Philip D. Murphy, Governor
Sheila Y. Oliver, Lieutenant Governor
Diane Gutierrez-Scaccetti, Commissioner
Kevin S. Corbett, President & CEO

NJTRANSIT
One Penn Plaza East
Newark, NJ 07105-2246
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November 2, 2020

Dear Governor Murphy:

Pursuant to Chapter 150, Laws of 1979, I herein transmit the minutes of actions taken at the open session of the regularly scheduled meetings of the New Jersey Transit Corporation, NJ TRANSIT Rail Operations, Inc., NJ TRANSIT Bus Operations, Inc., NJ TRANSIT Mercer, Inc., and NJ TRANSIT Morris, Inc., Board of Directors held on Wednesday, October 21, 2020.

Sincerely,

Joyce J. Zuczek

Joyce J. Zuczek
Board Secretary

Enclosures

Honorable Philip D. Murphy
Governor, State of New Jersey
State House
Trenton, NJ 08625

Open Session Minutes of the actions taken at the regularly scheduled Board of Directors' meetings of the New Jersey Transit Corporation, NJ TRANSIT Rail Operations, Inc., NJ TRANSIT Bus Operations, Inc., NJ TRANSIT Mercer, Inc., and NJ TRANSIT Morris, Inc. conducted virtually by telephone on Wednesday, October 21, 2020. The meetings occurred concurrently.

Board Members

Diane Gutierrez-Scaccetti, Chair
James D. Adams, Board Member
Dini Ajmani, Treasurer's Representative
Sangeeta P. Doshi, Board Member
Cedrick T. Fulton, Board Member
Bob M. Gordon, Board Member
Richard A. Maroko, Board Member
Shanti Narra, Board Member
David A. Rasmussen, Board Member (Non-Voting)
Brian T. Wilton, Governor's Representative

Staff

Kevin S. Corbett, President & Chief Executive Officer (CEO)
Joyce J. Zuczek, Board Secretary
Eric R. Daleo, Senior Vice President, Capital Programs
William Viqueira, Senior Vice President, Chief Financial Officer & Treasurer
James A. Sincaglia, Acting Senior Vice President & General Manager, Rail Operations
Ronald E. Nichols, Chief, Light Rail & Contract Services
Joseph E. Snow, Assistant Attorney General, Office of the Attorney General
Caroline Vachier, Deputy Attorney General, Office of the Attorney General

Chair Gutierrez-Scaccetti convened the Open Session at 6:01 p.m. in accordance with the Open Public Meetings Act and Board Secretary Zuczek conducted a roll call. Board Secretary Zuczek announced that adequate notice of the regularly scheduled meetings of the Board of Directors of the New Jersey Transit Corporation and its affiliates and subsidiaries was provided in accordance with the Open Public Meetings Act and NJ TRANSIT's enabling legislation. Notices were filed on October 15, 2020 with the Secretary of State, sent to newspapers of general distribution, posted in the main entrance of NJ TRANSIT headquarters, published on the corporation's website, and sent to each individual, agency, and organization that requested such notice.

Approval of Minutes

Chair Gutierrez-Scaccetti asked for a motion to approve the minutes of the September 9, 2020 Board meetings. Board Member Brian T. Wilton made the motion, Board Member Shanti Narra seconded the motion, and it was adopted.

Roll Call Vote:

Adams	Ajmani	Doshi	Fulton	Gordon	Maroko	Narra	Wilton	Gutierrez-Scaccetti
Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

President & CEO's Monthly Report

President & CEO Corbett began with NJ TRANSIT's COVID-19-related statistics, before moving on to their many recovery-related efforts. First, he was pleased to report that only 25 NJ TRANSIT employees, out of a workforce of nearly 12,000, were currently positive for COVID-19. That's down more than 90 percent from a high of 299 positive cases on April 27, 2020. These statistics reveal just how far NJ TRANSIT has come over the past six months, and are especially notable considering recent coronavirus spikes, both regionally and nationally.

President & CEO Corbett noted they were not letting their guard down one bit. On the contrary, they were working harder than ever to maintain the safest possible travel environment for customers and employees. Their aggressive approach to cleaning and disinfection continues, including daily sanitizing of all vehicles and major stations and terminals.

They were redoubling efforts to reinforce the importance of wearing face coverings on vehicles, in stations, and on platforms. To ensure compliance with the face-covering requirement as outlined by Executive Order 165, they have taken a number of actions. They were continuing to blanket their system with their "SAFE NJ" signage, including posters, digital signage, regular station and onboard announcements, regular and frequent social media messaging, and prominent reminders on the website and mobile app. They have also made free cloth facemasks available at Customer Service offices in major terminals. To date, they have given out more than 12,000 to customers.

Over the last three weeks, the New Jersey Transit Police Department has been out in force throughout the system on mask enforcement details, reminding customers to wear them and handing out masks to those who need them. Since their last Board meeting, they have expanded their PPE vending machine pilot to four additional rail stations. The machines, equipped with cloth and disposable masks, hand sanitizer, disinfecting wipes, and gloves, are now available at New Brunswick, Metro Park, Summit, and Secaucus Junction, in addition to Newark Penn Station and Hoboken.

In terms of ridership, rail ridership remains at approximately 20 to 25 percent from pre-COVID levels, systemwide. Bus ridership is also holding steady at around 50 percent from pre-COVID levels, systemwide, although, as mentioned at last month's Board meeting, they were seeing significantly greater gains on local intra-state service. Local bus ridership within New Jersey was up to approximately 70 percent of pre-COVID levels. Bus service into New York was at approximately 35 percent of pre-COVID levels. Light rail

ridership was up to approximately 55 percent of pre-COVID levels, systemwide, with the Hudson-Bergen Light Rail (HBLR) and the Newark Light Rail between 53 and 56 percent, and the River LINE approaching 70 percent of pre-COVID levels.

Though ridership remains down, it was increasing incrementally. They know that these trends will only continue as New York City continues reopening. To ensure they are fully prepared, they were also hard-at work behind-the-scenes, planning for the future. This work includes but is not limited to: developing detailed ridership projections; conducting extensive customer surveys; engaging with peer agencies on a weekly basis at the planning level to share information and trends; and, of course, President & CEO Corbett continues to talk regularly with his counterparts at their region's peer agencies, and continue to meet regularly with the representatives of the 7-State Transportation Task Force.

In addition to engaging with peers around the country, President & CEO Corbett also meets regularly with members of UITP, the International Public Transportation Organization. He serves on the Board as the North American representative to UITP and gets the opportunity to share experiences and best practices with his counterparts around the world. They are learning about approaches and experiences at transit systems in London, Paris, and Singapore, to name a few.

As an illustration of these preparation efforts, President & CEO Corbett turned the floor over to Susan O'Donnell, NJ TRANSIT's Senior Director of Business Research and Analysis to discuss the results of multiple customer surveys she's conducted regarding customer travel behavior in the midst of the current coronavirus pandemic.

Susan O'Donnell discussed the COVID Travel Surveys they conducted. The first was conducted in April 2020 slightly after the start of COVID-19 travel restrictions, and the second study was conducted from late June through early July 2020. For convenience she would refer to the surveys as the April and June surveys. Ms. O'Donnell said looking at slide two, the April survey data was shown in orange and June survey data was shown in blue. The survey was broken down into work trips and non-work discretionary trips. In the first survey, they asked customers to identify what mode of NJ TRANSIT transportation they used the most and for what purpose. In April, survey customers were asked if they traveled by that mode in the past seven days for that purpose.

Slide two looked at the different modes and markets by Bus, Rail, Light Rail, and Access Link. They created three different markets for Bus since they are all a little different; they have North Jersey Local, South Jersey, and New York Interstate. Comparing the April and June data, the percent of customers traveling increased for both work trips and non-work trips. As the travel restrictions have lessened and businesses re-opening, the percent of customers travelling has increased in June. The largest increases were in non-work trips. Of the customers that were traveling in June but not in April, about half were not working in April and the other half were working from home.

Customers still traveling by mode for work trips using the same NJ TRANSIT mode before COVID increased for most modes and markets. They accounted for 63 percent of local bus customers traveling in June, while 46 percent traveled in April. The percent of customers still traveling by mode for non-work trips using the same NJ TRANSIT mode as before COVID decreased from April to June. Comparing June trip frequency to before COVID trip frequency, in June most of the work and non-work Trips were occurring at the same frequency as before COVID. New York Interstate Bus and Rail have the highest percentage of work trips that are occurring less frequently than before COVID.

