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Mass transit – US

Riders may be fleeing but funding holds steady

Ridership is declining on mass-transit systems across the country, but stable or growing support of transit agencies by governments or regional tax bases, or in many cases both, will mitigate the revenue impact of lost riders. Many transit enterprises remain crucial to the economic vitality of the regions they serve, suggesting that government support will be sustained. Taxes dedicated to transit agencies are also rising, a stabilizing factor for agencies most reliant on those revenues.

- » **Mass transit enterprises derive significant funding support from other sources, mitigating the falls in ridership.** Declining mass transit ridership is a national phenomenon despite certain pockets of growth and variability in the degree of decline across the US. However, growth in revenues other than passenger fares, such as subsidies from state and local governments or taxes levied within a region for the benefit of a transit enterprise, will lessen the impact of lost riders.
- » **Several transit enterprises are crucial to the economic vitality of the regions they serve, suggesting government support will be maintained.** In several cities, more than 20% of workers rely on public transportation to commute to and from work, even after recent ridership declines. Recognizing the high utilization and essential function of these systems, states such as Maryland and Virginia have recently begun to increase transit funding, and New York recently authorized a significant new funding source.
- » **External funding for transit enterprise capital projects has grown steadily, allowing the agencies to invest in system improvements and expansion.** Local governments and the US government represent the largest external sources of funding for capital projects. Since these funding decisions are not driven by ridership trends, agencies have been able to continue system improvements and expansion despite lower ridership.

Scope of the report

In this report we examine data of 10 of the largest mass transit systems in the US (see Exhibit 1). A table with statistics on other mass transit systems we rate is included in the appendix.

Exhibit 1

Overview of transit enterprises discussed in detail in this report

Transit enterprise	Principal city served	Annual transit ridership (millions)	Debt outstanding (fiscal 2018; millions)	Debt pledge	Senior most bond rating
New York Metropolitan Transportation Authority (NYMTA)	New York, NY	2,380.7	\$40,522.0	Transit revenue	A1 negative
Chicago Transit Authority (CTA)	Chicago, IL	460.8	\$4,399.5	Sales tax	A3 stable
Los Angeles County Metropolitan Transportation Authority (LACMTA)	Los Angeles, CA	379.5	\$5,592.2	Sales tax	Aa1 stable
Washington Metropolitan Area Transit Authority (WMATA)	Washington, DC	353.4	\$937.6	Transit revenue	Aa3 stable
Massachusetts Bay Transportation Authority (MBTA)	Boston, MA	336.1	\$5,408.0	Sales tax	Aa2 stable
Southeastern Pennsylvania Transportation Authority (SEPTA)	Philadelphia, PA	258.7	\$671.2	State taxes	A1 stable
San Francisco Municipal Transportation Agency (SFMTA)	San Francisco, CA	223.1	\$343.7	Transit revenue	Aa2 stable
San Francisco Bay Area Rapid Transit District (BART)	San Francisco, CA	126.5	\$1,366.6	General obligation	Aaa stable
Metropolitan Atlanta Rapid Transit Authority (MARTA)	Atlanta, GA	114.0	\$2,291.0	Sales tax	Aa2 stable
Tri-County Metropolitan Transportation District of Oregon (TriMet)	Portland, OR	96.6	\$828.9	Payroll tax	Aaa stable

Ridership data cover the 12 months through June 2019, with the exception of the NYMTA. The NYMTA's ridership data cover the 12 months through December 2018 and incorporate only the ridership on the operations of the New York City Transit Authority.

Source: *Transit enterprise financial statements, Federal Transit Administration, the New York Metropolitan Transportation Authority, and Moody's Investors Service*

We have focused on ridership largely within the cities in question, so the ridership figures we report do not include trips on what the Federal Transit Administration (FTA) classifies as commuter rail or commuter bus. In many places, commuter services are provided by a separate entity. For example, the Northeast Illinois Regional Commuter Railroad Corporation operates most of the commuter rail lines under the oversight of Metra, the suburban commuter railroad agency of the Chicago metropolitan area. This is a separate entity from the [Chicago Transit Authority \(CTA\)](#), which provides mass transit mostly within the [City of Chicago](#) (Ba1 stable). Ridership on CTA does not include Metra ridership.

Where commuter rail or commuter bus services are provided along with traditional mass transit services by the same agency or authority, we have excluded the commuter rail and commuter bus riders. For example, by limiting our analysis of ridership in the [City of New York](#) (Aa1 stable) to that occurring on the city's subway and buses operated by the New York City Transit Authority (NYCTA), we exclude ridership on Metro-North Railroad or the Long Island Rail Road (except for data in Exhibit 9) even though both commuter operations, like the NYCTA, are managed by the [New York Metropolitan Transportation Authority \(NYMTA\)](#). The NYCTA ridership figures include use of the authority's paratransit services and bus services provided by a subsidiary, the NYMTA Bus Company.

The [Massachusetts Bay Transportation Authority \(MBTA\)](#) also operates both city transit and suburban commuter transportation and we do not analyze the ridership of the commuter operations.

