traveled between major mechanical failures in 2013, which is indicative of successful and aggressive maintenance and rehabilitation programs by the Service Boards that keep vehicles in good condition despite their average vehicle fleet age. Of the total regional active fleet of 7,430 vehicles, 793 were put into service in 2013; hundreds more are on order and will be added to the fleet in the near future. The introduction of new vehicles into the fleet, and the retirement of older ones, will help to reduce the average fleet age. In 2013, there was a 0.5 percentage point reduction in the number of vehicles in service beyond their minimum useful life, to 29.8%. 2% of CTA buses, 53.6% of CTA rail cars, 57.6% of Metra train cars, 11.7% of Pace buses, 34.2% of Pace vanpools, and 11.7% of Pace ADA paratransit vehicles are in service beyond their minimum useful life. Improvement in the reliability indicator miles between major mechanical failures, occurring in conjunction with an advanced fleet age, demonstrates strong maintenance and rehabilitation programs of RTA system vehicles. However, the ability to keep older vehicles in good working condition impacts operating costs and the capital program. In fact, addressing state of good repair needs has caused a fundamental shift in the capital program away from enhancement and expansion projects to maintenance projects. In the 2006 capital program, 67% of the projects were for maintenance of the current system compared to 92% of the 2013 program, resulting in corresponding reductions in capital enhancement and expansion projects.

Service level solvency measures reflect the financial condition to ensure there are sufficient resources to meet current and ongoing budgetary needs. Regionally, there have been improvements in fare revenues since 2009, with an overall 18.9% increase. Fare increases were implemented in 2009 and 2013 at CTA, at Metra in 2012, and at Pace in 2009; each Service Board has also made some fare policy adjustments that contributed to increased farebox revenue receipts. Each of the Service Boards had improved fare revenue for 2013 as well as for

the five-year period under review. Once adjusted for inflation, the average regional fare paid in 2013 was \$1.36, an 8.7% increase from 2009. Accordingly, the reliance on non-fare revenue has been reduced from a high of \$2.13 in 2009 to \$2.02 (adjusted for inflation) in 2013, demonstrating a reduced reliance on public funding subsidies to cover the operations cost associated with providing transit.

The second piece of service level solvency relates to capital program funding. This indicator reached a ten-year high in 2012, following several years in which the region benefitted from an infusion of capital dollars from American Recovery and Reinvestment Act (ARRA), Illinois Jump Start and Jobs Now! capital bond programs, and the federal MAP-21 transportation reauthorization bill. However, most of the Illinois Jump Start bonds have not yet been released. Overall capital funding fell 48.0% in 2013 and is trending 29.1% lower compared to 2004; adjusting for inflation negatively exacerbates this differential even further. Reduced capital funding also necessitates the issuance of bonds to pay for capital program projects, and subsequent payouts for debt service on those bonds erodes capital availability even further. However, bond issuance allows the Service Boards to continue forward with capital project work in the absence of steady and sufficient state and federal funding dollars. Capital program funds, totaling \$903 million in 2013, must be considered in relation to the \$33.5 billion 10-year need, which translates to roughly \$3.3 billion of capital funding needed per year – clearly, capital program funding remains a critical issue for each Service Board and for the RTA system as a whole.

SNAPSHOT

Performance Measure		2013 Value	1-Year Trend	5-Year Trend
Service Coverage	Transit Capacity (Trips) per Area Resident	336	↑	↓
	Vehicle Revenue Miles per Service Area Square Mile	63,820	↑	↓
	Passenger Trips (Ridership)	642,656,074	↓	↑
	Passenger Trips per Area Resident	76.6	↓	↑
	Passenger Trips per Vehicle Revenue Mile	2.74	↓	↑
	Passenger Miles	4,128,063,485	↓	↑
Service Efficiency and Effectiveness	Operating Cost per Unit of Transit Capacity (2009 \$)	\$0.120	↓	↑
	Operating Cost per Passenger Trip (2009 \$)	\$3.38	↑	↔
	Operating Cost per Passenger Mile (2009 \$)	\$0.53	↑	↓
	Operating Cost per Vehicle Revenue Mile (2009 \$)	\$9.26	↓	↑
Service Delivery	On-Time Performance	87.4%	↑	↓
	Reportable Safety & Security Incidents per 100,000 Passenger Trips	0.089	↓	↑
Service Maintenance and Capital Investment	Capital Program: Maintenance/Enhancement/Expansion Projects	\$882,234,171	↓	↑
	10-Year Capital Funding Needs	\$33.5 billion	↑	N/A
	Miles Between Major Mechanical Failures	25,348	↓	↑
	Percent of Vehicles Beyond Useful Life	29.8%	↓	↑
Service Level Solvency	Fare Revenue per Passenger Trip (2009 \$)	\$1.36	↑	↑
	Non-Fare Revenue per Passenger Trip (2009 \$)	\$2.02	↑	↓
	Capital Program Funding (2004 \$)	\$758,597,263	↓	↓

Direction of arrows indicates 2013 value in comparison to 2012 (1-year) and to 2009 (5-Year) figures. The color of the arrow indicates whether the change is favorable (green), unfavorable (red), or is equal (yellow) to comparison figure.

NOTES

1. This analysis is based on published data from the National Transit Database (NTD), RTA's audited financial statements, and operating data from the three Service Boards. This report covers the years 2009-2013.
2. For 2009, NTD required Metra to change how it reported capital project credits (which comprise about 5% of Metra's operating cost) so that they were not allowed to be subtracted from expenses as they had been in prior years and were instead reported as a reconciling item. For 2010 and subsequent years, NTD allowed a reversal of this decision and allowed Metra to again report capital credits as offsets to operating expenses. Since this report uses 2009 as the base year for trend analyses, the reporting change will result in operating cost results for 2009 that are lower than if the methodology was consistent to later years; five-year trend data and analyses will reflect a steeper increase in operating expense than would exist if the methodology had been consistent.
3. Prior to 2011, reported ADA paratransit ridership did not include companion or personal care attendant data, which were included in the 2011 data and going forward per a clarification to NTD reporting policy. This change affects every indicator that includes ADA paratransit ridership data, a factor that should be considered when comparing ridership data over time.
4. Free rides associated with the Senior Ride Free Program were not included in Metra's NTD reported ridership. With the change to a means-tested ride free program in September 2011, many who previously rode Metra for free began using various fare media and were then included in ridership totals.
5. Metra's on-time performance methodology was amended as of May, 2011 to exclude "extra" trains added to handle special events that were not included in normal operating schedules. Prior to May 2011, all "extra" trains were included in the count of all trains and were always reported as on-time in the overall on-time performance calculation. With the change in methodology, "extra" trains are excluded from the overall on-time performance calculation unless those trains' schedules include all intermediate station stop times and are publicly distributed via Metra's website and/or paper flyers.