Ms. O'Donnell said in the demographic area essential workers, such as Healthcare, Emergency Management, Food Service, Delivery Drivers, Utilities and Transportation were over 60 percent of customers traveling in all the modes. Over 85 percent of the North and South Jersey Local Bus customer traveling for work in June own one or no autos and earn less than $75,000 a year. For Rail, the percentages were much lower.

In June, the work trips customer not traveling in the last seven days were asked why not, Rail, New York Interstate Bus and Light Rail have the highest percentage of working from home and the North & South Jersey Bus have higher furlough and laid off percentages. On the return to work preference, customers were asked once government guidance allows and businesses start re-opening, if it was up to you, would you prefer to return to your office or worksite, of customers working from home or remote in June, most prefer to return to work either in September/October (25 to 45 percent) or in 2021 (28 to 58 percent).

Ms. O'Donnell said they identified top measures they were thinking of or going to put in place and wanted to measure how important they were to customers. Shown on slides nine and 10, customers while traveling in June and to those not traveling in June were asked which were the most important to them. Four of the top ten most important items for those traveling in June were PPE and three of the top ten were related to cleaning protocol. For the customers not traveling, the top eight responses were identical to those customers traveling in June. The only difference was the percentage of customers wearing masks was much higher. Lastly, Overall Customer Satisfaction with NJ TRANSIT with both travelers and non-travelers is higher better scores than it was before COVID in November 2019. Ms. O'Donnell noted in their toughest markets, the customers traveling gave a higher score than those not traveling. She said they are working on a third COVID survey that is to go out in the next couple of weeks.

President & CEO Corbett noted Susan's presentation was online and available for download. Simply visit njtransit.com and click on the "Board of Directors" link under the "About" tab. On this page, scroll down past the Board's livestream video, and click on "Board Agenda," where the full presentation is at the bottom of the page.

A moment ago, President & CEO Corbett mentioned that NJ TRANSIT is working closely with peer agencies to share best practices, protect customers and employees, and plan for the future. In addition to these efforts, they are taking a proactive, industry-leading

approach to gathering and analyzing information, and serving as a resource hub for others.

On September 29, 2020, NJ TRANSIT proudly partnered with Rutgers University's Bloustein School to convene a full-day, online symposium, examining the impacts of COVID-19 on transportation, the economy, and the business and tourism industries. They brought together 25 local, national, and international experts to present and participate in conversations which included the future of work, housing, commercial real estate, tourism, hospitality, retail, and entertainment, with a focus on the New York and New Jersey metropolitan region.

More than 200 people attended, including transportation professionals, city planners, economists, real estate experts, and other decision-makers from government and transit agencies. Ultimately, the information and insights gathered will serve as a critical component in their ongoing planning and forecasting efforts. Videos of the symposium, including the keynotes and four expert panels, are now online, and President & CEO Corbett encouraged everyone to take a look at njtransit.com/symposium. That link will redirect to the Bloustein school's website, where the symposium lives.

NJ TRANSIT also has a number of "technology-related" items to report this month, spanning both COVID and non-COVID-related aspects of service. One innovative initiative that President & CEO Corbett was particularly proud of, and which he thinks will be especially useful to customers, was the introduction last month of the "How Full Is My Ride" feature on the mobile app. This new feature allows rail and bus customers to see how full their ride is before boarding, enabling them to make better-informed decisions that optimize their comfort level as they return to the system.

For rail and bus customers, green, yellow, and red color-coded icons indicate light, medium, or heavy ridership conditions. On buses, data is collected automatically through onboard passenger counting technology. On trains on the Raritan Valley, Atlantic City, and Morris & Essex Lines, data is also collected automatically through NJ TRANSIT's new handheld devices, used by train crews to scan and validate tickets and passes.

For other rail lines, customers can crowdsource this information by self-reporting distancing levels, alerting fellow customers to how full their train is. Crowdsourcing will be gradually phased out, as train crews on additional rail lines receive new handheld ticket validation devices. Systemwide distribution of these devices is expected to be completed over the next five months.

New handheld ticket validation devices are not the only way they were working to modernize fare collection. On Monday, October 19, 2020, they announced the beginning of the installation process to add onboard ticket validators to the entire statewide bus fleet. These devices allow customers to scan a barcode, from either a paper ticket or pass, or a mobile ticket on their phone, instead of handing a ticket or a pass to a bus operator. This increases customer convenience and eliminates a frequent touchpoint at the same time, making it safer for both customers and bus operators.

The fleet-wide installation process, which follows a successful pilot program on six bus routes based out of the Morris garage, has begun on buses at Oradell garage, and will proceed to other garages over the coming months. As part of their commitment to reducing customer touchpoints to the greatest extent possible right now, they have identified bus garages serving routes with the highest use of paper tickets for the beginning of the installation process. In subsequent phases of this modernization program, the validators will accept additional fare media, including contactless credit and debit cards, and a NJ TRANSIT fare card currently in development.

In keeping with these many technological developments, President & CEO Corbett was also pleased to report that NJ TRANSIT has received a prestigious, internationally-recognized certification for our continued efforts to protect the integrity and privacy of corporate and customer information. Last month, they became the first public transit agency in the nation to achieve ISO/IEC 27001:2013 certification.

This certification will ensure the privacy and integrity of both corporate and customer data, and was confirmed by an independent and accredited auditor, which validated NJ TRANSIT's use of best practices to manage, secure, and protect information. The standards of the ISO/IEC provide an internationally recognized framework and guidelines for companies to keep customer information secure. President & CEO Corbett thanked everyone in their IT department for achieving this landmark certification.

President & CEO Corbett said congratulations were also in order for two individual members of their IT department, both of whom were really revolutionizing information technology at NJ TRANSIT. CIO and Chief Digital Officer Lookman Fazal, and CTO and Acting Chief Information Security Officer Bilal Khan were winners in the 2020 State Scoop 50 Awards Program. They were two of just 50 Information Technology leaders nationwide who were honored from Scoop News Group, out of literally thousands of leaders and projects nominated. The awards honor the best leaders nationally from across state and local government IT communities and acknowledge the important work they're doing to make government better.

Lookman was named a "State Executive of the Year" and Bilal was named a "State Up-and-Comer of the Year." Once again, President & CEO Corbett congratulated both of them, and thanked the entire IT department for their remarkable work to transform technology at NJ TRANSIT to improve the customer experience.

President & CEO Corbett said they have a major infrastructure-related development to report this month. On September 15, 2020, President & CEO Corbett was proud to join Governor Murphy and Commissioner Gutierrez-Scaccetti to celebrate the historic groundbreaking to replace the Raritan River Bridge, a $600 million-dollar project. The bridge is a critical rail link for communities all along the North Jersey Coast Line, and an essential connector for these communities to major job centers in Newark, Jersey City, and Manhattan.

As many remember, this 112-year-old bridge suffered significant damage during Superstorm Sandy, which is why it must be replaced, and why they will build it back stronger and more resilient than ever before. That will allow NJ TRANSIT to continue moving customers to critical job centers and shore communities for years to come, without prolonged service interruptions related to severe weather events or infrastructure issues resulting from the age of the bridge. Overall, the Raritan River Bridge is just one of 18 additional capital projects now advancing through NJ TRANSIT's new Five-Year Capital Plan.

Another major resiliency project they were advancing is NJ TRANSITGRID, a critically important initiative for NJ TRANSIT and for regional and national economies. During power interruptions to the existing grid system, this first-of-its-kind microgrid will supply critical, highly-reliable, resilient power to: portions of the Northeast Corridor and the Morris & Essex Line; portions of the Main Line for signal systems; and all of the Hudson-Bergen Light Rail.

As some may know, they were now in the process of reimagining this project to make it as environmentally friendly as possible, and consistent with Governor Murphy's Energy Master Plan, which has set New Jersey on the path to 100 percent clean energy by 2050. Today, the Board will vote on a proposed stipend program for this project, which they believe will encourage innovation, and allow solicitation of the best possible technical design and construction solutions from both national and international bidders.

In a moment, Eric Daleo, Senior Vice President of Capital Programs, will give a presentation covering this aspect of the project, along with their many efforts to maximize the project's use of renewable energy. Before that, President & CEO Corbett noted that they will be holding a market outreach forum for this project next week, on October 28, 2020, where interested developers can hear about the project first-hand, and learn the strategies they were using to re-envision it. With that, President & CEO Corbett introduced Eric Daleo to give a presentation on their new approach to project delivery.

