

## SECTOR IN-DEPTH

22 January 2019

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Mass transit and state and local government - New York and New Jersey

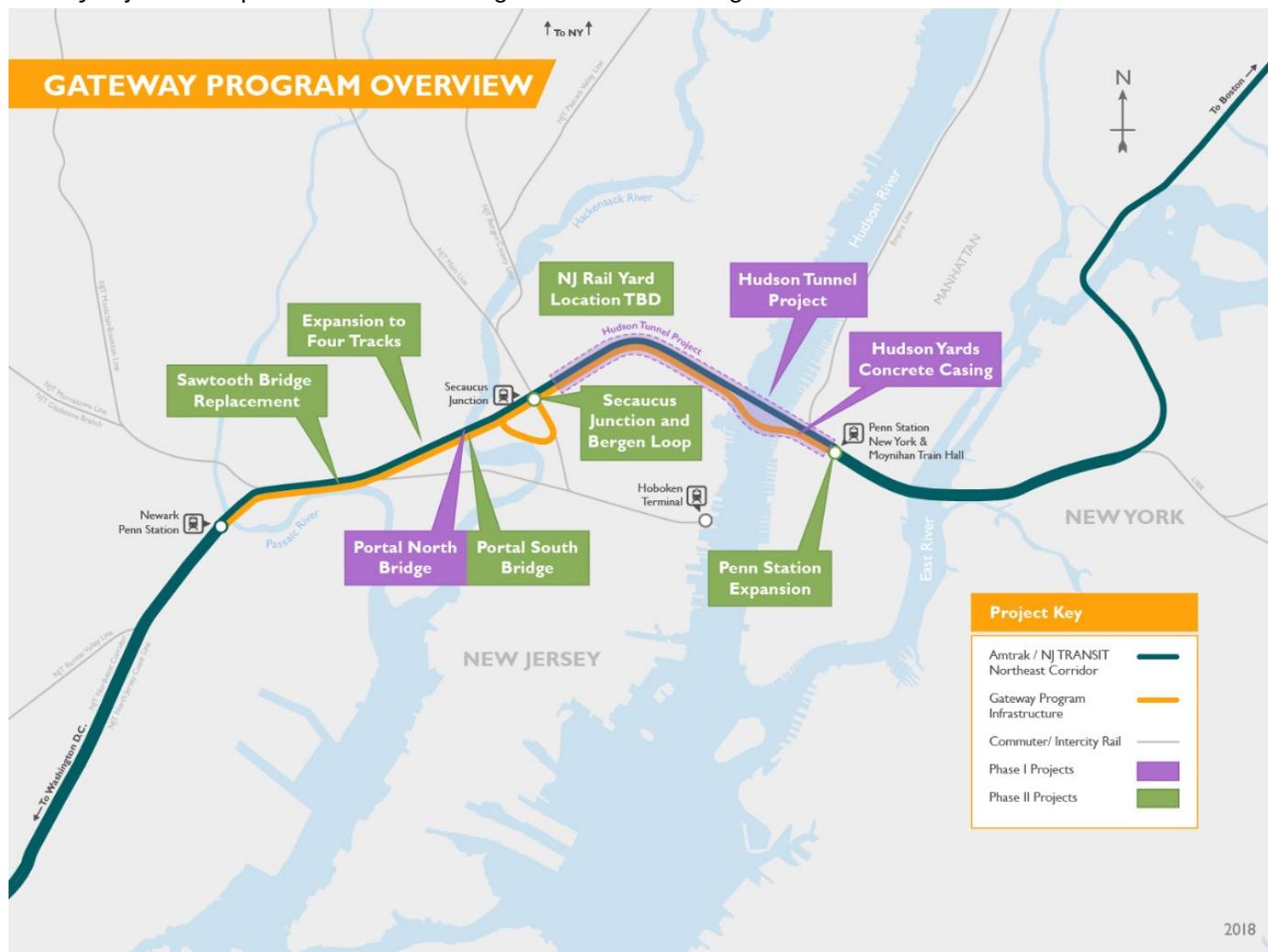
## Critical New York-area rail project hinges on federal funding commitment

In the coming months, the federal government will make a decision on whether to provide grant funding to match the [State of New Jersey's](#) (A3 stable) \$600 million commitment to fund the Portal North Bridge replacement, a critical component of the massive Gateway project. Funding this project would be a boon to area transit agencies and governments. New Jersey's commitment increases the chances that essential federal matching funds will be awarded for the bridge — the first part of the larger Gateway program that also involves new and rehabilitated tunnels under the Hudson River, together "Phase One." The new bridge would improve rail system reliability on the Northeast Corridor (NEC), add capacity, and help stabilize ridership and avoid regional economic disruption.