6. CTA changed its methodology for counting vehicle revenue hours and vehicle revenue miles in 2011. Through 2010, CTA counted a significant share of non-revenue service (pull-outs, pull-ins, and vehicle repositioning) as revenue service. The FTA asked CTA to stop including that service for the 2011 submittal. Although 2011 bus vehicle revenue miles and vehicle revenue hours were lower than in 2010, this change in methodology exaggerated this reduction significantly. The 2011 overall regional figures were also impacted by this methodology change and would have been about 1.5% more favorable under the old methodology for vehicle revenue hours and 1.3% more favorable for vehicle revenue miles.

7. This report includes 2016 targets for several performance measures. Targets were determined by using each Service Board's projected annual budgetary data for operational (passenger trips, passenger miles, vehicle revenue hours, and vehicle revenue miles) and financial (operating cost and fare revenue) indicators, applied to 2013 data submitted by each Service Board to the National Transit Database. Financial targets include inflation adjustments, using inflation rates of 1.9% for 2014, 2.1% for 2015, and 2.2% for 2016, per the Survey of Professional Forecasters (June 2014). Targets are reported to illustrate the direction of expected performance within the resources of the current year's financial plan.

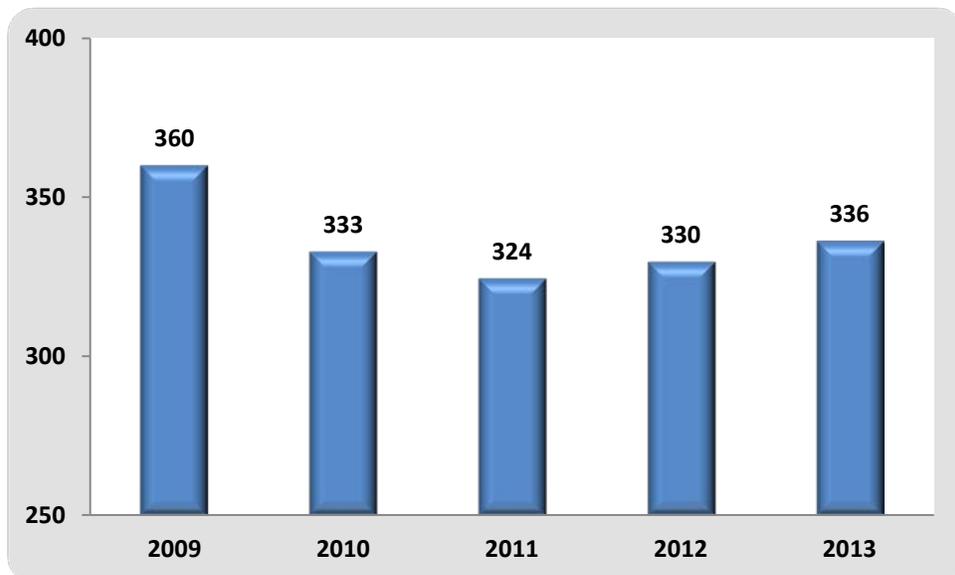
SERVICE COVERAGE

Service Supplied

Transit Capacity per Area

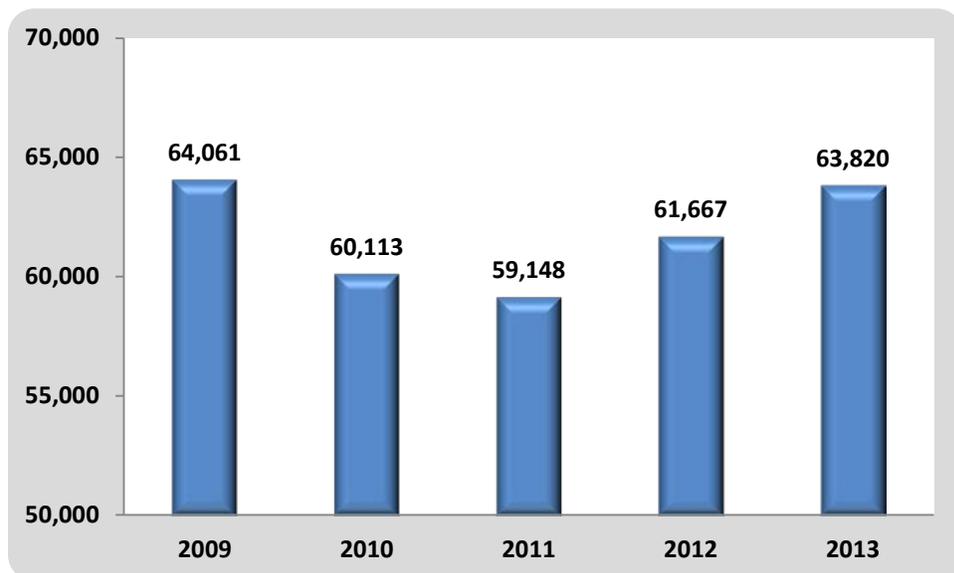
Resident

The number of trips available for each resident in the region to take annually.



Vehicle Revenue Miles per Service Area Square Mile

The number of miles of travel provided annually by revenue service vehicles per square mile of the service area.