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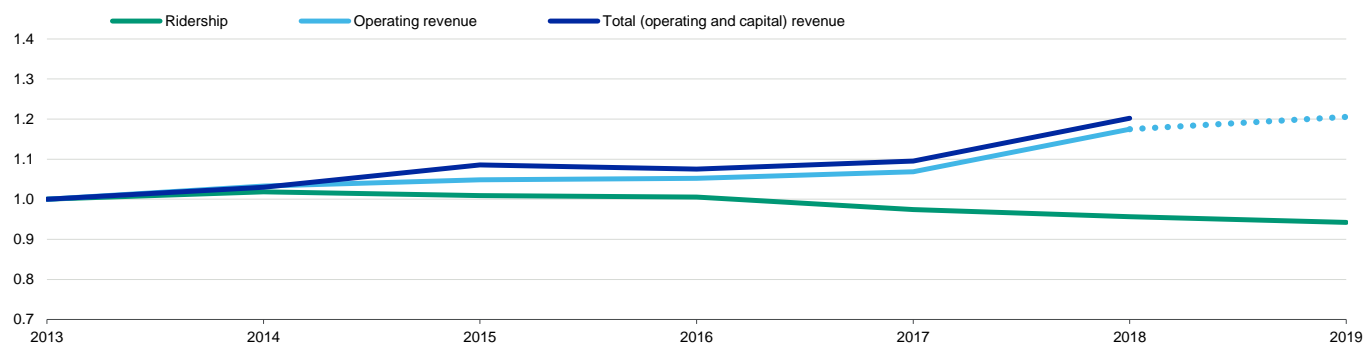
Mass transit enterprises maintain funding support from other sources, mitigating the nationwide fall in ridership

Stable or growing support of transit agencies by governments or regional tax bases, or in many cases both, will mitigate declining mass transit ridership across the US. Revenue other than fares consists of a variable mix of subsidies from governments and taxes levied directly for the benefit of the transit enterprise.¹ In spite of falling ridership over the past several years, total transit enterprise revenue is still rising because government subsidies and direct taxes have grown to offset stagnation or declines in fares (see Exhibit 2).

Exhibit 2

Revenues of the 10 enterprises under discussion continue to grow during the current period of declining ridership

Aggregate ridership (year ending June 30) and revenue (respective fiscal year) of the 10 systems indexed to 2013



2019 operating revenue is estimated based on the respective agencies' adopted fiscal 2019 budgets.

Total revenue is a combination of operating revenue and capital grants. Capital revenue does not include proceeds of bonds issued by the transit systems.

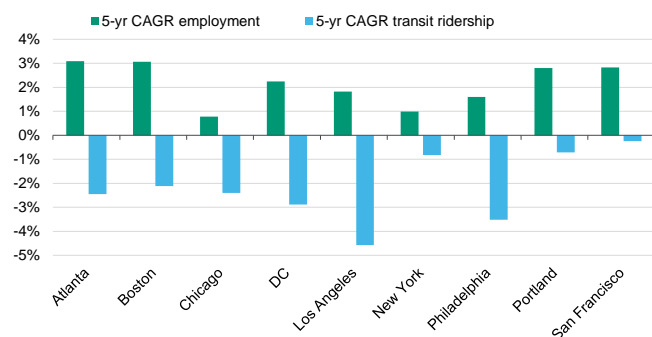
Sources: Federal Transit Administration, transit enterprise audited financial statements and budget documents, and Moody's Investors Service

Every one of the 10 mass transit systems discussed in this report saw a decline in ridership over the period 2014-2019 (year ending June 30), though the degree of decline varied. That is despite the fact that job growth has remained strong in each of the cities served by these systems (see Exhibit 3). Transit ridership declines, which have been heavily concentrated in bus services (see Exhibit 4), have multiple causes, ranging from growing use of alternative transportation methods, such as ridesharing or biking, to a rising tendency to telework. Workers who would ride mass transit daily but now choose to work from home even one or two days per week reduce their own personal ridership up to 40%.

Exhibit 3

Transit ridership is declining even as job growth remains strong

Compound annual growth, year ending June 30, in employment and ridership, 2014-2019



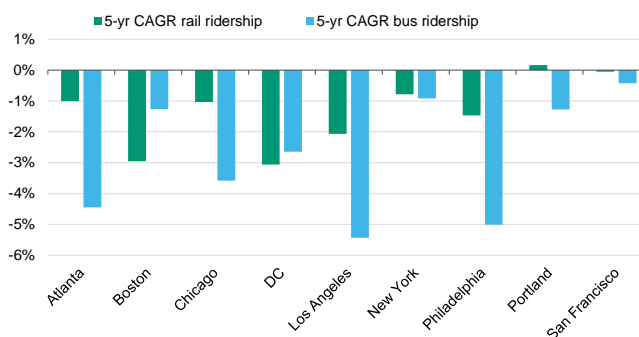
Ridership data are based on those systems listed in Exhibit 1. Ridership in the City of San Francisco consists of the sum of BART and SFMTA ridership.

Source: US Bureau of Labor Statistics and the Federal Transit Administration

Exhibit 4

Ridership declines are heavily concentrated in bus services

Change in ridership by mode, year ending June 30, 2014-2019



Ridership data are based on those systems listed in Exhibit 1. Ridership in the City of San Francisco consists of the sum of BART and SFMTA ridership.