- » **Completion of Gateway Phase One would improve the reliability of rail infrastructure on the Northeast Corridor.** However, it will not materially increase rail capacity on the NEC, which is essential for longer-term economic growth in the New York region.
- » **New Jersey's commitment addresses federal government feedback, increasing the likelihood of matching federal dollars for the Portal North Bridge.** If this aspect of the project is funded and successfully advances, it paves the way for future funding requests from the Federal Transit Administration (FTA) for the Gateway program.
- » **Improved reliability of regional transportation systems would support transit agency revenues and lower the chances of regional economic disruption.** Rail infrastructure improvements would be credit positive for [New Jersey Transit](#) (NJ Transit, A3 stable), [Amtrak](#) (A1 stable) and area governments. In recent years, deterioration in NJ Transit's reliability has contributed to commuters seeking alternative modes of transportation into Manhattan.
- » **Construction costs related to the Portal North Bridge and the Hudson Tunnel are manageable, but cost overruns are a risk.** Given the size and scale of the region's tax base, the aggregate \$7 billion of non-federal contributions would be manageable for the funding partners, including the states of [New York](#) (Aa1 stable) and New Jersey and the [Port Authority of New York and New Jersey](#) (Port Authority, Aa3 stable), barring delays and large cost overruns.

Exhibit 1

Gateway Project has two phases with the first focusing on the Portal North Bridge and Hudson River tunnels



Source: Gateway Program Development Corporation

## Completion of Gateway Phase One would improve reliability of rail infrastructure on the Northeast Corridor

The Gateway Program in its entirety focuses on improving and expanding rail infrastructure on a section of the NEC that runs between Newark, New Jersey (Baa3 positive) and Pennsylvania Station in New York City (Aa2 stable). According to the Gateway Program Development Corporation, Phase One includes replacing the Portal North Bridge, doubling the number of tracks across the Hudson River from two to four, and rehabilitating existing tunnels and tracks that were severely damaged by Superstorm Sandy. Phase One would add some rail capacity to a crowded system via the Portal North Bridge and enhance resiliency and reliability of an old, damaged tunnel. Subsequent phases of the Gateway project would further expand the system's capacity and support long-term economic growth.

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### Portal North Bridge project

According to the Gateway Program Development Corporation, the existing Portal Bridge, which carries approximately 450 trains per day, creates a bottleneck with its frequent mechanical failures. Due to its low height, the bridge swings open to allow ships to traverse the Hackensack River. This mechanism frequently malfunctions, leaving the bridge stuck in the open position and effectively stopping all train traffic in and out of Pennsylvania Station. The Portal North Bridge project would create a higher, fixed-span, two-track bridge that will allow maritime traffic to flow without interrupting service. The project would increase NJ Transit's capacity by 10% by allowing new double-decker trains to replace single-level cars, lengthening trains and allowing for faster speeds on the new bridge.

This portion of the project has moved through the planning, environmental review and design stages, and is awaiting funding approval from the FTA to move to the engineering phase. NJ Transit submitted grant requests to the FTA in September 2016 and in February 2017 and the project received a "medium-high" rating, making it a strong candidate for federal matching funding.

However, in February 2018, the project was downgraded to medium-low by the FTA, making it ineligible for advancement to the next phase of the Capital Investment Grant process that would ultimately lead to federal funding. The FTA attributed the downgrade to several factors including insufficient committed local funding and optimistic project cost estimates. In response to the downgrade, NJ Transit submitted an updated financial plan in June 2018 that increased New Jersey's funding commitment to the bridge project. In July 2018, the FTA granted NJ Transit an extension on the request to reconsider the rating and funding proposal.