Eric Daleo said he appreciated the opportunity to speak regarding the NJ TRANSITGRID project. Tonight, he will be referring to a presentation online called "NJ TRANSITGRID: Reliably Powering the Future." Mr. Daleo noted the operator gave instructions at the beginning of the call and the presentation can be accessed on the njtransit.com website where the presentation is a link on the Board agenda page.

Mr. Daleo said for more than a year, they have heard from stakeholders with concerns on the direction of the NJ TRANSITGRID project. They are committed to building the project. But tonight, after consultation with members of the Board of Directors, they want to respond directly to the concerns they have heard; that members of the public, including some listening in tonight, have raised.

Over the next several minutes they will hear a plan on how, with the Board's support and authorization they are seeking tonight, they plan to approach the next steps in the

project's development in a way that encourages the maximum use of renewables, storage, and other technology to the extent technically feasible.

Transitioning to the second slide, they will hear tonight from some of the members of the team responsible for moving this project forward: Lenora Isaac, Senior Director of NJ TRANSIT's Resilience Program; Kiran Patel, Chief of Capital Project Management; John Geitner, Senior Director of Environment Energy and Sustainability; and Megan Strickland, Chief of Capital Compliance Budget and Administration will conclude the presentation.

Transitioning to slide three, this project was initiated by the Christie Administration after Superstorm Sandy. At the time, NJ TRANSITGRID was originally envisioned as a natural gas turbine powered facility. The Murphy Administration is committed to a process that supports the re-envisioning of the design of this project and prioritizes green technology. Mr. Daleo said tonight they would hear a plan that does just that and Lenora Isaac would present slide four.

Lenora Isaac, Senior Director of NJ TRANSIT's Resilience Program, spoke about the vital role NJ TRANSITGRID plays in NJ TRANSIT's Resilience Program. She highlighted some of the events impacting NJ TRANSIT and the region. Ms. Isaac said over the past two decades the region has been impacted by a number of weather and other events resulting in catastrophic and crippling power failures. In 2003, the Northeast Blackout resulted in 50 million customers losing power and was the largest blackout in North America that left passengers stranded and scrambling to find alternate means to get out of New York City or back to their home destinations. Superstorm Sandy in 2012 impacted states from North Carolina to Vermont and caused unprecedented impact to NJ TRANSIT's infrastructure and service, again leaving some rail customers without rail service for three-weeks. Ms. Isaac said just a few months ago Tropical Storm Isaias caused catastrophic power failures and storm surges, again impacting NJ TRANSIT services while repairs were being completed.

Transitioning to slide five, as NJ TRANSIT endeavors to prepare for the future, decisive action is required in anticipation for the future facing power outages. Rutgers University Center for Energy Economic, and Environmental Policy predicts the occurrence of 1.2 hurricanes or tropical storms per year posing significant threat to the nation and New Jersey's power system.

Ms. Isaac moved onto slide six, noting many or all of them have been affected personally in some way by these storm events and power failures. These power outages in turn have significant impacts on their transportation system, to their customers, and to their regional economy. With over 53 million commuter rail trips in and out of New York City each year any loss of power can severely constrain the economy. The impacts of an extended power outage in the region would impact as many as 200,000 NJ TRANSIT and Amtrak customers resulting in an estimated $42 million of lost wages each day.

Transitioning to slide seven, in order for NJ TRANSIT to deliver reliable service they need power and energy resilience is key to transportation. Once the flood waters, subside electric power is needed to resume service. Electrical outages only serve to complicate NJ TRANSIT's path to recovery, as they rely on current means of emergency generators to energize key equipment. However, diesel generators are not a viable solution for a number of reasons. Due to diesel supply shortages, like those experienced in the aftermath of Superstorm Sandy, also because diesel generators are only intended to provide temporary back-up power typically for 24-48 hours, and also due to air quality and emission concerns associated with diesel generators.

Transitioning to slide eight, Ms. Isaac said in the aftermath of Superstorm Sandy, NJ TRANSIT responded to the emergent need for greater resilience to future events. Inspired by President Obama's Hurricane Sandy Rebuilding Strategy, they applied for funding to assist in this endeavor. In 2014, the Federal Transit Administration allocated $410 million of the estimated $577 million to build the NJ TRANSITGRID project. Originally developed in conjunction with the Sandia National Laboratories and the U.S. Department of Energy, NJ TRANSITGRID is a microgrid envisioned for the purpose of providing highly reliable power to a core segment of NJ TRANSIT and Amtrak's critical service territory during extreme weather or outages in the commercial power grid.

Kiran Patel, Chief of Capital Project Management, discussed the technical aspects of the NJ TRANSITGRID project. On slide nine, there is an aerial map that shows the proposed site for this project, which is located on the Kearny Peninsula on 20 acres of land owned by NJ TRANSIT. That particular site would provide reliable power to limited operations during grid outages. The facilities that will include the limited operations are on the Northeast Corridor between New York Penn Station and NJ TRANSIT's Jersey Avenue Station in New Brunswick, the Morris & Essex Line between Hoboken Terminal and Maplewood Station, a portion of the Main Line for signal systems, and the Hudson-Bergen Light Rail in its entirety.

Slide 10 showed the Microgrid Central Facility rendering which shows the solar and energy storage, combined-cycle technology, a hardened substation to distribute the power that is being generated at this site, and the distribution and critical infrastructure to take the power from the site to the receptors where the power will be used.

Transitioning to slide 11, this project provides multiple benefits and the key benefits are listed on the slide. First and foremost is the reliability of the system. This project will prepare NJ TRANSIT to better withstand and recover from extreme weather and other events. This project also ensures NJ TRANSIT is not subject to broader cyber security threats that could otherwise disrupt NJ TRANSIT service. It also eliminates single point of failure at existing interconnection points to reduce cascading impacts of service issues and mitigates commercial grid vulnerability. Mr. Patel said as a critical infrastructure operator that customers depend on, NJ TRANSIT must provide reliable service and energy is critical to this mission. This project would provide that energy to carry out the critical mission.

Mr. Patel transitioned to slide 12. This project will also provide a reliable transportation resource serving their community, allowing those who rely on mass transit as their only mobility option to travel locally to work, school, and other venues that would otherwise be inaccessible during a commercial grid outage. This project would also provide financial benefits. This will create employment opportunities in facility operations, maintenance, and ancillary services. This project will also create operating revenue via power sales. There is a one-time economic impact on the New Jersey economy of $749 million. This project will create 4,200 construction jobs, accounting to $291 million in earnings. There will be an ongoing economic impact to the New Jersey economy of more than $20 million annually for operation and maintenance of this facility.

John Geitner, Senior Director of Environment Energy and Sustainability, shared a little about the sustainability program and how this program would dovetail nicely with the NJ TRANSITGRID project. The NJ TRANSITGRID project was conceived back in 2014 as part of a competitive grant program from the FTA regarding system resiliency and reliability. Mr. Geitner said they took a look at NJ TRANSIT and the businesses mobility and what the things were that threatened their ability to provide mobility to the public. The energy system was one of the first things looked at and partnering with Sandia National Laboratories they came up with an initial design to see what could make their energy system more resilient and reliable.

Mr. Geitner said their goal is to look towards the future and what NJ TRANSIT would look like with a reliable energy system and how this could system be as green and environmentally friendly as possible. He said NJ TRANSIT does have an energy and sustainability effort and he is proud to be a part of that department and proud to lead it as they move forward. Mr. Geitner said the 10-year Strategic Plan released in June 2020 mentions more specifically what NJ TRANSIT's goals are. One of the key goals is to promote a more sustainable future for their planet. NJ TRANSIT plans on doing this by already advancing initiatives and projects that meets this goal, by investing in a cleaner rail and bus fleet, and some efforts deploying electric buses are taking place at a garage in Southern New Jersey, as well as charging stations being put in to charge the buses. This will be taking place at more garages as they learn more about what this technology brings.

They are also producing their first written sustainability plan and look forward to partnering with thought leaders in this area to be able to share with the public what exactly it is they do at NJ TRANSIT to be more sustainable to ensure the future of the planet. Mr. Geitner said NJ TRANSIT is also looking to optimize their solar energy assets which most people may not know they already have on the rooftop and car shops in Kearny, New Jersey. They do enjoy the benefit of this solar energy production and benefits of energy credits that it produces, and the credits go back into this system making it more operable. They will be looking to expand solar assets over time as they move forward. Additionally, they want to implement energy and efficiency and conservation measures and often times this is referred to as the low hanging fruit of the sustainability program. NJ TRANSIT has done a great job this far in locating and identifying projects that have a real impact. A great

initiative to the sustainability plan would be the NJ TRANSITGRID project and how they want to re-envision it for the future.