Source: Federal Transit Administration

Though the decline in ridership puts downward pressure on transit fares, passenger revenue is rarely the dominant source of transit funding, as shown in Exhibit 5. Among the 10 systems in this report, only five bring in fares that account for 30% or more of total operating revenue; in only three of these are fares a plurality of revenue. Once we expand the revenue base to include both operating

and capital funding, only three enterprises continue to bring in fares that are 30% or more of revenue. Only the [San Francisco Bay Area Rapid Transit District](#) (BART) and the NYCTA count on fares for a plurality of combined operating and capital funding.

Exhibit 5

Fares are rarely the dominant source of funding among mass transit systems

Composition of fiscal 2018 revenue

	Operating revenue				Operating revenue plus capital grants			
	Fares	Subsidies	Direct taxes	Other	Fares	Subsidies	Direct taxes	Other
BART	49%	6%	39%	7%	41%	21%	32%	6%
NYCTA	45%	12%	37%	6%	40%	23%	32%	5%
WMATA	40%	56%	0%	3%	26%	71%	0%	2%
CTA	39%	22%	34%	5%	30%	39%	26%	4%
SEPTA	34%	62%	0%	4%	24%	72%	0%	3%
MBTA	29%	16%	44%	11%	24%	31%	36%	9%
TriMet	18%	19%	58%	5%	16%	31%	49%	4%
MARTA	18%	10%	65%	7%	17%	13%	63%	7%
SMFTA	15%	58%	0%	27%	12%	67%	0%	21%
LACMTA	6%	21%	69%	5%	5%	30%	61%	4%

Operating revenue consists of revenue reported in financial statements as operating and nonoperating revenue. Nonoperating revenue is included because that is how most enterprises classify operating subsidies and direct taxes.

Capital grants are included as 'subsidies' on the right half of the table because they always come from other governments. Capital funding in this table does not include proceeds of bonds issued by the transit systems.

Source: Transit enterprise audited financial statements and Moody's Investors Service

On a combined operating and capital funding basis, nearly all 10 of these transit enterprises rely on revenue sources other than fares to finance 70% or more of their activities. In the case of NYCTA, the share of revenue from sources other than fares will only rise in the coming years as it begins to collect the proceeds of the city's new congestion fee to finance part of its capital program.

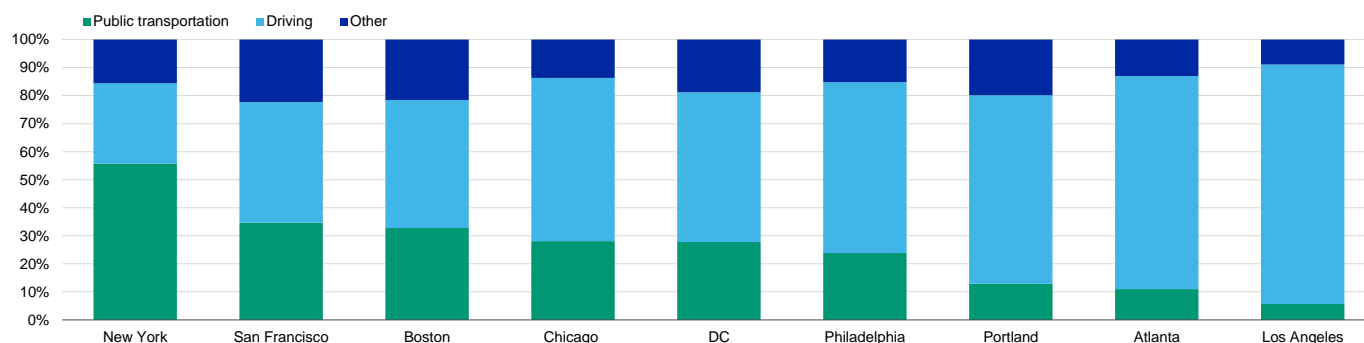
Several transit enterprises are crucial to the economic vitality of the regions they serve, suggesting government support will be maintained

Despite falling ridership in many of the nation's largest transit systems, those agencies remain vital to the cities they serve, suggesting government support will be maintained. For instance, ridership is down over the past several years on systems that serve New York, Boston, Chicago and the [District of Columbia](#) (DC, Aaa stable), but in each of those cities at least 28% of workers still use public transportation to get to and from work (see Exhibit 6). Maintaining the systems that move these people around will likely remain an objective of governments serving the areas.

Exhibit 6

Public transportation remains an important mode of commuting for workers in several cities

Mode of commuting by workers within select cities



The data mostly show utilization within the selected city. However, there are some exceptions. The Chicago data include the City of Evanston because the CTA provides transit service between the two cities. The DC data include a few cities surrounding the District of Columbia for the same reason. The San Francisco data are also only associated with the city. If we expand the geographic area to include several communities outside San Francisco that are served by BART, public transportation utilization falls, but remains high at between 25% and 30%.

'Driving' includes workers driving alone, carpooling or using taxicabs. 'Other' includes bicycling, walking and working from home.

