



HOW TO SAVE NEW YORK CITY'S
Infrastructure: DEDICATE REVENUES

There have been periods in New York City's history, most notably during the fiscal crisis of the 1970s, when infrastructure was neglected with disastrous results.

The most resonant images of this decline come from the subway system of this era: track and signal failures due to deferred maintenance were common. These and other equipment failures led to train delays, entire subway lines being taken out of service, and several well-publicized accidents.

The City's roadways fared little better during this time. When a portion of Manhattan's elevated West Side Highway collapsed in 1973, inspectors found that much of the roadway was unsafe, and the road was closed from the Battery all the way to 57th Street.

The West Side Highway remained out of service and was not fully replaced until 2001.

Recent history has been far more encouraging. Looking at capital expenditures in 2011, the Building Congress found that government invested more than \$18 billion in that one year alone throughout the five boroughs, funding general upkeep, as well as critical network expansions including the Second Avenue Subway, the Third Water Tunnel, new public schools, and parks.

However, the public sector has relied increasingly on borrowing to fund these improvements. While debt financing is vital and entirely appropriate, as it seeks to spread large upfront costs over the generations of New Yorkers who will benefit, it also increases the cost of projects. All levels of government face a future of having to devote increasing portions of their revenues just to meet debt service obligations, leaving less money available for future capital needs.

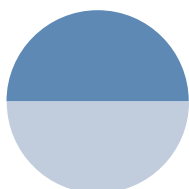
This report looks closely at how New York City's infrastructure is paid for and the limitations of existing funding streams. **The Building Congress in this report recommends new, dedicated revenue sources to maintain, grow, and strengthen the City's infrastructure network.** Most of the new revenues proposed here are premised on the "user pays" model, linking fees and charges directly to the networks that require upkeep and new investment.

Government must also approach capital program management more strategically. **Use of public-private partnerships should be expanded** to open up opportunities for creative project financing and more efficient project delivery.

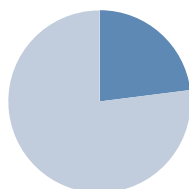
The report also recommends greater reliance on transparent, independent public entities to receive dedicated revenues, finance capital projects, and ensure new funds are spent only for their intended use.

All Public Investment in New York City by Spender

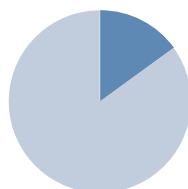
2011 Total: \$18.2 Billion



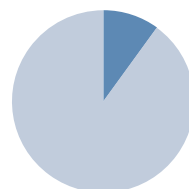
New York City
50% • \$9.1b



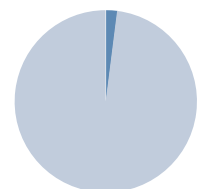
MTA
23% • \$4.1b



Port Authority
15% • \$2.7b



New York State
10% • \$1.9b

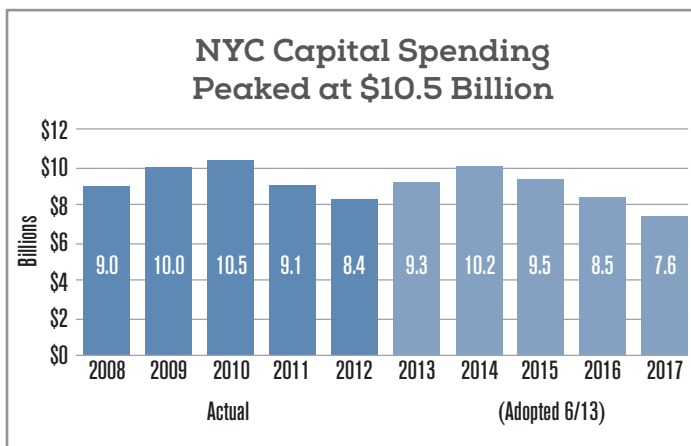


Federal Government
2% • \$0.3b

The Players

Investment in New York City's infrastructure is shared by a number of government entities.

NEW YORK CITY • The City of New York is the single biggest investor in its own infrastructure. In FY 2011, the City spent \$9.1 billion to maintain and improve the systems under its control. The largest portion – \$3.1 billion – was invested in environmental infrastructure – water, sewers, and sanitation; \$2 billion went to public schools; and \$1 billion went to transportation. The additional billions went to improve parks, public hospitals, and other government assets, including technology.