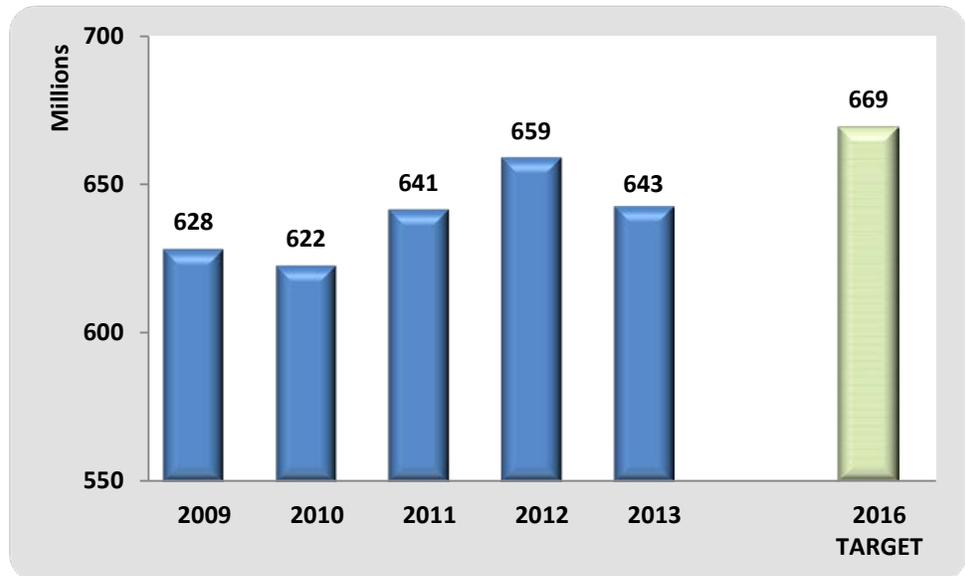


SERVICE COVERAGE

Service Consumed

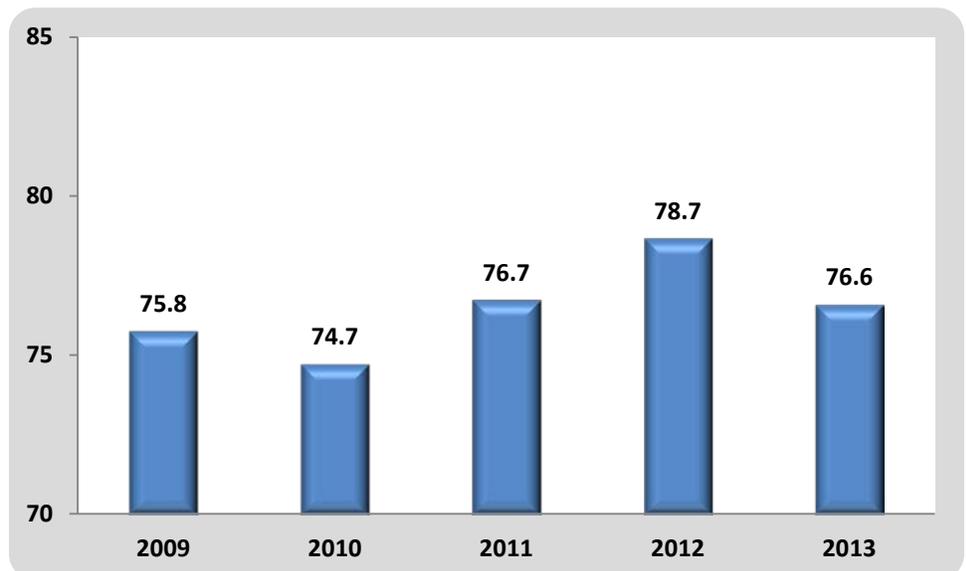
Passenger Trips

The number of times passengers board revenue service vehicles, including transfers, in order to complete their trips.



Passenger Trips per Area Resident

The average number of rides taken per resident annually.

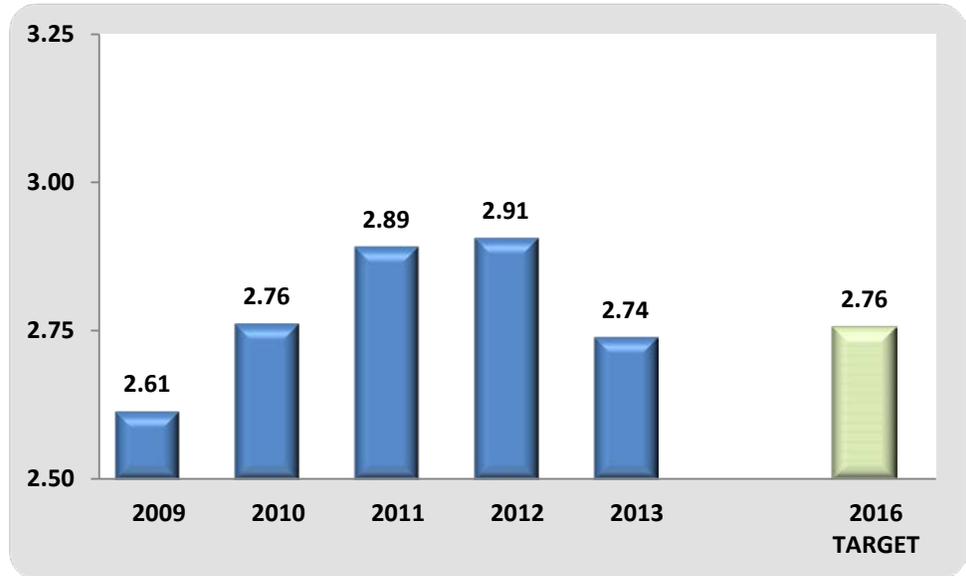


SERVICE COVERAGE

Service Consumed

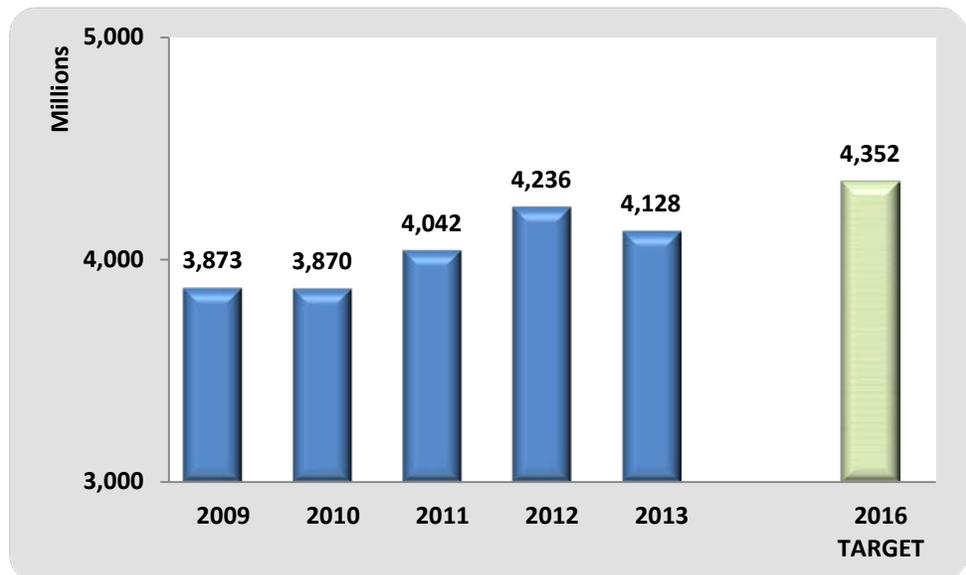
Passenger Trips per Vehicle Revenue Mile

The number of passenger trips divided by the miles that vehicles travel while in revenue service.