Source: US Census Bureau's American Community Survey 2017

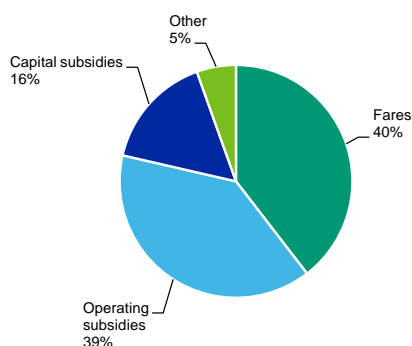
WMATA

The [Washington Metropolitan Area Transit Authority](#) (WMATA), which serves the greater District of Columbia region, is a highly essential system that has already seen growth in its governmental support. A decade ago, WMATA brought in 40% of its operating and capital revenue from its farebox, as shown in Exhibit 7. As of fiscal 2018, fares accounted for less than 30% of the authority's combined operating and capital revenue. From fiscal 2013 through fiscal 2018, total WMATA ridership fell 15%, partly due to a very aggressive maintenance campaign over 2016 and 2017.

Over the past several years, the authority's government partners – the District of Columbia and the states of [Maryland](#) (Aaa stable) and [Virginia](#) (Aaa stable) – steadily increased their funding of the authority, especially over the past five years as ridership fell. The three governments are set to continue to increase their support of the authority this fiscal year, further reducing reliance on fares, as shown in Exhibit 8. All three adopted legislation last year that committed them, beginning in fiscal 2020, to provide an aggregate \$500 million in new capital funding to support the authority's capital improvement program.

Exhibit 7

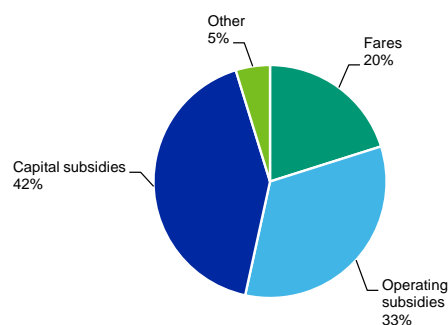
Composition of WMATA's total funding, fiscal 2008



Source: WMATA's fiscal 2008 audited financial statements

Exhibit 8

Composition of WMATA's total funding, fiscal 2020 budget



Source: WMATA's adopted fiscal 2020 budget

Though essential transit enterprises will maintain support from their local and state governments, this does not mean there will be no disruption in that support. Enterprises reliant on government subsidies are vulnerable to shifting political winds or rising economic and financial challenges faced by the higher government. When political support for an enterprise is strong and the sponsoring governments are fiscally stable, the enterprise can be confident in the availability of the subsidies. But the near-term likelihood of those subsidies can weaken when economic and fiscal health or political support changes.

The NYMTA and the CTA are cases where politics or state fiscal stress have been obstacles to revenue growth, though both agencies expect to see increased government funding soon.

NYMTA

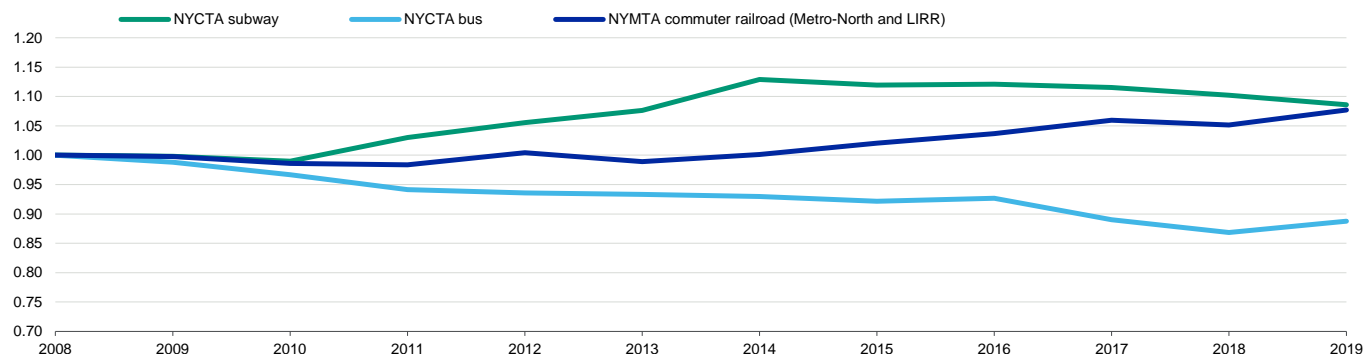
The NYMTA is vital to the City of New York, serving its five boroughs and providing commuter service to communities north and east of the city via the Metro-North Railroad and the Long Island Rail Road (LIRR). However, the city has little oversight of its operations because the authority is governed by the [State of New York](#) (Aa1 stable). The state recognizes the importance of the authority to the city's economy and, therefore, the state's economy, but must balance its support of the authority with other state functions. In the past, this complex governance of the system has caused tension in funding the NYMTA.