Gateway affects a 10-mile portion of the NEC, which is often the site of traffic delays and gridlock that results in billions of dollars of productivity lost annually. The NEC stretches from Washington ([District of Columbia](#), Aaa stable) to [Boston](#) (Aaa stable), passing through New York and [Philadelphia](#) (A2 stable) on its way. It serves a combined 800,000 daily riders between Amtrak, NJ Transit and other carriers. The region around the NEC is home to roughly 17% of the US population and generates 20% of national GDP, according to the Gateway Program Development Corporation.

### Hudson River tunnel project

The Hudson River tunnel project is the second part of the Gateway project's Phase One and aims to provide significant improvement in service levels and reliability. The tunnel component calls for the construction of a new two-track Hudson River tunnel, which will allow for the rehabilitation of the existing 108-year-old North River Tunnel that suffered significant damage from Superstorm Sandy in 2012.

The tunnel project was initially accepted into the FTA's Capital Investment Grant pipeline in July 2016 and a draft environmental impact statement (EIS) was released in July 2017 and finally submitted to the US Department of Transportation (US DOT) in February 2018. Reflecting the importance of this project, the EIS process was expedited to 22 months, approximately half the length of the standard EIS review. However, also in February 2018, the project was downgraded to "medium-low" status by the FTA, driven primarily by issues surrounding the amount of committed local funding and the eligibility of the Gateway Program Development Corporation as project sponsor.

In response to the downgrade, the Port Authority of New York and New Jersey agreed to become the project sponsor of the tunnel project and in September 2018, a revised financial plan was submitted to the FTA. The plan requests the inclusion of the tunnel project in the US DOT's fiscal year 2020 budget proposal for the Capital Investment Grant program. In addition, the revised submission highlighted the local funding commitments from the states of New York and New Jersey and the Port Authority, which together represent nearly 90% of the local share needed for constructing the entire tunnel project. The submission highlighted that the project sponsors are still awaiting US DOT publication of a final environmental impact study and accompanying record of decision (ROD), which is necessary to advance the project. The ROD would allow the project sponsors to incur certain project costs, acquire real property, and move the project to the FTA engineering stage and ultimately the construction phase.

## New Jersey's commitment addresses federal feedback, increasing the likelihood of matching federal dollars for the Portal North Bridge

In June 2018, NJ Transit submitted an updated financial plan to the FTA that increased New Jersey's commitment to the bridge project, in response to the project rating's downgrade to "medium-low." The FTA's downgrade cited insufficient local funding commitments, and made the project ineligible to receive federal Capital Investment Grant dollars.

The revised plan includes a commitment of up to \$600 million in funds from the State of New Jersey, to be financed via state appropriation bonds issued by the New Jersey Economic Development Authority and some capital funding from the New Jersey Transportation Trust Fund. Should the FTA agree that the revised plan addresses its feedback and the project returns to a medium or higher rating, it will advance through the Capital Investment Grant core capacity grant program toward a full funding grant agreement (FFGA). The project is currently in the development stage, the first of three stages in the FTA's Capital Investment Grant program.<sup>1</sup> Despite the lack of federal support to date, the construction plan has remained relatively close to its initial 2019 launch date due to other grant funding. However, if the project rating is not upgraded in early 2019 and federal funding is not approved, this could put the project behind schedule and reduce the likelihood of completion.

## Improved reliability of regional transportation systems would support transit agency revenues and lower the chances of regional economic disruption