Passenger Miles

The cumulative sum of the distances ridden by all passengers.

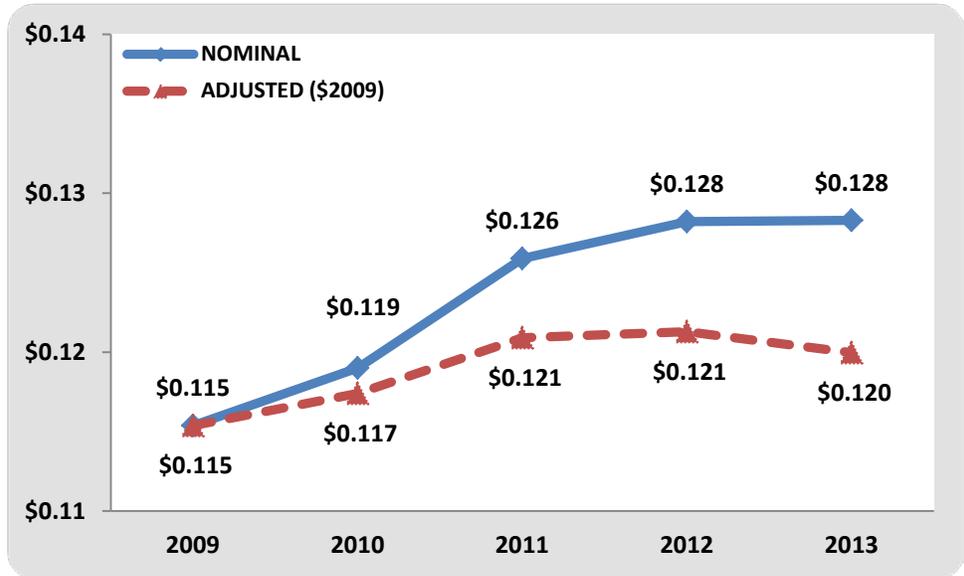


SERVICE EFFICIENCY AND EFFECTIVENESS

Service Efficiency

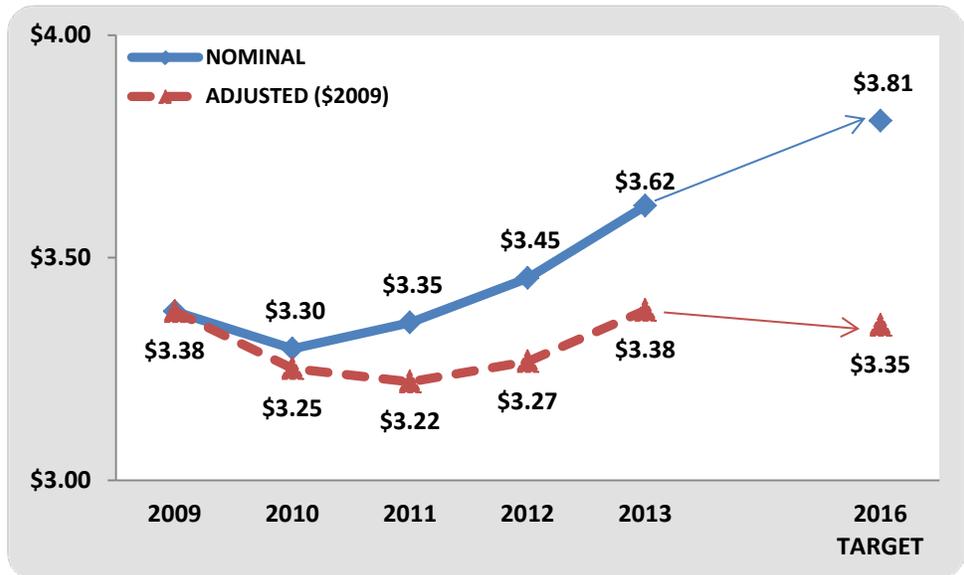
Operating Cost per Unit of Transit Capacity

The average cost of providing a passenger seat or space for each mile of an individual trip, whether or not it is taken.



Operating Cost per Passenger Trip

The average cost of each individual trip taken.