More recently, however, the state [enacted a new congestion fee on vehicles entering lower Manhattan](#). Revenue from the fee will provide the NYMTA, which faces a deferred maintenance backlog, a significant funding injection for critical infrastructure investment and service improvements. The approval of the congestion pricing plan was a key step in resolving uncertainty over the NYMTA's funding future, which has been a looming fiscal challenge for the authority, the city and the state. It will also further reduce the NYMTA's reliance on fares at a time when ridership has yet to fully stabilize on several of its modes of transportation (see Exhibit 9).

Exhibit 9

NYMTA commuter railroad ridership fared better than subway and bus ridership since 2014

Annual ridership, year ending June 30, indexed to 2008



Source: Federal Transit Administration

CTA

The CTA, which largely serves the City of Chicago, has the third highest dependence on fares among the enterprises discussed in this report. The authority's fiscal 2019 forecast assumed fare revenue of \$588 million, up a mere 1% from \$583 million in fiscal 2014. In the same period, the authority has had compound average annual growth in its statutory sales taxes of 2.6%. However, the largest component of combined operating and capital funding remains government subsidies, which have remained flat at best in most of the past several years. These subsidies largely consist of matching funds from the [State of Illinois](#) (Baa3 stable), discretionary allocation of regional sales taxes of the [Regional Transportation Authority](#) (RTA, A2 stable), and a portion of Chicago real estate transfer taxes.

Among the enterprises in this report, the CTA has had the lowest rate of growth in operating revenue (see Exhibit 10). Slow growth in fares has been one factor, but another has been little to no growth in governmental subsidies (see Exhibit 11). The State of Illinois, given its own fiscal challenges, has had little flexibility to increase its funding of the RTA, leaving that authority with fewer resources to pass on to the CTA.

Exhibit 10

The CTA's operating revenue growth has been slowest among the 10 systems discussed

5-year compound annual growth rates, fiscal years 2014-2018

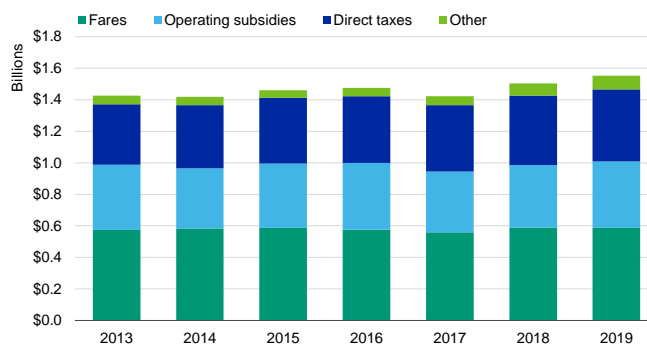
	Operating revenue	Total revenue
SFMTA	7.3%	6.3%
BART	5.3%	-1.0%
LACMTA	5.2%	7.0%
MBTA	4.9%	4.7%
MARTA	4.3%	3.6%
TriMet	4.2%	3.9%
WMATA	3.1%	3.7%
NYCTA	2.1%	3.1%
SEPTA	2.0%	5.5%
CTA	1.1%	-1.6%

Source: Transit enterprise audited financial statements and Moody's Investors Service

Exhibit 11

Several sources of CTA operating revenue have been nearly flat since fiscal 2013

The CTA's annual operating revenue by fiscal year



Source: CTA's audited financial statements and fiscal 2019 adopted budget

However, the State of Illinois is now planning to increase transit funding. Its recently approved capital plan includes \$3.6 billion in new funding for the RTA over the next six years that will largely be financed by the state's increased gas tax. The RTA will pass a portion of this funding to the CTA, increasing the latter's resources and aiding investment in its infrastructure.

Tax revenues rising for those agencies that rely on them

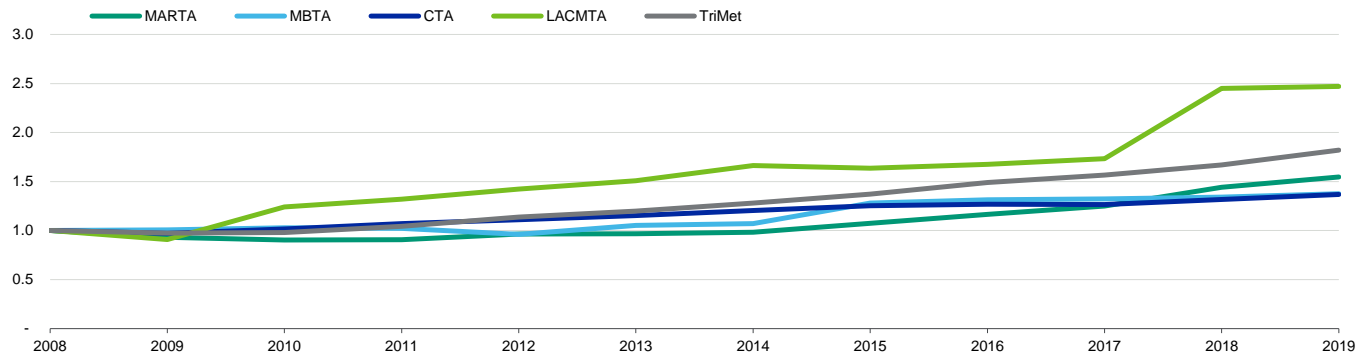
In cities where the use of public transportation is less widespread, greater financial support comes from the tax bases directly served by the enterprises. In these cases – the [Metro Atlanta Rapid Transit Authority](#) (MARTA), the [Tri-County Metropolitan Transportation](#)