Megan Strickland, Chief of Capital Compliance Budget and Administration, started with slide 18 to discuss next steps and the proposed path forward. Consistent with the Governor's Energy Master Plan and Clean Energy Goals, NJ TRANSIT will solicit an updated review of renewable or other zero emissions energy technologies that may supplement or replace the current power generation design.

To accomplish this, they intend to take the following steps: First: Hire a renewables energy consultant. Second: Host a Microgrid Market Outreach event for the industry later this month. Third: Release a Request for Qualifications on November 25, 2020. Fourth: Release a Request for Proposal that encourages new, thoughtful renewables integration in December 2021. Finally: Select a project option and award the contract in December 2022. To facilitate this plan, today they will be seeking authorization to develop a stipend program.

Transitioning to slide 19, NJ TRANSIT is in the process of hiring a consultant to review the renewables elements of the project. This consultant will: help maximize the renewables scope of the project; conduct a review of recent utility scale renewables and storage projects of similar capabilities; support NJ TRANSIT in evaluating renewables team experience in response to the Request for Qualifications; and assist NJ TRANSIT in drafting the Request for Proposals where renewables energy alternative designs will be required to be submitted by potential developers, to the extent technically feasible.

Turning to slide 20, later this month, NJ TRANSIT will host a Microgrid Market Outreach event to encourage developers to rethink plans and add renewables team support, consistent with the RFQ. The event will review the project's renewables energy strategy, allowing time for potential bidders to form a renewables team. Disadvantaged Business Enterprise firms will be invited to this event to learn about opportunities to partner with developers. NJ TRANSIT is planning separate outreach opportunities to solicit input and update the public.

Turning to slide 21, NJ TRANSIT is utilizing a two-step competitive process to procure design/build/finance/operation/maintenance services. The first step in their procurement strategy is to go out to the market with a Request for Qualifications. This means that they will go out to market and ask developers to respond who have certain experience. They will specifically require that the developer have experience in renewables deployment and long-duration energy storage projects. They will shortlist up to four respondents through this RFQ process that meet these requirements and have the necessary qualifications and experience. Those qualified respondents will be invited to proceed to the next step.

Turning to slide 22, only qualified, shortlisted firms will receive the Request for Proposal, which is the second step in the procurement process. The RFP is the document that solicits bids from contractors and is scheduled for release in December 2021. Qualified proposers will be invited to submit comprehensive technical proposals, including

alternative clean energy options and a 100 percent renewables option, to the extent technically feasible.

As noted on slide 23, once this competitive procurement process is completed, they plan to select a project option and award the contract in December 2022. They will then begin construction on a resilient and sustainable microgrid that will support 4,200 good-paying jobs and propel NJ's energy economy while creating a reliable transit system and ensuring all federal dollars secured are expended.

Turning to slide 24, tonight, they are asking the Board of Directors to approve a stipend program to encourage innovation. This stipend program will support the solicitation of the best possible technical design and construction solutions from industry experts, increase market competition, and allow NJ TRANSIT to purchase the intellectual property included in the proposals. A stipend value of $1 million will be assigned to all eligible submissions, and the total anticipated program will not exceed $3 million. He noted for more information, visit the website, NJTransitresilienceprogram.com.

President & CEO Corbett said Eric's NJ TRANSITGRID presentation was also online, at the same location as Susan O'Donnell's customer survey presentation. Again, visit njtransit.com and click on "Board of Directors," then click on "Board Agenda," and the full presentation is at the bottom of the page.

President & CEO Corbett said Positive Train Control was another critical rail infrastructure project that enhances safety on NJ TRANSIT's system. He turned the floor over to Terry Fetters from their contractor, Parsons, to update the Board with a status of the Positive Train Control (PTC) project. He will talk about how the Parsons team is ensuring the project remains on schedule for full implementation by December 31, 2020.

Terry Fetters, Project Manager from Parsons for the Positive Train Control (PTC) Project, provided an update on the PTC Project and where Parsons was on scheduled targeted dates and key milestones, and what they've completed since the last meeting to ensure successful completion by the end of the year December 31, 2020 PTC Deadline. Mr. Fetters said in the efforts of meeting scheduled targets and key milestones since the last Board meeting, he had some positive updates to report. In July 2020, they started providing updates and reported they had completed Revenue Service Demonstration (RSD) on schedule and began Extended Revenue Service Demonstration (ERSD) on the Montclair/Boonton, Morristown, and Gladstone lines; at this time, the project had advanced to 30 percent of the NJ TRANSIT route miles in ERSD. The Safety Plan was in the hands of the FRA as of the end of June for review and on target for a review cycle that would give them safety certification. In August, Raritan Valley and Bergen Lines were brought on schedule and entered into ERSD representing 50 percent of NJ TRANSIT route miles. In September, the Pascack Valley Line was brought into ERSD 12 days earlier than scheduled, which represented 57 percent of NJ TRANSIT route miles in ERSD.

In October, on the Main Line from West Secaucus to Suffern entered ERSD and the Main Line will ultimately take them to approximately 66 percent of NJ TRANSIT route miles. The Lehigh (Conrail) and Sport Line will enter ERSD by the end of the month. Mr. Fetters said the North Jersey Coast Line is scheduled to enter into ERSD November 19, 2020, the schedule is going well and is anticipated to be brought in earlier and will add another 45 miles, which would then bring them to 80 percent of NJ TRANSIT route miles in ERSD. On the final two lines Atlantic City and Southern Tier are on target to be in ERSD as scheduled on December 7, 2020.

The P22.4 Software loading began on schedule for the entire fleet on October 18, 2020. Mr. Fetters said they are on target for 100 percent completion prior to December 31, 2020. Parsons and Alstom are committed to successful completion of this project and continue to have close daily coordination between all parties involved and have regularly scheduled executive level meetings. In addition, stakeholder meetings take place weekly with the FRA, NJ TRANSIT, Parsons, WSP and Alstom for collaborative and transparent discussions to progress the project to identify any mitigation necessary and identify opportunities for increasing efficiencies. Parsons is committed to the successful completion of this project by December 31, 2020. President & CEO Corbett noted they have had excellent cooperation.

President & CEO Corbett noted that later in the meeting, they would hear presentations on their operating and capital budgets for Fiscal Year 2021 before the Board votes on their approval. The spending plans reflect Governor Murphy's commitment to NJ TRANSIT, and to providing the resources we need to keep our transit system, and their state, moving amidst one of the most challenging economic times in recent history.

President & CEO Corbett was pleased to note that NJ TRANSIT was able to keep fares stable this Fiscal Year. Holding fares steady was especially important today, as they know how critically important mass transit is for essential workers and transit-dependent customers, many of whom are facing financial uncertainty as a result of the pandemic.

President & CEO Corbett shared a few remarks that underscore NJ TRANSIT's commitment to diversity and inclusion. Today, more than ever, it's critically important that they not only ensure a discrimination-free travel environment for customers, but that they provide an inclusive experience, where the various needs of all customers are recognized and responded to. NJ TRANSIT also need to ensure that they provide that same environment in the workplace for their nearly 12,000 NJ TRANSIT employees.

To that end, President & CEO Corbett was proud to announce that next week, NJ TRANSIT will launch a new diversity and inclusion initiative. Their goal is to help drive inclusion for their key constituencies: Their customers, business partners, community partners, and of course, employees.

They are very proud of the diversity of our employees, and President & CEO Corbett knows this initiative will be well received. The initiative will be led by our Chief of Diversity

and Inclusion, Leotis Sanders, and supported by President & CEO Corbett and NJ TRANSIT's entire executive management team.

Energy and Sustainability Policy Committee

Chair Gutierrez-Scaccetti said they would normally go on to public comments but before they do, she would like to talk a little more about the NJ TRANSITGRID Project. She said clearly over the last several Board meetings they have heard many public comments regarding energy and sustainability and have heard them all loud and clear. She certainly recognizes that as they move forward in implementing the Governor's vision there is a need for NJ TRANSIT to focus on its commitment to the environment and sustainability goals, and that fulfillment of this vision should be visible and transparent.