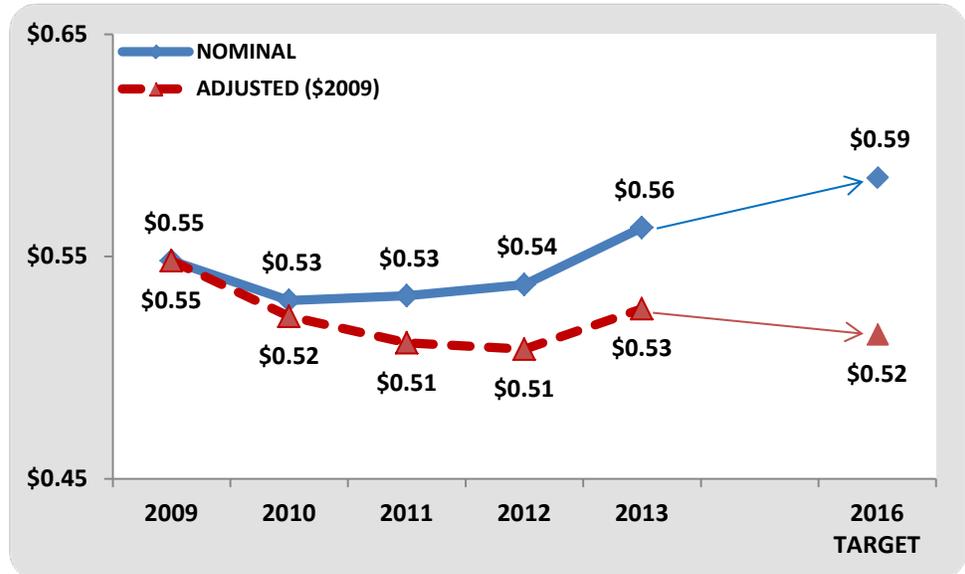


SERVICE EFFICIENCY AND EFFECTIVENESS

Cost Effectiveness

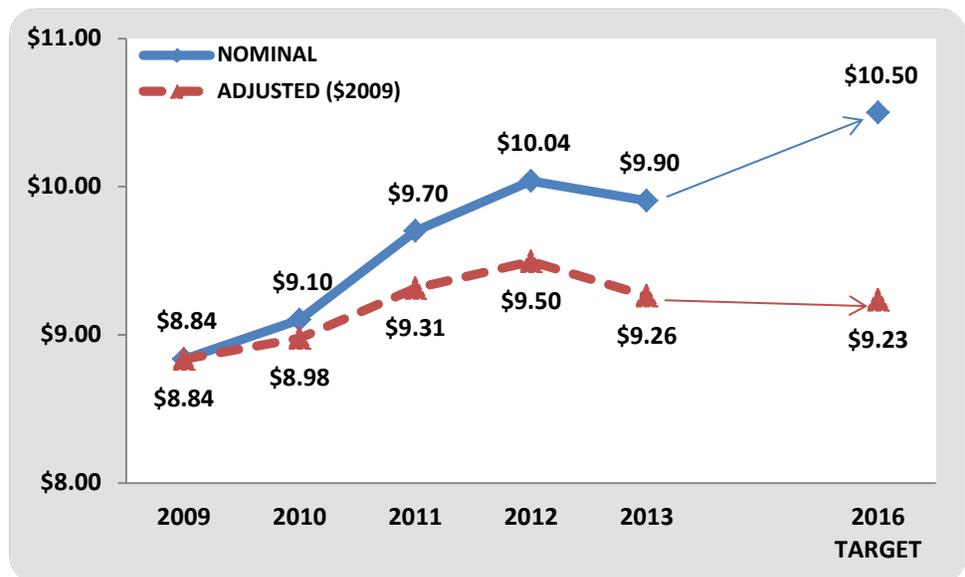
Operating Cost per Passenger Mile

The average cost of providing each mile of each individual trip taken.



Operating Cost per Vehicle Revenue Mile

The average cost of providing each vehicle revenue mile of service.

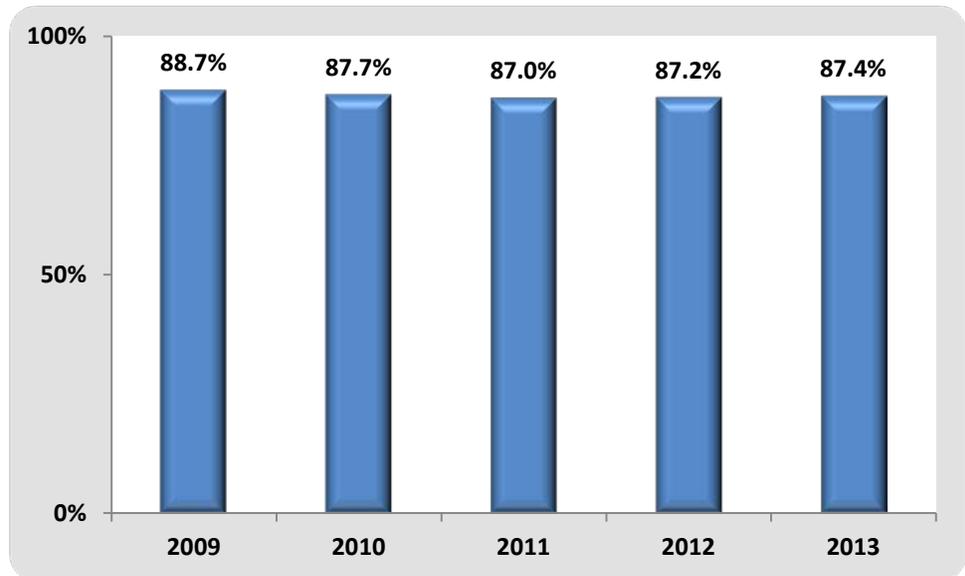


SERVICE DELIVERY

Customer Service and Safety

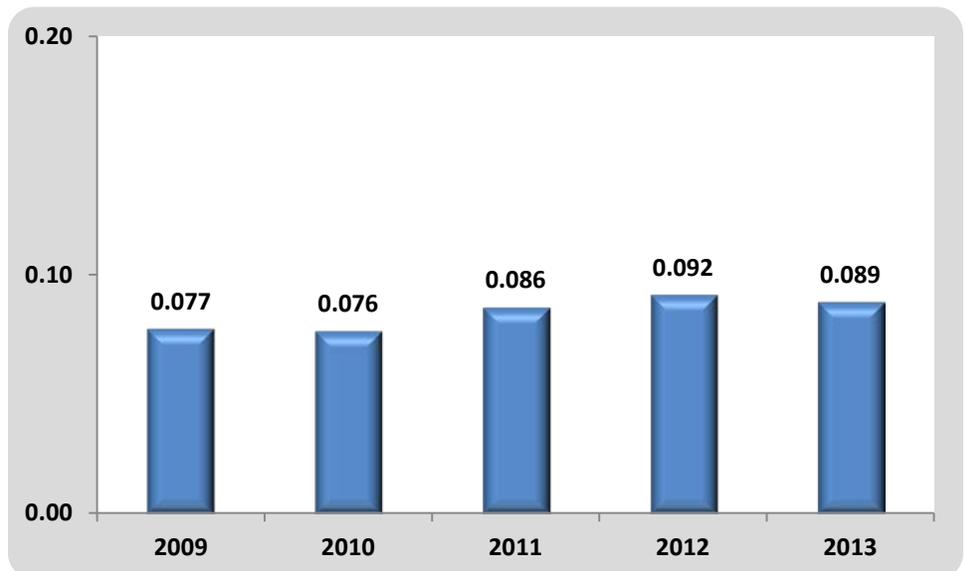
On-Time Performance

The percentage of time that revenue service vehicles are considered on schedule, based on each Service Board's on-time performance measurement definition.



Reportable Safety and Security Incidents per 100,000 Passenger Trips

The number of combined major safety and security incidents per 100,000 passenger trips taken.