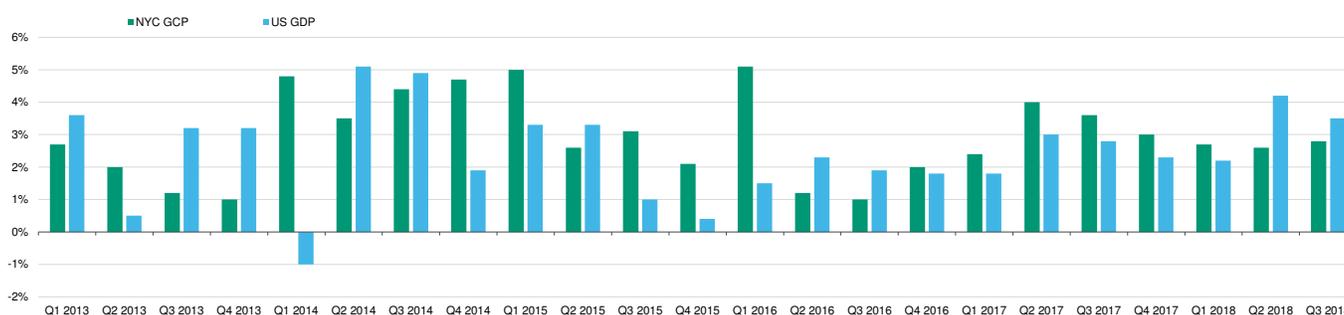
Transportation infrastructure is a critical component of the economic health of a region. It is often cited by companies when choosing locations to expand their businesses. Recently, [Amazon.com, Inc.](#) (A3 positive) chose to locate 25,000 new jobs each in New York City and [Arlington, Virginia](#) (Aaa stable) partly due to the [strong infrastructure](#) in those regions, which supports the mobility of employees both within and outside the region.

The initial request for proposal Amazon issued for a second headquarters site listed requirements of mass transit on-site, access to arterial roadways and proximity to major airports as among the most important criteria in making its decision. New York City's strength in this area is reflected in its consistently strong growth in gross city product, which until very recently consistently outperformed the nation (see Exhibit 2).

Exhibit 2

### New York City's future economic growth will depend on regional transportation investment

Year-over-year change in GDP

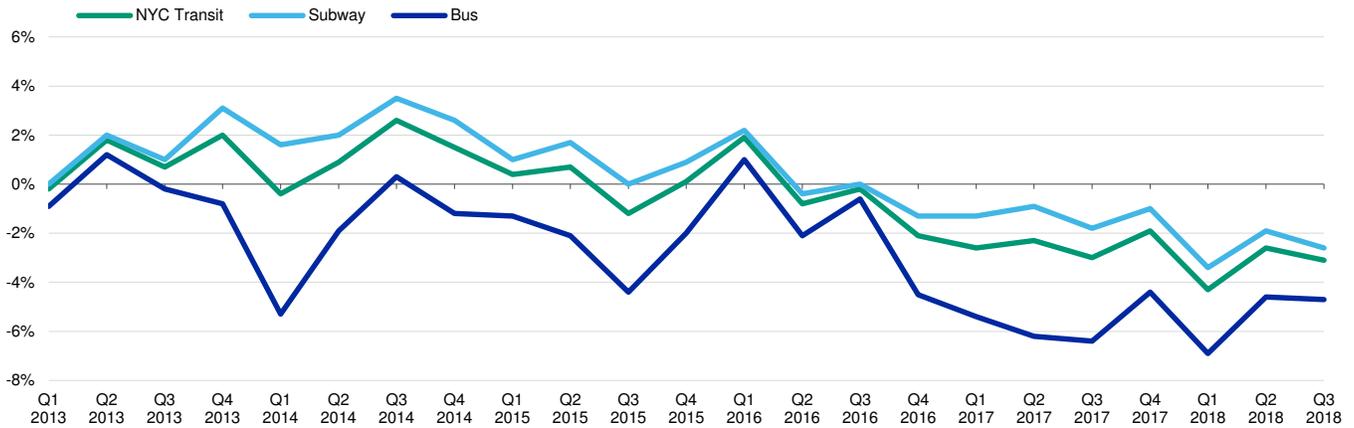


Sources: US Bureau of Economic Analysis, New York City comptroller's office

However, for the first time, public transit ridership is not growing commensurately with the economy. Both the [Metropolitan Transportation Authority](#) (MTA, A1 negative), which serves New York City, Long Island and southern [Connecticut](#) (A1 stable), and NJ Transit, which serves north and central New Jersey, have shown persistent declines in ridership in recent years (see Exhibits 3 and 4).