In listening to their stakeholders and in looking at how they can make for a strong public engagement process, it appears the best thing to do is form a new ad hoc committee of the Board. It would be ad hoc only because in accordance with the By-Laws of NJ TRANSIT, a formal committee would have to be a part of the amendment to the By-Laws, and they don't want to wait for this process. Therefore, the committee will be considered an ad hoc committee for now. The Energy and Sustainability Policy Committee will be made-up of Board Members. The new committee will meet as necessary and consist of three Board Members, the committee meetings will be open to the public, and ultimately allow for public engagement and dialogue on the projects. From time to time, as appropriate, the committee can refer issues to the full Board for consideration if warranted.

As part of this new initiative, she asked the new committee to consider issues related to the development and construction of future operations of the NJ TRANSITGRID Project, including implementation of the Action Item that staff has articulated today as part of their approach to re-imagine this project. In addition, the committee will review NJ TRANSIT's efforts to provide and promote zero emission vehicles in its revenue and non-revenue fleet, issues related to electrification, NJ TRANSIT's development of a Sustainability Plan as called for in NJ TRANSIT's 2030 Strategic Plan, and other issues that may be appropriate as determined by the Board through the Chair.

Chair Gutierrez-Scaccetti said she heard comments from Board Members, the public, and stakeholders, but the public in general. There was a stakeholder meeting last Friday which she thought was an excellent first step. Chair Gutierrez-Scaccetti said the most important thing they can do as all members of the same state and society is to work closely together and make all that they do successful.

Chair Gutierrez-Scaccetti complimented staff on their presentations, and said they did an excellent job in explaining what the plan is, and they will continue to work hard with the members of this committee and public stakeholders to ensure that everyone is informed and listen to all ideas. This is certainly the purpose of next week's event to gain broad input into whatever becomes of the NJ TRANSITGRID.

Chair Gutierrez-Scaccetti appointed Board Members Doshi, Adams, and Fulton to the Committee and Board Member Fulton to serve as Chair of the new committee. They have all been very active in this regard and said it will be very important to everyone to have them as Board Members available to this committee and reporting back to the Board, just as they do with other committees at NJ TRANSIT.

Chair Gutierrez-Scaccetti said using this mechanism will be very beneficial to everyone, however, nothing is perfect, and if not in the beginning, it will evolve into something everyone feels is workable, and at the end of the day has the benefit. She said this effort is meant to be impactful because no one wants to take time out of their day if they are not going to make use of the time and information that is given. Chair Gutierrez-Scaccetti said the information that they get is supposed to be impactful, and this is a commitment that's made by the Board and herself, and said she knows it's what the Governor expects from all of them. They will begin the process of establishing a schedule for the committee in the very near future. Chair Gutierrez-Scaccetti said she has probably surprised two of the three Board Members tonight appointed to the committee, but at the end of the day, they are great representatives.

Vice Chair

Chair Gutierrez-Scaccetti said she had one more announcement to make and would not need a motion on it this month but will formalize it next month. In addition to Board Member Cedrick Fulton serving as Chair of the new committee, she appointed him as the Acting Vice Chair of the Board of NJ TRANSIT. Chair Gutierrez-Scaccetti said they have been without a Vice Chair for a very long time, and as they continue to fill the plates of Board Members with work of NJ TRANSIT, she could think of no one better than Board Member Cedrick Fulton to take on the role of Vice Chair.

In accordance with NJ TRANSIT Reform Legislation, this appointment will be posted on the agenda next month and will be voted on formally. Chair Gutierrez-Scaccetti said Board Member Fulton's role as Vice Chair will begin immediately, and he will be a tremendous aid to her in her role as Board Chair and Commissioner with his extraordinary expertise and knowledge of how government and transportation work, and with a demeanor that is second to none in the way he handles any crisis that comes his way. Chair Gutierrez-Scaccetti said she talked to all of the Board members, and they all share her feeling about Board Member Fulton.

Public Comments

Chair Gutierrez-Scaccetti said they all have heard the presentations on the NJ TRANSITGRID, and the re-imagined project. They can't vote on it yet because they don't vote on items before public comments are heard. She noted everyone would not have to hear the presentations again before voting on this item, but it will be voted on first before moving on to the other items. Chair Gutierrez-Scaccetti asked the event call operator to open the floor for public comments and to provide instructions for entering the queue to make a public comment.

The event call operator said the floor was open for public comments. If individuals wanted to make a public comment, they were instructed to press *1 on their telephone keypad to enter the queue. They would hear a brief tone to indicate they have successfully entered the queue. Priority access would be given to any participant who has pre-registered, and those comments will be taken in turn. They would then take public comments from remaining participants on a first-come first-serve basis. Each person would have three (3) minutes for their public comment. A warning would be provided with one (1) minute remaining and again with 15 seconds remaining.

Sally Jane Gellert, Legislative and Communications Director of the Lackawanna Coalition, said her first request was to please open the stations because passengers are looking for indoor seating and restrooms as they wait for their trains and buses. She said buses are growing more crowded, and often bus-stop benches as well. Meanwhile, Ms. Gellert noted rail ridership was still quite low, yet rail stations without ticket agents were locked, and those stations with agents have restrooms open during ticket agent hours only and benches were always blocked off. She said NJ TRANSIT riders deserve some courtesy, and riders with mobility issues, young children, or people who are simply in need of a restroom were particularly inconvenienced.

Ms. Gellert said bravo on the NJ TRANSIT Microgrid, and it was a pleasure to congratulate NJ TRANSIT for meeting with the stakeholders and advocates. They were pleased to see a new ad hoc committee was being formed. They would like to see the federal resiliency funds used to build a Portal North Bridge to match the planned Portal South bridge with no capacity grant requirements and the EDA funds released.

Ms. Gellert said in looking at NJ TRANSIT's expected fiscal year fare-box recovery rate of 14 percent, or one-third of fiscal 2019's 42 percent and about half of fiscal 2020's 31 percent, they would expect to see a decreased budget this year, and they would be asking how NJ TRANSIT would continue to provide service and even restore the lost trains that were expected back in early 2019. However, in what seems to her to be incredible optimism or a disconnect with reality, NJ TRANSIT's fiscal 2021 budget is actually higher than the Fiscal Year 2019 and 2020 budget. She said since April, NJ TRANSIT has cut $851 million from projected income plugging the gap with 90 percent of remaining CARES Act funding and state funding. Ms. Gellert noted that the budget document pointed out that Fiscal Year 2021 is the last year of the contract with the New Jersey Turnpike Authority and asked that legal documentation be provided on the promises made by the Commissioner.

Frank Pizzella, Councilman from Hillsdale, spoke about a train station owned by NJ TRANSIT in Hillsdale which sits in the middle of their downtown, and the entire building interior is used by the public every day on the Pascack Valley Line. He said the station was in the very center of their downtown and is going to be included in a revitalization redevelopment plan that they are introducing to the public. Based on inspections by their professionals, the building is in desperate need of major repairs, and the lease agreement

requires NJ TRANSIT to maintain the major upkeep, and they are required to maintain the general repairs for health and safety.

Mr. Pizzella said they recently applied for a grant to renovate the bathrooms and made them handicap accessible which they didn't have to do because it was an obligation of NJ TRANSIT, but they took care of it. Also, he said years ago they applied for grant that would help them repair the roof, but unfortunately NJ TRANSIT has not been responsive. Mr. Pizzella said the Borough requests that NJ TRANSIT meet them halfway and they have done their part in trying to find funding to help NJ TRANSIT do what it needs to do to restore things. He said they are not asking NJ TRANSIT to pay for everything, and they are willing to do their part.

Mr. Pizzella said recently they almost lost the grant because NJ TRANSIT has been non-responsive in helping them respond to the Bergen Historic Preservation Society. He said they need a point-of-contact person so that they can move this process along and requested that NJ TRANSIT allow him to meet with someone appointed. Mr. Pizzella said documentation has been submitted outlining the grant.

Chair Gutierrez-Scaccetti said she appreciated Mr. Pizzella's comments and asked him who had he been working with at NJ TRANSIT up until now. Mr. Pizzella said he had been working with John Del Colle in the past but hasn't heard from anyone else in over a year and was willing to meet NJ TRANSIT halfway. He said he would do what he could to find funding to keep the station going. Chair Gutierrez-Scaccetti told Mr. Pizzella she would have Paul Wyckoff, Chief of Government and External Affairs, or Justin Davis, Senior Vice President of Regulatory & Government Affairs and Chief of Staff, get in touch with him tomorrow and set-up a time for discussion with the NJ TRANSIT staff.