The vast majority (95 percent) of the City of New York's capital spending is funded through debt. The City issues a wide variety of bonds, backed primarily by income and property taxes.

The large projects for water and sewer improvements deserve special mention, since the borrowing to provide them is supported by a dedicated revenue stream. Individual property owners are assessed charges based on actual water and sewer usage. These revenues are directed to the Water Finance Authority (WFA) and are devoted exclusively to the operations and capital program of the water and sewer system, an arrangement that has enabled the modernization and upkeep of the largest water supply and wastewater treatment systems in the country.

MTA • The state-controlled Metropolitan Transportation Authority (MTA) is responsible for the city subway system, commuter rail, bus service, and nine bridges and tunnels. The MTA spent \$4.1 billion on capital improvements within the City in 2011, continuing a 30-year, \$90 billion system restoration and modernization.

An increasing portion of the MTA capital program is debt financed, backed primarily by rider fares, driver tolls, and a number of dedicated taxes and fees. Direct city and state contributions provide a much smaller share than they used to. The MTA's first two capital campaigns (1982-1991) relied on debt financing for only 30 percent of its funding; the bulk came from direct federal, state and city subsidies. In contrast, the MTA's 2010-2014 capital program relies almost twice as much on debt financing, at nearly 60 percent.

PORT AUTHORITY • The Port Authority of New York & New Jersey spent \$2.8 billion within the City's boundaries in 2011 to maintain and upgrade its airports, ports, bridges and tunnels, bus terminal and PATH rail system, and to rebuild the World Trade Center.

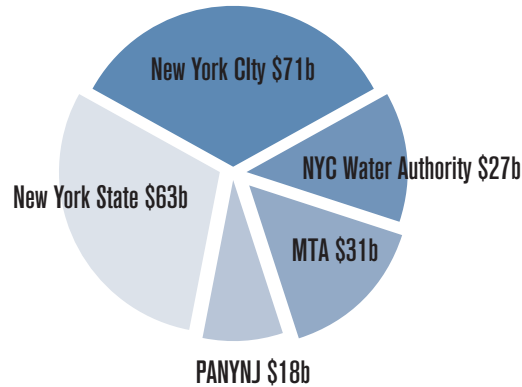
To pay for its capital projects, the Port Authority issues bonds backed by tolls, leases, airport fees, and other charges. The Port Authority collects its own revenues, which are protected and used for their intended purpose. These revenues also fund day-to-day operations.

STATE AND FEDERAL GOVERNMENTS • In 2011, the State of New York spent approximately \$1.9 billion in the City on State-controlled highways and bridges, institutions of higher education, and environmental infrastructure. The State's spending is largely paid for by bonds issued by various State authorities, State tax revenues, and federal grants.

While the federal government directly spent only about \$330 million in New York City, it also allocates billions of dollars in grants to several State entities, most notably the MTA.

Outstanding Debt 2011* \$210 Billion**

* Fiscal year varies by entity.
Based on data from official documents.
** Numbers rounded.



A Growing Debt Burden

Together, the total debt incurred by the City and its Water Finance Authority was \$98 billion in 2011; today it is about \$100 billion. The City expects it to approach \$109 billion by 2017.

Servicing this debt is a major fixed expenditure facing the taxpayers of the City of New York. Recently, the cost of repaying debt has absorbed about \$5 billion out of the City's general revenues annually. The City forecasts it will spend about \$7 billion a year between 2014 and 2017 servicing its debt.

To its credit, the City – indeed all levels of government – has been able to take advantage of interest rates that are at post-World War II lows, allowing it to access more capital and maintain a robust spending program. But this very low rate climate is already starting to recede.

The major rating agencies have advised that the City should devote no more than 17 percent of its tax revenue (excluding user fees) to debt service. Generally, the City's debt service takes up around 15 percent of tax revenue, but it is projected to take up an increasing share in the coming years.

The MTA has also seen a rapid run-up of debt. The State Comptroller recently estimated that the MTA's annual debt service payments are

likely to rise from 16 percent of all revenue in 2011 to 22 percent by 2018. And this figure does not include *any new* financing required for the 2015-2019 capital program, which he estimated could require well over \$20 billion in new money.