[District of Oregon](#) (TriMet) in the [City of Portland](#) (Aaa stable) and the [Los Angeles County Metropolitan Transportation Authority](#) (LACMTA) – the agencies are less reliant on other governmental entities, though each still receives some support from cities, counties or their respective state government. In each of these places, the taxes collected and used by the transit system have been growing with those cities' economic expansions (see Exhibit 12). The CTA and MBTA also benefit from the collection of dedicated taxes. In the case of the MBTA, the [Commonwealth of Massachusetts](#) (Aa1 stable) has established a statutory tax revenue floor that ensures the authority's sales taxes rise by the lesser of 3% or the change in the consumer price index each year.

Exhibit 12

Transit-dedicated taxes are growing steadily in many regions

Annual tax collections, indexed to fiscal 2008



MARTA, MBTA, CTA and LACMTA collect sales taxes dedicated to the transit enterprise. TriMet collects a payroll tax. Starting in fiscal 2018, LACMTA's collections reflect a voter-approved increase in taxes.

In the case of CTA, the chart shows collections of the authority's own statutory sales tax. The CTA also receives discretionary funding from the RTA, which is largely financed by the RTA's own sales tax.

Source: Transit enterprise audited financial statements and budget documents

External funding for transit enterprise capital projects has grown steadily, allowing the agencies to invest in system improvements and expansion

Federal, state and local governments increased their funding for capital improvements by most of the 10 transit systems between 2013 and 2018 (see Exhibit 13). In the aggregate, capital grants increased 5% annually, on average, among these systems. Growth in capital grant revenue demonstrated continued external support by sponsoring state or local governments, as well as the federal government, despite ridership declines.

Exhibit 13

Capital grants to most of the 10 largest transit agencies grew over the past five years

Capital grants received, by transit enterprise fiscal year (\$ millions)

	2013	2014	2015	2016	2017	2018	CAGR
LACMTA	\$135.7	\$221.9	\$463.5	\$456.2	\$319.5	\$618.9	35.5%
SEPTA	\$223.0	\$245.0	\$355.9	\$526.0	\$539.5	\$542.2	19.4%
NYCTA	\$773.8	\$882.4	\$1,059.3	\$891.2	\$1,198.0	\$1,416.4	12.9%
WMATA	\$773.6	\$555.6	\$1,072.4	\$930.1	\$942.1	\$983.6	4.9%
MBTA	\$408.1	\$501.7	\$581.3	\$560.5	\$510.2	\$486.9	3.6%
SMFTA	\$325.3	\$313.7	\$378.8	\$325.8	\$383.8	\$377.4	3.0%
TriMet	\$96.2	\$209.8	\$110.5	\$8.5	\$103.7	\$109.7	2.7%
CTA	\$678.1	\$531.0	\$563.2	\$485.7	\$421.4	\$434.5	-8.5%
MARTA	\$47.3	\$71.2	\$73.1	\$32.4	\$26.4	\$30.0	-8.7%
BART	\$484.0	\$429.8	\$314.5	\$399.3	\$332.9	\$197.4	-16.4%
Total	\$3,945.2	\$3,962.1	\$4,972.5	\$4,615.4	\$4,777.6	\$5,197.0	5.7%

We take capital grant figures from each enterprise's annual statement of cash flow. In the case of the NYCTA, we use the amounts reported in its annual statement of cash flows as 'reimbursements of capital project costs from MTA' as a proxy for capital grants received and used for NYCTA purposes.

Source: Transit enterprise audited financial statements

Where capital grants declined over 2013-2018, it does not mean those systems did not invest in their infrastructure. The capital grant figures shown above do not include, for example, proceeds of bonds issued by the agencies. Exhibit 14 below shows that both the CTA and BART increased their capital assets despite a reduction in capital grants. These agencies could have utilized local revenue or bond proceeds to continue to make investments in capital infrastructure.

Exhibit 14

Most systems increased capital assets over the past several years, with growth driven by NYCTA, LACMTA and WMATA

Annual value of capital assets, by transit enterprise fiscal year (\$ billions)

	2013	2014	2015	2016	2017	2018	CAGR
NYCTA	\$36.1	\$37.4	\$38.6	\$39.8	\$41.1	\$43.0	3.6%
LACMTA	\$9.0	\$10.0	\$11.5	\$12.6	\$13.5	\$14.6	10.2%
WMATA	\$8.7	\$8.8	\$11.8	\$12.2	\$12.4	\$14.5	10.7%
MBTA	\$8.3	\$8.6	\$8.9	\$9.1	\$9.5	\$9.9	3.7%
BART	\$6.5	\$6.9	\$7.1	\$7.4	\$7.7	\$8.0	4.1%
CTA	\$4.4	\$4.8	\$5.0	\$5.0	\$4.9	\$4.9	2.1%
SEPTA	\$3.7	\$3.6	\$3.8	\$3.9	\$4.2	\$4.5	3.9%
SFMTA	\$2.2	\$2.5	\$2.7	\$3.1	\$3.6	\$4.2	14.0%
TriMet	\$2.6	\$2.9	\$3.0	\$3.0	\$3.0	\$3.0	3.2%
MARTA	\$3.0	\$3.1	\$3.0	\$3.0	\$2.9	\$2.9	-1.0%
Total	\$84.6	\$88.5	\$95.5	\$99.2	\$102.7	\$109.5	5.3%