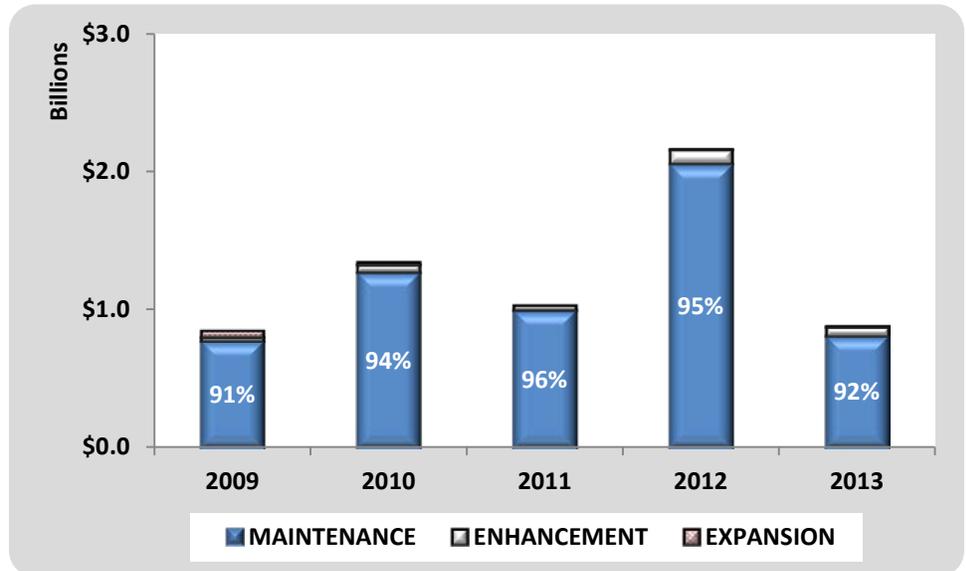
SERVICE MAINTENANCE & CAPITAL INVESTMENT

State of Good Repair

Capital Program

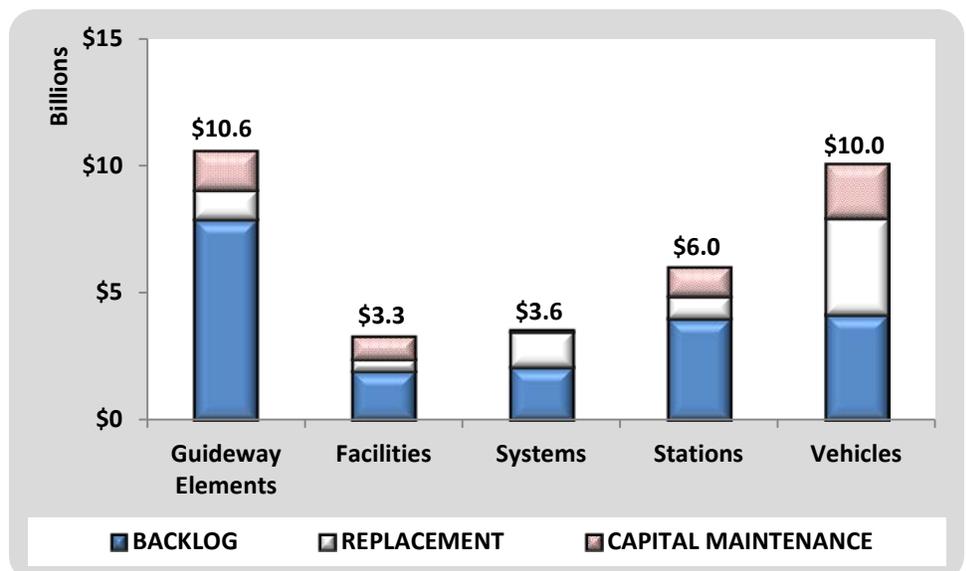
Maintenance/ Enhancement/Expansion

The annual allocation of projects budgeted within each category as a percent of the total capital program. Each year's capital program is the sum of new, de-obligated, and reprogrammed funding available to repair, augment, and grow service.



10-Year Capital Funding Needs

The estimated cost of bringing RTA system-wide assets to a State of Good Repair over the next ten years totals over \$33.5 billion, consisting of \$20 billion backlog projects and \$13.4 billion for regular maintenance and replacement projects.

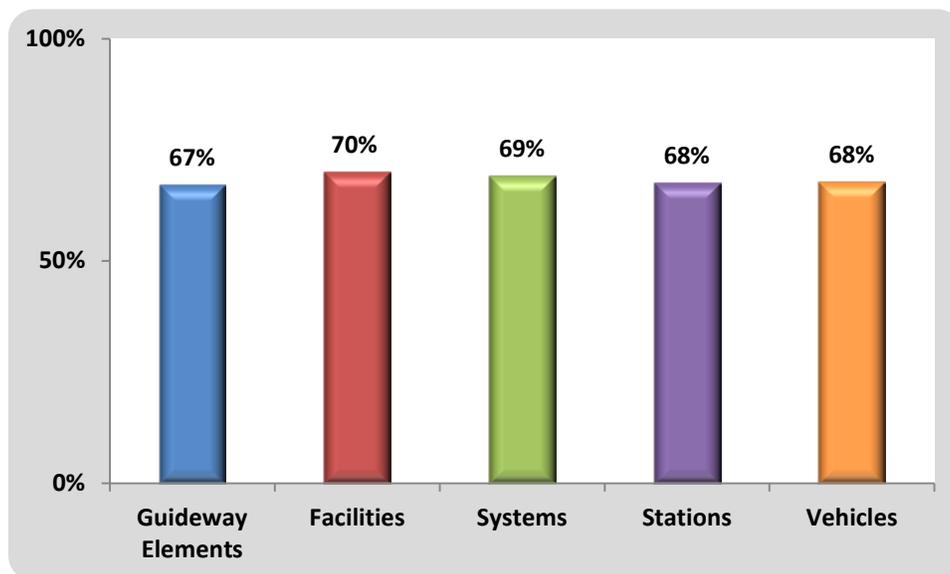


SERVICE MAINTENANCE AND CAPITAL INVESTMENT

State of Good Repair

Percent of Assets in a State of Good Repair

The general physical condition of the region’s capital assets, based on analysis of the current physical condition and age distribution of each Service Board’s transit assets from inventory date reported as of December 2012. The condition rating levels established by the RTA for purposes of categorizing physical condition are numbered 1 (worn) through 5 (excellent), consistent with the rating system used by the Federal Transit Administration; assets rated 2.5 or better are considered in this report to be in a State of Good Repair. Subway tunnel structures are considered permanent assets and are excluded from this asset rating exercise, as they are not intended to be replaced, but rather rehabilitated indefinitely. Metra guideway data are under development and are also excluded from this year’s report, but will be included in future reports as a more complete dataset becomes available. Adjustments were also made to exclude Pace maintenance facilities which may still be within their useful life, but which Pace categorized as functionally obsolete.