Basil Giletto, Chair of the Senior Citizens and Disabled Residents Transportation Advisory Committee (SCDRTAC), said he was speaking in his official capacity. His members have identified a serious problem that requires NJ TRANSIT's help. Mr. Giletto said while they were thrilled that most services have been reinstated to previous weekday and weekend levels as of July 6, 2020, many seniors and disabled have little or no alternatives to travel with what NJ TRANSIT provides. Mr. Giletto said now that they are back in NJ TRANSIT buses and trains, they find themselves in many instances with no access to restrooms or waiting rooms. This is a major problem, because of the Governor's Executive Order, waiting rooms are completely off limits, and in many of the stations they have no place to sit.

Mr. Giletto said many of their seniors are frail, and their systems are compromised. In most stations, there just is not enough outdoor seating and, therefore, has been impossible to maintain social distancing, which is very important for their age group. With no one allowed in the waiting rooms, he said his constituents were herded into the remaining spaces, where they were forced to put their health at risk while waiting for their trains and buses. Mr. Giletto said this was especially of concern when transfers require an extended stay in a particular station. Their frail seniors may find themselves unable to stand for the extended time periods until their transport arrives.

Mr. Giletto said outdoor seating will be even less favorable once the weather becomes severe. He urged considering opening every third seat in the waiting room even if a ticket is required to use these seats. Mr. Giletto said bathrooms not being open further causes complications for seniors using service during non-peak hours since they are only open when a ticket agent is on site. He has come before the Board before asking NJ TRANSIT to invest in this age group's needs, stating that the resultant increase in revenue would justify the effort. As Baby Boomers, they will require service for another 40 years, and they will do so if they find this type of travel both accommodating and safe. Mr. Giletto urged NJ TRANSIT to open the restrooms and waiting rooms safely as soon as humanly possible.

Samantha DiFalco, Organizer with Food & Water Action New Jersey, commented on behalf of over 72,000 members and supporters in New Jersey. Ms. DiFalco said they wanted to express their appreciation to Governor Murphy and NJ TRANSIT for coming to the decision to shelve the proposal to build and operate a fracked gas power plant in Kearny and sincerely explore constructing a power plant using 100 percent renewable technology. This decision will keep 571,000 additional tons of greenhouse gas emissions out of the atmosphere and additional toxic fossil fuel pollution out of environmental justice communities.

Ms. DiFalco said this is a huge step in the right direction towards fulfilling the goals laid out in Governor Murphy's clean energy and environmental justice commitment. She said it is their hope that NJ TRANSIT will hold true to the course enacting a moratorium on all fossil fuel projects in New Jersey. This is an exciting opportunity to leverage public enthusiasm for clean energy and bold climate action and to set NJ TRANSIT on the right track, not only to design and construct this microgrid using renewable technology, but to develop a whole transit system powered by renewable energy. Ms. DiFalco said this could truly be a model for the whole country and hopes this is just the first step for NJ TRANSIT becoming the leader in a renewable powered public transportation.

Ms. DiFalco said the Don't Gas the Meadowlands Coalition is excited about participating in a new meaningful public process in the development of this new microgrid and in the future other projects that will put NJ TRANSIT on the right track to becoming the first transit system powered by 100 percent clean energy. This decision also provides a huge opportunity for the state to make long-term investments in union jobs and clean energy and will help facilitate a transit system towards a green new deal. Ms. DiFalco thanked Governor Murphy for his commitment to clean energy.

Matthew Smith New Jersey State Director, for Food & Water Action expressed gratitude to Governor Murphy and NJ TRANSIT for tonight's historic decision to shelve the gas fired power plant project and move forward with a serious exploration of a 100 percent renewable energy alternative for public transit resiliency. Mr. Smith said this is a win-win for clean air, the climate, and economy. This decision also comes on the heels of an unprecedented grass-roots movement as thousands of people have signed petitions, sent emails, made telephone calls, and have spoken at numerous Board meetings. He said

they are also joined by 16,000 cities who have strong resolutions against the fracked gas power plant and for a clean energy alternative. He said opposition also includes 13 State Legislators who support this decision to table the gas fired powered plant and replace it with clean energy. Mr. Smith said they are thrilled and excited for this opportunity, and for context, NJ TRANSIT could position itself as a driver of Governor Murphy's clean energy climate commitment and establish itself as an international leader in the fields of clean energy and energy storage. Mr. Smith is excited about NJ TRANSIT's commitment to getting the greatest and brightest students in colleges across the State who are studying about climate change and clean energy involved in their decision making as well as the environmental justice advocates. Mr. Smith said working together will put NJ TRANSIT back in its rightful place as a leader in the transit industry.

Ryan Felmet said he was glad that NJ TRANSIT has finally come back to the table with a favorable decision for the environmental groups after the relentless discussions on the transit grid. He said it was much appreciated at the end of the day. Mr. Felmet thanked the active Board Members for their work at committee meetings in recent months, in particular Board Members Gordon, Adams, Fulton, and Narra and said their work was truly appreciated. Mr. Felmet thanked NJ TRANSIT for putting the audio of committee meetings on the website and said this has been the right step towards transparency.

Mr. Felmet hopes the Board will start the conversation and the public will hear more on cost-cutting saving measures as they go beyond 2021 because the CARES Act funding is only going to last so long. They want to hear if the Board is closely monitoring the expenses as it relates to the budget and said it has been noted that Board Members have not had the chance to see the budget. The public wants to ensure that there will be no impacts to service and they all need a transit system to rely on beyond 2021 and thought it was time to examine things such as union contracts and satellite offices. Mr. Felmet asked NJ TRANSIT to please do not lose sight of cost saving measures because this agency has already been running on low funding before the pandemic hit and a transit system is needed.

Elizabeth Ndoye resident of Hoboken and member of the Don't Gas the Meadowlands Coalition said they have worked hard to get to this moment tonight and thanked NJ TRANSIT and Governor Murphy for taking this incredibly historic step of opting for an alternative energy plan for the power plant. She believes NJ TRANSIT will become champions of environmental justice and protectors of public health by constructing this power plant with renewable energy. Ms. Ndoye said she was personally happy this will be protecting the health and wellbeing of her children, other family, and friends and ensuring they will have a future with cleaner air and water. She looks forward to participating with NJ TRANSIT in the public process as they move forward in the creation of a hybrid microgrid. She believes this will put NJ TRANSIT on the path to lead this State and the nation in becoming the first transportation system powered entirely by clean energy. She congratulated NJ TRANSIT on taking a stand on environmental justice and a cleaner planet for future generations and looks forward to the unveiling of NJ TRANSIT's 100 percent clean energy transit system. Kudos for opting for the plan that

will protect future generations and bringing New Jersey to a closer thriving green new deal economy.

Joseph Clift asked the six outside voting members of the Board a single question, "Do you aspire to be the active, policy-generating Board of the 2018 NJ TRANSIT Reform Act continually advocated by Senator Weinberg and not the compliant, rubber-stamp Board of the past?"

Mr. Clift asked the Board to table Action Item 2010-60, $2.6 billion Fiscal Year 2021 Operating Budget to allow robust in-public Administration Committee review, discussion and modification of the budget, as required by the Act. He said not a single word or number in today's proposed budget has been presented or discussed at even one Committee's monthly meetings, despite the Act's mandate, the "Committee shall advise the board of directors on financial matters, including, but not limited to proposed budgets including the capital program, major expenditures of the corporation, and all financial policies." Mr. Clift said missing work that should be covered in these meetings is, 1) take a hard look at projected Fiscal Year 2022 expenditures, which could more than double NJ TRANSIT's Fiscal Year 2021 need for State Appropriations support from $386 million to over $800 million due to NJ TRANSIT being once again a repeat of (Fiscal Year2009-Fiscal Year 2010), a massive 35 percent, $203 million cut in NJ TRANSIT's pre-COVID $590 million 2) a more aggressive waste cutting and efficiencies; and 3) setting smart instead of amorphous goals such as (specific, measurable, achievable, relevant and timebound). Mr. Clift said a date needs to be established for the return of the dozens of trains temporarily disconnected in 2018 due to Positive Train Control Implementation, which should be restorable with the full roster of locomotive engineers in early 2021.