While the MTA benefits from a number of dedicated taxes and fees that help support the capital program, those revenues are volatile and do not enjoy the same level of protection as the revenues generated by the WFA. In fact, over the past four years, the State Legislature has approved three diversions and outright reductions to dedicated tax and fee revenues that had already been appropriated. Further, the regional Payroll Mobility Tax, which provided the MTA with \$1.5 billion in revenue in 2012, faces a lawsuit challenging its constitutionality, but the State continues to collect the tax while the case moves through the courts.

Even the Port Authority, which receives a predictable set of revenue streams, is feeling the pinch. Faced with the massive cost of rebuilding the World Trade Center, along with the ongoing need to upgrade its core facilities, the Port recently enacted a series of fare and toll hikes, which was the subject of a lawsuit and drew intense scrutiny from elected officials on both sides of the Hudson River.

Recommendations

In this period of fiscal austerity, the MTA has notably found billions of dollars of efficiencies in its capital program, reducing its overall cost while maintaining the same projects. Other government agencies should replicate this rigorous cost management effort, which should be continuous.

Nevertheless, without new, dedicated revenue sources, government cannot maintain its current level of support for critical capital investments

– much less make the additional investments necessary to harden its infrastructure in the wake of Superstorm Sandy and climate change.

The Building Congress recommends that government carefully examine and work to adopt the following measures.

TOP LINE RECOMMENDATIONS

UNIFORM TOLL POLICY • In 2007, Mayor Michael Bloomberg proposed, and the City Council approved, a plan to charge drivers for access to Manhattan’s core business districts. Revenues were to be dedicated to regional mass transit infrastructure. That proposal, however, was shelved by the State Legislature.

A refined plan currently being discussed proposes charging vehicles a more uniform fee for crossing bridges and tunnels within the five boroughs, or for entering Manhattan below 59th Street. The plan could initially lower the cost of some crossings, while generating more than a billion dollars of new revenue annually. Polling taken in 2008 showed public support for this policy, particularly if the revenues are dedicated to mass transit.

PUBLIC-PRIVATE PARTNERSHIPS •

Government can better stretch its limited resources by deploying public-private partnerships (PPPs). The term PPP encompasses a variety of collaborative design, delivery, financing, and maintenance arrangements between government and the private sector. All have the potential to reduce project costs. For example, design-build construction permits a single development consortium to undertake an entire project from

design to completion. In this way, the design and construction phases proceed in tandem, shaving months or even years off a project’s schedule. PPPs also can achieve cost savings by shifting risk to the contractor for design delays and construction cost overruns. They also permit creative financing options not typically available to government that can reduce the long-term cost of maintaining an asset after its completion.

While New York has been slow to embrace the concept, PPPs are being employed for two of the largest bridge construction projects of the past 50 years – the Goethals and Tappan Zee Bridges. If done correctly, each will demonstrate that government can create the next generation of infrastructure more efficiently and without ceding control of its assets to the private sector.

VMT FEES • In July, Oregon became the first state to approve a version of a vehicle miles traveled fee (VMT) as a partial replacement for its gas tax, which has produced declining revenues for the state as cars become more fuel efficient. The Oregon program, now being implemented on a limited basis, charges drivers according to how many miles they have traveled instead of taxing fuel sales, a fee that more accurately reflects each vehicle’s actual use of the state’s roads.

New York State funds transportation through a Dedicated Highway and Bridge Trust Fund, underwritten by a variety of taxes on petroleum. Once envisioned as a stable, pay-as-you-go funding mechanism for the State’s road and bridge infrastructure, the Fund is used increasingly to service existing debt and requires a substantial subsidy to meet its other obligations. The Building Congress has reported that the Fund can no longer support significant new transportation infrastructure investment. If, with time, the VMT proves operational, it offers a potential alternative to generate stable, cost-indexed funds for future highway investments.