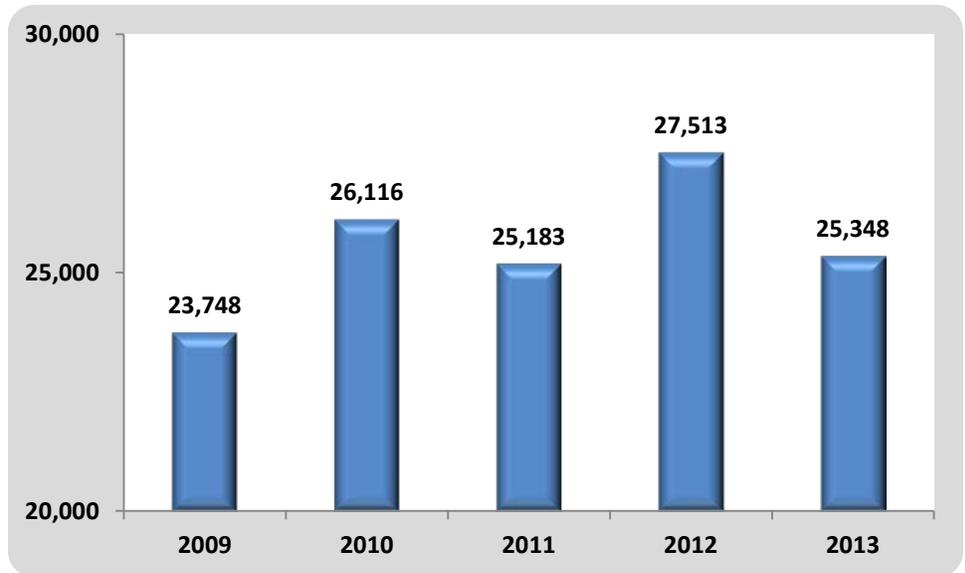
Note: All assets are maintained in safe operating condition through additional capital and operating expenditures on maintenance and rehabilitation.

SERVICE MAINTENANCE AND CAPITAL INVESTMENT

Reliability

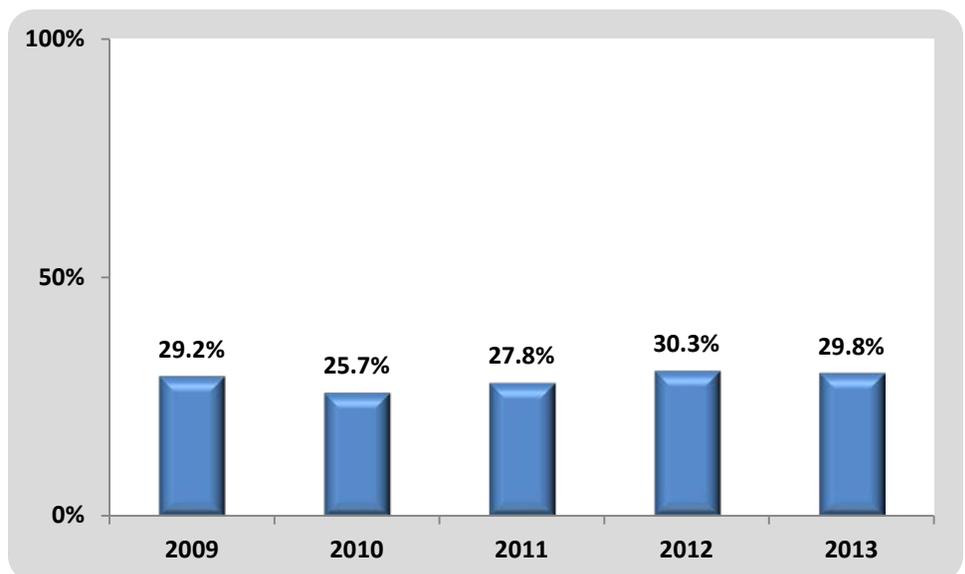
Miles between Major Mechanical Failures

The average distance that revenue vehicles travel in service between mechanical failures that prevent them from completing a scheduled trip or from starting the next scheduled trip.



Percent of Vehicles Beyond Useful Life

The percentage of vehicles in the total revenue vehicle fleet that have reached the end of their minimum useful life as defined by the Federal Transit Administration.