Exhibit 3

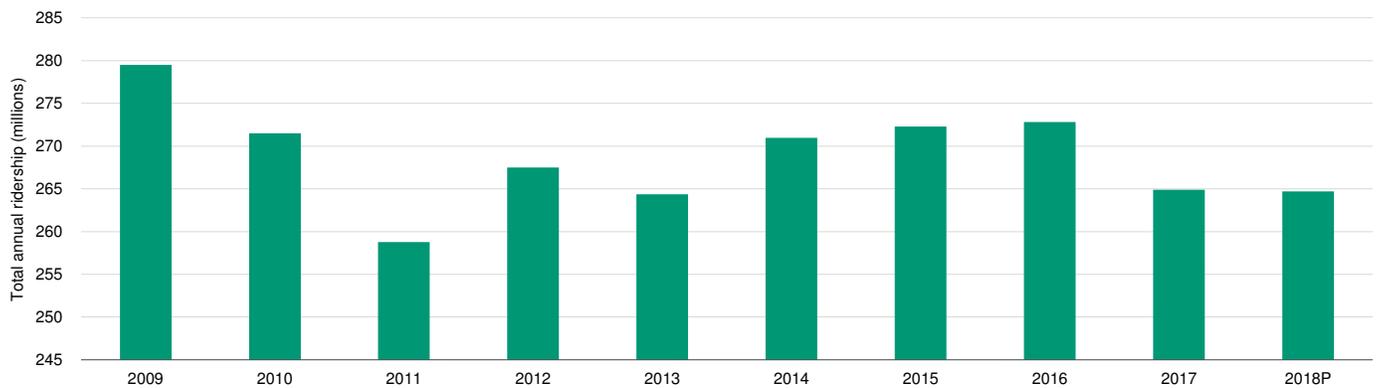
**Transit ridership in New York City has declined in the last two years, even as the economy has grown**



Source: Metropolitan Transportation Authority

Exhibit 4

**NJ Transit ridership decline continues longer trend**



2018 is a projection.

Source: NJ Transit annual continuing disclosure

The growth of alternatives to public transportation such as ride sharing means that mass transit will have to compete even harder to keep its current riders and fare revenues, let alone increase them. Still, with its high traffic congestion levels, ride-sharing alternatives are unlikely to ever serve as an adequate substitute for mass transit in the New York City metro area. Thus, a robust and reliable mass transit system remains essential to the regional economy. Fare revenues comprise a significant 46% of NJ Transit's operating revenues and approximately 41% of MTA revenues, and continued declines in ridership will reduce these revenues in the absence of politically difficult fare increases.

While improving reliability of existing service levels is important to stabilizing ridership and revenues, significant long-term population and economic growth will require expanding the region's existing transit capacity. While New York City saw robust annualized population growth of 0.9% annually between 2010 and 2016, population growth slowed to just 0.1% between 2016 and 2017, according to the US Census Bureau. While there are likely a number of drivers for this slowdown in population growth, including housing shortages and cost of living, it coincides with ridership declines in the area transit systems.

## Costs related to the Portal North Bridge and Hudson Tunnel are manageable, but cost overruns are a risk

Under the current financial plan for Gateway Phase One, half of the funding for the \$1.6 billion Portal North Bridge and \$12.7 billion Hudson River tunnel projects would come from non-federal sources.<sup>2</sup> The State of New Jersey and NJ Transit would contribute the local share (proposed at 41% of total cost) of the Portal North Bridge project with the remainder paid by Amtrak (9% of costs, mostly through federal grants) and any FTA grants (up to 50%) that are approved.

The new Hudson River tunnel construction would have \$1.6 billion coming from New Jersey and NJ Transit, \$1.75 billion from New York, and up to \$2.2 billion from the Port Authority in the form of loan support. An additional \$800 million in local matching contributions is expected for rehabilitation of the existing tunnel, work that is not expected to begin until 2026. The proposed federal share is split between FTA grants (44% of proposed costs) and Amtrak (6%, mostly through federal grants).

While the mix of federal and state funding sources has not been finalized, the \$7 billion in aggregate local contributions will be borne by taxpayers and transportation users in the New York City metropolitan area. The cost is large but not overly burdensome in relation to the size of the New York City metropolitan area economy and tax base. The Hudson River rail crossing between New Jersey and New York's Pennsylvania Station, which serves approximately 73 million Amtrak and NJ Transit passengers a year, is an essential commuting link for a regional economy with a \$1.6 trillion annual GDP. Compared to the regional tax base, the planned \$7 billion local contribution is about half a percent of the metro area's \$1.3 trillion annual personal income.