Source: Transit enterprise audited financial statements and Moody's Investors Service

Improvements in capital assets, net of depreciation and disposals, over the last five years indicate a net increase in a transit systems' vehicles, guideways, stations and other assets that are vital to the core operations and reliability of the systems. However, there are some limitations when using capital assets to evaluate infrastructure quality. Many capital assets' actual useful lives extend beyond the useful life assumed in the audited financial statements. As such, many vehicles or other assets may be contributing to the system's core function without being counted in their capital asset base.

Where there was a decline in capital assets over this period, such as with MARTA, the decline is expected to be short-lived because the authority is poised to undertake a large-scale expansion in the next three to five years. In response to the growth in the [City of Atlanta](#) (Aa1 stable) and the wider region, the authority implemented the More MARTA Program. This \$2.7 billion project aims to both improve existing services and expand bus and rail options over the next 40 years. An investment of this size will begin to reverse the capital asset declines experienced over the last five years.

Federal funding has grown steadily since 2010, though future funding is uncertain

For capital investment, local governments (47% of total capital funding) and the federal government (37% of total capital funding) provide the largest sources of external funding (see Exhibit 15). Local sources consist of taxes and bond proceeds. Federal funding comes from multiple individual programs but are primarily derived from the mass transit account of the Highway Trust Fund. According to the American Public Transportation Association 2019 Factbook, federal funding of public transportation operating and capital from these various sources has grown over the last ten years, from \$10 billion in fiscal 2010 to \$13.5 billion in fiscal 2019.

Exhibit 15

Local governments and the federal government make up nearly the entirety of public transportation capital funding sources

Nationwide public transportation funding sources, 2017 (\$ billions)

	Operating revenue		Capital funding		Total	
	Amount	Share of total	Amount	Share of total	Amount	Share of total
Fares and other operating income	\$18.5	36%	\$0.0	0%	\$18.5	26%
Local governments	\$16.4	32%	\$9.5	47%	\$25.8	36%
State governments	\$11.7	23%	\$3.4	17%	\$15.1	21%
Federal government	\$4.3	9%	\$7.5	37%	\$11.8	17%

Local government funding includes local taxes, toll transfers, and bond proceeds.

Source: American Public Transportation Association 2019 Public Transportation Fact Book

The historically steady federal funding for mass transit arises from the formulaic way in which these dollars are allocated. Nearly 80% of federal funding for transit comes from the transit account of the Highway Trust Fund. The remaining 20%, which is solely for the Capital Investment Grants program, comes from the US government's general fund. The two largest programs are the Urbanized Area Formula, which receives 39% of all federal transportation funding, and the State of Good Repair Program, which receives 18%. Neither of these programs allocate dollars based on ridership trends, thus insulating transit entities from challenges due to declining ridership.

Systems poised to undertake capital improvements may contend with worsening ridership trends in the near term

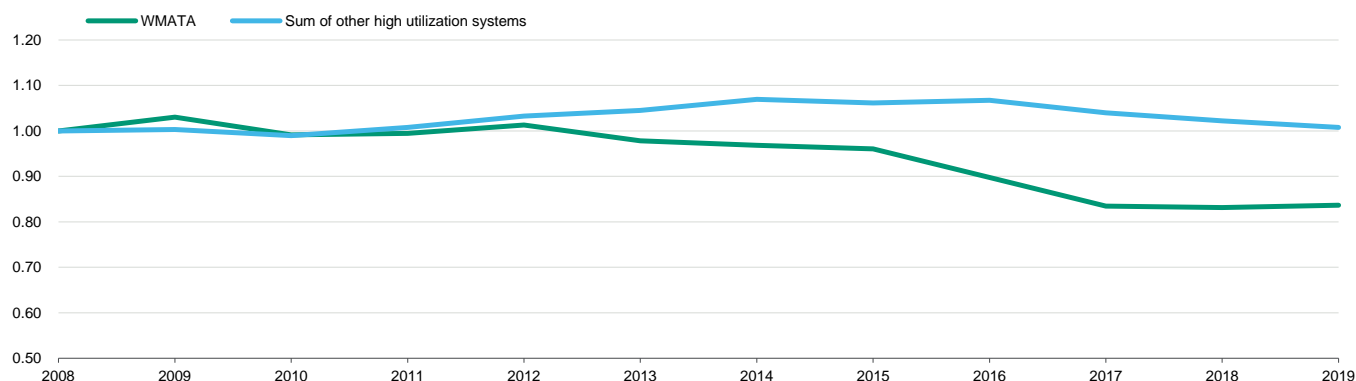
Transit agencies must constantly balance the needs of investing in the system to improve service and reliability against creating near-term service disruptions that might exacerbate negative ridership trends. Once commuters find alternative transportation options, it can become difficult to get them to reenter the system once the improvements are complete. Growing external support for transit agencies eases some of these pressures and gives them a longer runway to recover lost ridership.