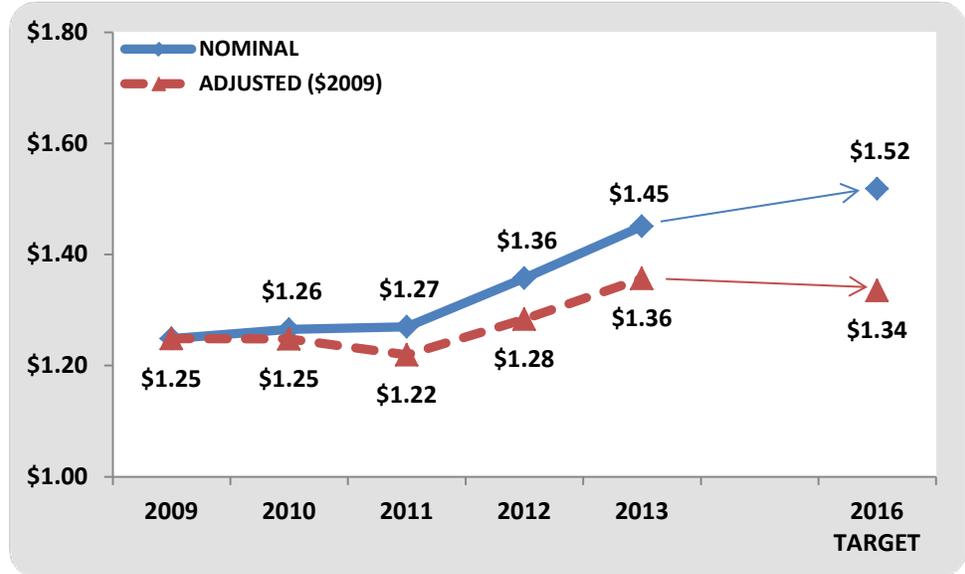


SERVICE LEVEL SOLVENCY

Operations

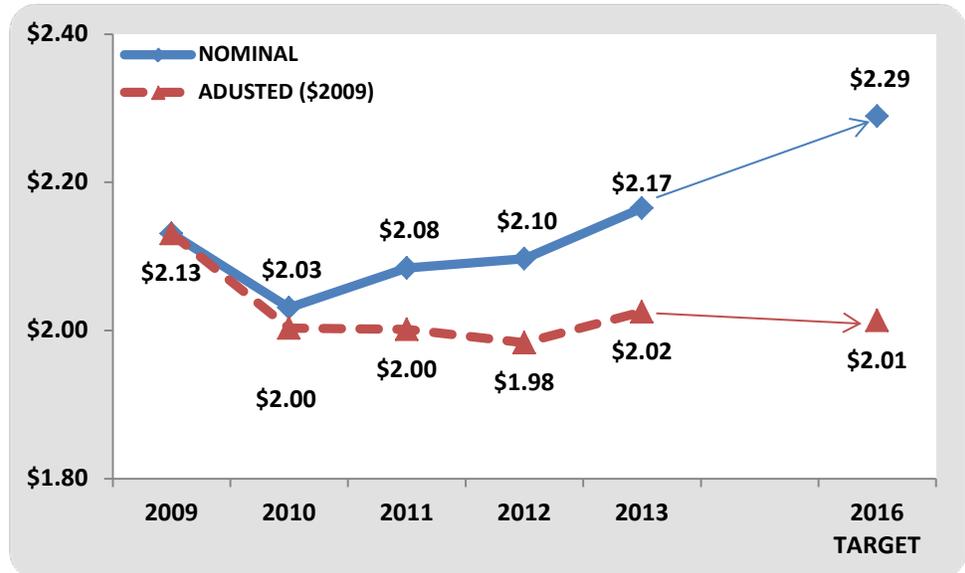
Fare Revenue per Passenger Trip

The average fare paid by customers per trip.



Farebox Shortfall (Non-Fare Revenue) per Passenger Trip

The amount of revenue from sources other than fares required to cover the average cost of a passenger trip.

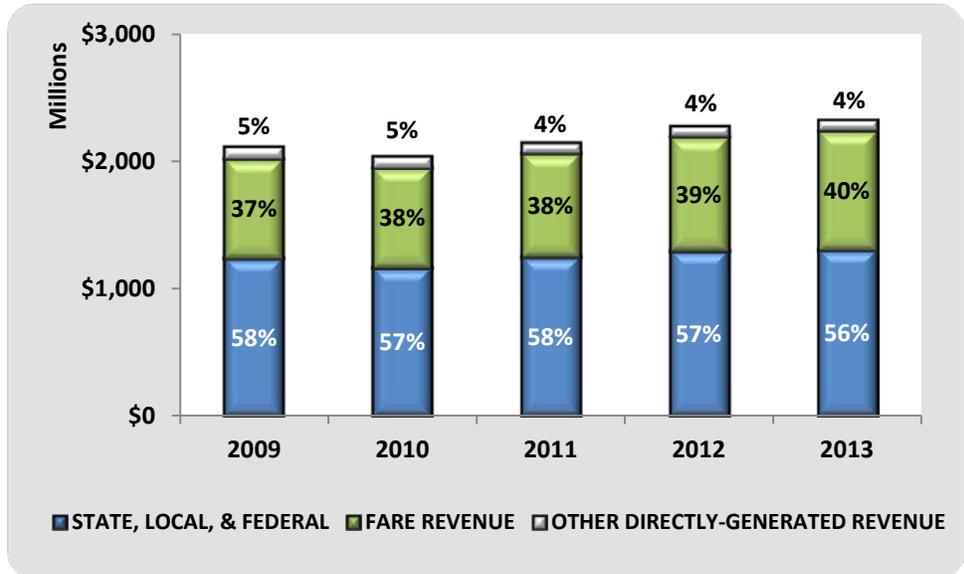


SERVICE LEVEL SOLVENCY

Operations and Capital Program Funding

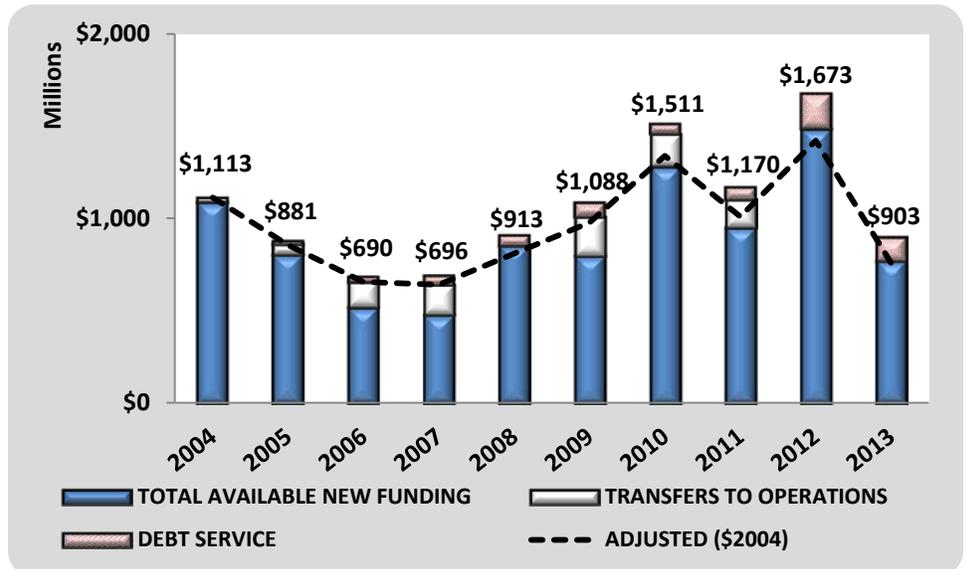
Farebox Shortfall (Non-Fare Revenue) Compared to Total Revenue

Operating costs are covered through the balance between fare revenue, other directly-generated revenue (advertising, concessions, etc.) and all other revenue (local, state, and federal).



Capital Program Funding

The amount of new capital funds budgeted to finance the maintenance, enhancement, and expansion of the transit system's infrastructure. Capital funds budgeted in one year may not actually be expended until subsequent years due to the longer-term nature of capital project implementation. Capital funding amounts include transfers to operations and debt service paid on capital bonds, which began in 2004.



The region's capital program is shown for the past ten years to show the variance in capital funds availability over time.