Mr. Clift asked the Board to table Action Item 2010-61, $1.4 billion Fiscal Year 2021 Capital Plan Adoption and Fiscal Year 2021 authorization to secure Capital funding to allow the same legally required action by the Administration Committee as previously described. An in-depth review, in-public review by the Board members is especially important because some of the projects, in particular Portal North Bridge no longer needs to be built because a Portal South low-level removable bridge can be built for $400 million, and the same concept can and should be applied to Portal North. Mr. Clift said some of these action items do not have to be approved today, and NJ TRANSIT is operating on the resolution for last year's fiscal budget. Mr. Clift said at the September 30, 2020 Administration Committee meeting, the Board was completely misled when the Chief Executive Officer and Chief Financial Officer stated the Board had approved the Fiscal Year 2021 Budget at the March 11, 2020 Board meeting. Mr. Clift said it did not happen, only proposed numbers were sent in.

Ellen Lee thanked the Board and NJ TRANSIT for stopping further development on their plans for a fracked gas power plant and continuing to protect public health and environmental justice communities and the future of the State. Ms. Lee was glad to see that NJ TRANSIT has taken consideration to views surrounding this issue. Ms. Lee was excited to see the new proposal for the NJ TRANSITGRID and the implementation of the proposed stipend. Despite this exciting announcement she wants to make sure that

NJ TRANSIT is aware they are not leaving them alone. Ms. Lee said they will continue to follow future decisions to ensure that the new NJ TRANSITGRID will be clean and have no use of natural gases that will harm their lungs or communities and the environment, but rather be a sustainable energy source which will provide the State with good union jobs. This could also put NJ TRANSIT in a position to becoming a national leader in getting away from fossil fuel and achieving the goal of a clean new deal.

Paula Rogovin member for the Coalition to Ban Unsafe Oil Trains and the Don't Gas the Meadowlands Coalition said as one of the thousands of people who signed petitions, rallied, marched, helped to lobby State legislators and local town council, and sat at countless Board meetings month after month to stop NJ TRANSIT's original plan to construct a dirty fossil fuel power plant is finally delighted they have been heard. Ms. Rogovin said it is so exciting that Governor Murphy and NJ TRANSIT are onboard with the renewable energy hybrid microgrid to power NJ TRANSIT trains, which is an alternative proposal that came directly from the Don't Gas the Meadowlands Coalition. She said the Coalition can now imagine a renewable energy hybrid microgrid for transportation throughout the State of New Jersey and for the whole country.

Ms. Rogovin said they look forward to New Jersey leading the nation in renewable energy and said it is a victory for environmental justice, the air, and the environment. The Coalition expressed their appreciation to Governor Murphy for taking a bold stance which puts into practice what he has been saying for several years. Ms. Rogovin said climate change is real and science must be followed. Ms. Rogovin said this moves Governor Murphy's Executive Order 23 into something real and significant. The Coalition is pleased to see an Ad Hoc Committee being added so that real public dialogue and participation can take place surrounding this issue, and they all are part of this victory, and they look forward to working with everyone.

Edward Potosnak, Executive Director with the New Jersey League of Conservation Voters (NJLCV) said supported Action Item 2010-64 the proposed NJ TRANSITGRID project which offers up to $3 million in stipends to convert the outdated and dirty fossil fuel power plant to a clean renewable alternative. NJLCV is not 100 percent certain that the large scope of a 140-megawatt project is needed and would encourage an independent analysis to validate actual need through what he calls a COVID lens. Mr. Potosnak said he thinks people have learned in COVID times about what is truly needed in this crisis, and most people would agree that trains need to continue to run. He said life as we know it has changed, and it seems rational today that a large-scale power outage described on slide four of the NJ TRANSITGRID presentation, NJ TRANSIT would not need to run at peak power usage of 140-megawatts because a lot of places will be out of power and there would be no workplace to go to.

Mr. Potosnak said the size of this project should be re-evaluated by a third party to make sure the project is aiming for the right goal. Mr. Potosnak said while they prefer to see a redesign from the beginning in the scope, they are very pleased to see how NJ TRANSIT is embracing Governor Murphy's energy vision by offering stipends for renewable power generation and creating jobs. They are optimistic and will be carefully watching the

progress as they know the air permit for the outdated air polluting facility has not been withdrawn and they are urging NJ TRANSIT to withdraw these permits. Mr. Potosnak said what they are calling NJ TRANSITGRID 2.0 needs to be more than a good faith effort to develop a clean and renewable alternative, NJ TRANSIT really needs to hit it out of the park because there is no room for a dirty carbon burning power plant or half measures. The region has been choked by pollution from combustion and power plants that produce climate changing carbon dioxide and other pollutants, it is also important to include the cost of carbon on health and environment when weighing those decisions. Mr. Potosnak asked the Board to please withdraw the air permits from the New Jersey Department of Environmental Protection because all eyes are on NJ TRANSIT to ensure NJ TRANSITGRID 2.0 is one that does not add pollution to the already overburdened communities.

Matt Kamper, Regional Director of Passengers United commented on Action Item 2010-61, NJ TRANSIT Fiscal Year 2021-2025 Capital Plan and said he is in full support of the plan because there are a lot of amazing things that NJ TRANSIT is planning on doing. Mr. Kamper said NJ TRANSIT really does care about the riders across New Jersey, and that they have been doing incredible work with the Capital Plan, and he is looking forward to seeing more. He hopes that NJ TRANSIT will continue to work with the Federal Railroad Administration to make sure that the Gateway Tunnel Project can be funded so they can fix the Hudson River Tunnels for future generations.

Mr. Kamper was pleased to see NJ TRANSIT is providing updates on Positive Train Control on a monthly basis, and is hoping they will keep this up, and that they will meet the Positive Train Control deadline. Mr. Kamper also suggested that it would be helpful if NJ TRANSIT could post the Positive Train Control update along with the agenda to be presented to the public online beforehand so that they have a chance to read it before the meeting. He said the presentations were great and NJ TRANSIT is really listening to the riders and he hopes that this will continue.

Jason Anthony, Vice President of Passengers United said that Action Item 2010-61, NJ TRANSIT's Fiscal Year 2021-2025 Capital Plan is a good deal. This Capital Plan needs to be funded by the federal government which is giving zero dollars to transit. Mr. Anthony said he knows that President & CEO Corbett along with MTA Chairman Pat Foye is advocating for federal funding for transit. Mr. Anthony was very impressed with NJ TRANSIT's Capital Plan and said it satisfies all of the riders' needs, and this is exactly what is needed to put NJ TRANSIT back on map to its glory days. He said renewable energy is a good thing and that is why they are going to continue advocating for future generations.

Jeff Tittel thanked the Board for all their work and said this is all about the power of people. He said after meetings and telephone calls this subject shows what the public can do when they are united. This is a true victory to the environment and people of New Jersey that went from a project that was wrong until now to a project that is right and having the potential for a clean energy future. Mr. Tittel said there is still a lot of work to do, and he knows this is not going to happen overnight. He said it was critical to add an

Ad Hoc Committee and reach out to the public for participation and felt NJ TRANSIT should also reach out to Rocky Mountain Institute, New Jersey Institute of Technology, and Stevens Institute because they have great minds that could help move this State towards sustainability.

Mr. Tittel said this project is of national significance and would be the first major microgrid to run a transportation system on this continent. This is a major victory in the battle of climate change and in green transportation. He is so glad the Board has invested in the future because it is critical going forward. Mr. Tittel said not only can the microgrid be done through a combination of hybrid, solar, and battery storage, but maybe even fuel cells so that you would not need any natural gases to supplement. He said an assessment of land in the State needs to be done so they will know where the solar panels can be placed. He said there are landfills owned by the Sports Authority and areas along the NJ Turnpike right-of-way that are perfect for solar. The most important thing is that we do this together so that NJ TRANSIT can once again be the leader that it once was in transportation.

Andy Pollack Public Advisor to Passengers United thanked the Board for their approval of a very important Action Item 2007-52 back in July 2020 which approved the new Portal North Bridge Project which was long overdue. Mr. Pollack noticed that a lot of trains have been cancelled because there are not enough engineers available and would like to know when the engineers will be available.

Mr. Pollack was concerned about the fast approaching deadline for Positive Train Control implementation and hopes NJ TRANSIT will meet this deadline with the work that still needs to be done.

Mr. Pollack was happy that NJ TRANSIT will be electrifying buses and is glad that the Capital Plan assures that NJ TRANSIT is going to finally start electrifying the buses, especially the interstate buses because diesel fuel is unhealthy for the environment.