WMATA provides an illustrative example of this phenomenon. The authority undertook an aggressive capital improvement and maintenance campaign in late fiscal 2016 to address critical safety issues. The initiative, known as SafeTrack, was completed in June 2017 and successfully consolidated three years of planned capital improvements into one year. However, the closure of stations and disruption in the normal travel schedule had a very large negative impact on ridership, particularly on rail services. Exhibit 16 shows that while all other essential systems saw some ridership declines, WMATA's declines accelerated, first in the aftermath of very publicized accidents and then further during the authority's aggressive improvement program.

Exhibit 16

WMATA's ridership decline was more significant than that of other high utilization transit agencies and coincided with safety concerns and aggressive capital investments

Annual ridership, year ending June 30, indexed to 2008



'Sum of other high utilization systems' consists of ridership on NYCTA, SFMTA, BART, MBTA, CTA and SEPTA, all systems serving cities where more than 20% of workers commute via public transportation.

Source: Federal Transit Administration

MBTA is also planning to shut down certain stations within the system to accelerate repairs in response to an influx of train derailments in recent months. State lawmakers are also considering a large \$18 billion transportation bond, of which \$6 billion would be allocated to transit improvements. The planned and potential projects will improve system reliability over the long term, though there may be service disruptions and further drops in ridership while the work is being performed.

Appendix

Exhibit 17

Select data of other mass transit systems with a Moody's bond rating

Transit enterprise	Principal city served	Annual transit ridership (millions)	Debt outstanding (fiscal 2018; millions)	Debt pledge	Seniormost bond rating	5-year CAGR ridership
Denver Regional Transportation District	Denver, CO	94.8	\$3,210.4	Sales tax	Aa1 stable	-1.5%
San Diego Metropolitan Transit System	San Diego, CA	85.3	\$16.4	Transit revenue	Aa3 stable	-1.4%
Metropolitan Transit Authority of Harris County	Houston, TX	81.9	\$1,120.2	Sales tax	Aa2 stable	1.4%
Miami-Dade Transit	Miami, FL	80.5	\$1,263.0	Sales tax	A1 stable	-6.2%
Dallas Area Rapid Transit	Dallas, TX	66.7	\$3,210.9	Sales tax	Aa2 stable	-0.4%
Utah Transit Authority	Salt Lake City, UT	38.7	\$2,243.0	Sales tax	Aa2 stable	-0.9%
Bi-State Development Agency	St. Louis, MO	36.6	\$641.2	Sales tax	Aa2 stable	-5.3%
Greater Cleveland Regional Transit Authority	Cleveland, OH	34.0	\$96.5	Sales tax	Aa1 stable	-7.0%
Central Puget Sound Transit Authority	Seattle, WA	25.8	\$2,267.9	Sales tax	Aaa stable	17.8%
Sacramento Regional Transit District	Sacramento, CA	19.9	\$118.0	Farebox revenue	A3 stable	-5.6%
New Orleans Regional Transit Authority	New Orleans, LA	18.3	\$108.9	Sales tax	Aa3 stable	-2.3%

Ridership data cover the 12 months through June 2019. As with the 10 systems discussed in this report, ridership does not include commuter rail or commuter bus service.

The rapid growth of Central Puget Sound Transit Authority ridership is partly due to its status as one of the newest transit agencies in the US. If we combine the Central Puget Sound Transit Authority with the much larger King County Department of Transportation (not rated), then ridership is 153.9 million and the 5-year CAGR is 2.6%.

Source: Transit enterprise audited financial statements, Federal Transit Administration, and Moody's Investors Service

Moody's related publications

Sector In-Depth

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- » [Mass Transit - US: Prolonged federal shutdown will be credit negative for NJ Transit and other transit systems](#), January 2019

Issuer In-Depth

- » [Metropolitan Transportation Authority, NY - Growing income inequality will make fare hikes more challenging yet increase potential for subsidies](#), August 2019
- » [Metropolitan Transportation Authority, NY - FAQ: MTA's operating and fiscal challenges in the next recession](#), March 2018

Issuer Comment

- » [Metropolitan Transportation Authority, NY - MTA funding plan gains traction, a credit positive](#), February 2019

Credit Opinion

- » [Washington Metropolitan Area Transit Authority, DC - Update to credit analysis following upgrade to Aa3](#), June 2019
- » [Metropolitan Transportation Authority, NY - Update following outlook change to negative](#), December 2018

Endnotes

- 1 Government subsidies are largely provided by state and local governments, though the federal government may provide a modest amount of operating support. The federal government is more active in providing capital grants, though state and local governments also fund some transit capital improvements. Where taxes are in place to directly support a transit enterprise, they tend to be sales taxes either enacted by the state or approved by

voters, and, in either case, dedicated to the transit enterprise. There are exceptions to this, however. Payroll taxes are a major source of funding for both NYCTA and TriMet.

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