New Jersey commuters would be major beneficiaries of the new Hudson River tunnel given that NJ Transit customers account for the bulk of the passengers using the current tunnel. However, the large Gateway costs would compete with New Jersey's own backlog of transportation investment needs and high outstanding debt load. New Jersey's transportation funding flexibility has improved since 2015 given its 28-cent gas tax increase. However, the state has already identified \$16 billion of transportation needs to be funded through 2024. These projects will add \$6 billion of debt to the state's already-large \$39 billion debt load, which at 7.0% of state personal income is ranked fourth highest among the 50 states.

New York's economy would also benefit from Gateway, but the state has yet to identify a specific funding source for its portion of the costs and has many other large, regionally important infrastructure projects underway. The state has a \$29.3 billion transportation capital plan and existing debt levels of 5.2% of personal income, which ranks eighth highest among the 50 states. However, New York's debt ratio is down from 6.7% in 2011. New York has also committed \$8 billion of capital support for the MTA's substantial \$33 billion capital program, and will consider additional funding requests in fall 2019 when MTA's next five-year capital plan is unveiled.

For Amtrak, the project has potential benefits for the entire NEC that runs from Washington to Boston and other portions of its national network linked to the NEC. The Gateway project has been part of Amtrak's capital plans since 2010. The NEC accounted for 55% of Amtrak's ticket revenue in 2017 and 38% of passengers.

While Gateway Phase One construction costs for the states at current funding estimates are manageable, significant cost overruns could present challenges — particularly for New Jersey with its high debt burden and need to shore up a vastly underfunded state pension system. Other complex, large-scale projects in the New York area in recent years have seen cost overruns ranging from 15% to as much as 65% over the original budget (see Exhibit 5).

Exhibit 5

### Recent New York-area mega transit projects have gone significantly over budget

Project	Fulton Center Project	Second Avenue Subway, Phase I	East Side Access
Original budget	\$847,000,000	\$4,000,000,000	\$6,350,000,000
Final budget	\$1,400,000,000	\$4,600,000,000	\$10,200,000,000
Percent over budget	65%	15%	61%

Source: Metropolitan Transportation Authority

Construction cost overruns present a risk with projects partly funded through the FTA's Capital Investment Grant program — a proposed source for Gateway — because once the federal funding agreement is signed, the local project sponsors are responsible for all costs in excess of the original budget. While the Port Authority is serving as a project sponsor and has committed \$2.7 billion in its 2017-26 capital plan, the agency's capital plan states that it will not contribute funds in excess of that amount. This puts the states of

New York and New Jersey most at risk of shouldering the expense of potential cost overruns. For example, a 25% escalation in the total project cost would represent roughly an additional \$3.5 billion funding burden on the two states.

Still, modest cost overruns would be manageable given the breadth of the local economy and the combined financial strength of both states. Significant cost overruns, however, could lead to credit challenges beyond simply heightened leverage. Significant cost overruns and protracted delays also introduce additional political risks as public sentiment could sour on the project.

## Moody's related publications

### Issuer In-Depth

- » [Investment in NJ Transit is essential to state's long-term economic growth](#), November 13, 2018

### Issuer Comment

- » [Federal spending bill gives Amtrak some funding flexibility for New York-area Gateway rail project, a credit positive](#), March 29, 2018

### Credit Opinion

- » [New York \(State of\): Update to credit analysis](#), January 8, 2019
- » [New Jersey \(State of\): Update to credit analysis](#), August 30, 2018
- » [Port Authority of New York and New Jersey: Update to Key Credit Factors](#), January 29, 2018

## Endnotes

- <sup>1</sup> A project must have at least a medium rating to advance to the engineering phase, and needs an FFGA before it can move to the construction phase.
- <sup>2</sup> The Portal North Bridge financial plan was updated in June 2018, and the Hudson Tunnel financial plan was updated in September 2018.

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1145816