FINANCING ENTITIES • The WFA plays an essential role for the City – issuing debt backed

by water and sewer fee revenues. Water and sewer fees are established by the New York City Water Board, which is mandated under state law to set rates sufficient to meet the system's obligations. The revenues dedicated to bond repayment are constitutionally protected – creating a lock box – to ensure obligations are met. Since their creation in 1985, the WFA and the Water Board have maintained a stable financial outlook and allowed the City to plan and implement system expansion and maintenance outside the normal budget process, making rational, sustained investments in the system that will pay dividends for the next century, ultimately saving the City money and protecting public health.

In order to provide long-term stability, proposals for new revenues for infrastructure should employ models similar to the WFA, which guarantee revenues are collected and allocated independently of the normal budget process. For example, New York City's 2007 congestion pricing plan proposed a public authority to collect these new revenues and issue debt for regional transportation projects. Similar models could be used for other revenue streams discussed here, including a sanitation financing entity or a parking and transportation financing entity.

ADDITIONAL ILLUSTRATIONS

PARKING • *Residential Parking Permits.*

New York City possesses an estimated 3.4 million to 4.4 million unmetered on-street parking spaces from which it derives zero revenue. Of America's 10 most populous cities, New York is the only one without a residential parking permit program, charging residents a fee in return for easier and preferred access to a parking spot. Such programs provide a wealth of benefits – including reduced congestion and pollution, improved residential quality of life, and the ability to generate new revenues, which could be dedicated to the \$2 billion annual cost of maintaining and modernizing the City's transportation network.

Pay-by-phone parking in commercial areas is another innovation that could increase revenues while providing a benefit to users. The system allows drivers to pay for parking with a credit card via an application on their mobile phone or computer. In addition, advanced pay-by-phone technology, used in other major cities, like London, would allow the City to introduce more sophisticated metering along already priced commercial thoroughfares and enhance enforcement and revenue collection.

SANITATION • New York City spends \$2 billion annually to collect and then export its trash, which New Yorkers generate at a rate of 18 tons per minute. Residential disposal costs, which are borne entirely by City taxpayers, have quadrupled in the past 20 years. The City can broaden its revenue base and protect its general fund by charging fees that reflect each user's impact on the system.

Pay-As-You-Throw (PAYT) requires residents to pay based on how much household waste they generate. Such a system, which has proven effective in Zurich and Seoul and more locally on Roosevelt Island, would reduce costs by creating incentives for residents to recycle more and waste less. The revenues generated should be dedicated to support ongoing sanitation capital programs and operations.

Waste-to-Energy (WTE) technology provides low-cost, environmentally sound waste disposal. Instead of carting millions of tons of solid waste out of the City each year to be buried in out-of-state landfills, WTE uses facilities equipped to combust solid waste and convert it into usable power. A Citizens Budget Commission analysis also found revenue potential from energy generation; however, this requires new investment as the City's existing capacity is extremely limited.

Many large European cities have won public support for and operate WTE facilities. As with PAYT, revenues should be dedicated to support sanitation operations and investment.

Great cities cannot afford to stand still. New York's elected officials deserve credit for undertaking more than \$18 billion of public capital spending in 2011 alone. But as this report demonstrates, there is inadequate revenue to service the City's, the MTA's, and the rest of the public sector's growing debt burdens and also meet future needs.

In order to maintain, expand, and adapt critical networks for the future, government must finally embrace the types of user-related charges that have proven effective in other cities and with the City's own water and sewer system.

- **Elected leadership should approve a uniform toll policy to fund the City's aging transportation network.**
- **Elected officials should embrace the creative project delivery and financing opportunities offered by public-private partnerships.**
- **New revenues should be protected through the use of transparent public entities like the Water Finance Authority to receive revenues directly and use them to issue debt responsibly for new infrastructure.**
- **Additional revenues to support transportation infrastructure investment should be developed from parking and VMT fees.**
- **Household waste could be priced. The City could use PAYT fees and income from WTE sales to fund environmental infrastructure improvements.**

In order to implement these recommendations, the Building Congress reiterates its long-standing call for a Deputy Mayor for Infrastructure with the responsibility to coordinate the City's massive infrastructure program, and to provide leadership to ensure that permanent, dedicated revenues are put in place to meet the City's growing capital needs.

The Building Congress has offered a number of options to support continued investment in New York City's essential infrastructure. The City's elected and civic leaders should discuss these and consider other viable revenue generating alternatives. There is no more pressing policy issue for New York City.

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