Richard Grant a Hackensack resident sincerely thanked NJ TRANSIT and Governor Murphy for this momentous decision to power the microgrid with clean energy and stop the efforts of a gas fired power plant whose emissions would have adversely affected the health and wellbeing of nearby residents. This action will serve as a model for others to take action. Mr. Grant said he was one of the volunteers with “Don’t Gas the Meadowlands asking Governor Murphy and NJ TRANSIT to press the reset button on the NJ TRANSITGRID project and his original comment he was going to suggest that the Board of Directors establish an energy and sustainability policy committee and he stands by this. Mr. Grant said if it is in the purview of the Board he would like them to consider thinking of expanding NJ TRANSIT’s mission by adding sustainable transit service to safe reliable, convenient cost-effective transit service as a leading bedrock consideration in agency decision making.

Holly Cox thanked the Board and Governor Murphy for their historic decision to protect public health and environmental justice and provide a path for a safe climate future for all

of us. Although she realizes this may have been a difficult political decision for everyone to make, she highly commends the Board and NJ TRANSIT for listening and reaching a decision to halt the development on a gas fired power plant and reimagine this project using clean energy. Ms. Cox said three years ago she heard that humanity only has until approximately 2030 to act on climate or the irreversible damage will be too late. She said there is news every day that the climate is rapidly changing, and that Superstorms like Sandy and Isaias are only a few of the warnings and these storms are getting stronger and more frequent, and the wildfires in California are getting worse. She said the planet, wildlife, and oceans are suffering, and the list goes on and on. Ms. Cox said she is glad about this new project with renewable energy and it is a small but significant step in the right direction. This goal could put NJ TRANSIT on track to become the first transportation system that will be powered by 100 percent clean energy, which is amazing.

Andy Quito member of Passengers United said he is in full support of the Capital Plan and thought it was great. Mr. Quito said NJ TRANSIT is doing a good job and the NJ TRANSITGRID project shows that NJ TRANSIT cares about the people and the environment. Mr. Quito said he cannot wait until the new multi-level cars come in so service could be extended on the Coastline during summer months. He suggested that NJ TRANSIT have a semi-express every half-hour on the Coastline with every other train terminating at Aberdeen. Mr. Quito said he was very glad that electric buses are being purchased and in a few years all buses will be electrified which will be very good for the environment and future generations. He hopes NJ TRANSIT can move forward with the Gateway Project because the Hudson Tunnels are in need of a major fix.

Ted Glick President of Organization 360 said they have been very active with the “Don’t Gas the Meadowlands Coalition” and thanked NJ TRANSIT and the Board for their wisdom and decision to rethink the microgrid project. Hopefully together they will work to develop a clean renewable energy alternative. In addition, this could be a model of what is constructed. Mr. Glick said many people in his organization has had experience with government officials either trying to shut them up or humor them while going about what they do, and maybe in making this project a model can help make the shift to renewable energy.

Nat Bottigheimer New Jersey Director for the Regional Plan Association said NJ TRANSIT’s maintaining levels of service pre-pandemic is vitally important to New Jersey’s health, economy, and environment and to the tens of thousands of essential workers who rely on it daily. he said the Regional Plan Association is delighted that NJ TRANSIT’s budget is maintaining service and fares at pre-pandemic levels through Fiscal Year 2021, however there are deep concerns for Fiscal Year 2022 and beyond and the availability of needed transit funding to continue this crucial service. Mr. Bottigheimer said with no guarantee of additional federal relief funds beyond those already received, it is critical that the federal leaders keep the pressure on for a second round of COVID relief funding. New State sources of funding must be tapped to prevent transit service reductions that will harm essential workers and the most vulnerable and forestall the diversion of capital funds in the infrastructure rebuilding NJ TRANSIT has set forth in its Strategic and Capital Plans. He said the Regional Plan Association advocacy

for elevated transit funding depends on the easy and transparent availability of performance information and planning materials from NJ TRANSIT.

Mr. Bottigheimer said the Agency is definitely moving in the right direction. The recently released Strategic and Capital Plans are models of information and communication and the newly released customer service data showing ridership by race and income motivates resources to support New Jersey's most vulnerable. Mr. Bottigheimer said more detailed data on bus movement can show how traffic congestion and other factors worsen bus performance and increase transit cost and would be extremely helpful to their advocacy, as would online libraries of past planning studies. He said the Regional Plan Association understands that raw data on transit performance can be imperfect and reveal information gaps that need to be corrected. He said they recognize this risk and commit to providing the greatest support possible to correct the gaps for the investment in updated information systems.

Doug O'Malley, Director of Environment New Jersey representing more than 20,000 members and 60,000 supporters across the State thanked Chair Gutierrez-Scaccetti, President & CEO Corbett, Board Members and the NJ TRANSIT staff for their decision on the NJ TRANSITGRID project. Mr. O'Malley said this has been a process, but now NJ TRANSIT is looking at a project with more transparency. He also thanked NJ TRANSIT for their commitment to have an inclusive and transparent public process including the creation of a new Ad Hoc Committee around the NJ TRANSITGRID project as well as sustainable measures by NJ TRANSIT. Mr. O'Malley congratulated Board Member Fulton for his willingness to take on both the role as Vice Chair of the Board and his role to Chair the new Ad Hoc Committee. Mr. O'Malley said NJ TRANSIT is clearly getting the decision right and this clean renewable energy resiliency project can provide a national template for how New Jersey can get resiliency and move away from a fracked gas future that will release bad air pollution. He said this is a huge moment for the thousands of citizens, legislative leaders, including Senator Loretta Weinberg, and more than 16 towns across New Jersey who passed Resolutions for NJ TRANSIT to move to renewable options. This is also potentially the largest solar energy storage microgrid project in the country. He said this is exactly the sort of project that New Jersey should be investing in, and this is what a clean renewable energy future looks like. It is critical to note that there will be more extreme weather events and power outages and NJ TRANSIT should not double-down on fossil fuels.

Janna Chernetz, Deputy Director of Tri-State Transportation Campaign said Fiscal Year 2020 and the entire Fiscal Year 2021 is nothing that transit has ever seen before. She said nearly 100 percent of ridership reduction and the onset of lockdown has taken half of NJ TRANSIT's Operating budget. A State, under the ninth month of COVID with a substantial number of restrictions lifted, ridership numbers still remain to be a fraction of what they were pre-COVID. Ms. Chernetz thanked the leadership in Washington for the money allocated to NJ TRANSIT from the CARES Act to carry the agency through Fiscal Year 2021. A number of experts have been tracking several trends they have been seeing in the region, however, she said this called into question if New Jersey is able to respond in an equivocal expedited manner.

Ms. Chernetz said thanked Susan O'Donnell and her team for taking on the responsibility to study ridership behavior. Ms. Chernetz said Tri-State will continue to survey and organize riders to elevate their voices, so their needs are heard, and they look forward to continued dialogue with transit on this matter. While we know these findings are temporary there are hints our ridership might not rebound fully. She said surveys show that one percent of people permanently work from home, six percent through the end of 2020 and 14 percent through 2021, which impacts the Fiscal Year 2022 budget cycle, 83 respondents indicated some sort of shift in the flexibility of work hours or a hybrid schedule. Experts have found that 20 percent of businesses will offer permanent work from home options with 30 percent choosing a hybrid format. Without emergency assistance for these states, NJ TRANSIT will be in a precarious position in Fiscal Year 2022 to compensate for this loss in revenue. To further complicate Fiscal Year 2022 forecasts, and with the second wave of COVID, this was not considered in the current core package of the budget. She said COVID has also highlighted the vulnerable customer, transit dependent and the elderly and interstate bus riders who represent a majority of NJ TRANSIT riders. Throughout the pandemic, this also includes essential workers recognized as people of color who account for 43 percent of essential workers who have jobs that pay less.

Ms. Chernetz shared two examples of station challenges affecting the older population 1) a gentleman who resides in a group home for people with developmental disabilities in Monmouth County relies on public transit to get to his job every day and his employer prohibited him from working if he used public transit. 2) Some county, municipal and governmental transportation for seniors was reduced or halted which left seniors without access to get meals and social educational opportunity and some compounding issues of socialization. Ms. Chernetz said this is the perfect timing for the NJ Department of Transportation to work with municipalities to attract smaller offices and other businesses that have chosen to downsize and leave the high rent in New York City and encourage more interesting travel along the corridors. This could be economic food, not only for the local economy overall, but for the State and increase NJ TRANSIT's ridership. She said if something is not done, this could lead to disaster for Fiscal Year 2022.

Jeffrey Rapaport thanked Governor Murphy and the Board for the path laid out on the NJ TRANSITGRID and said the presentation was very well described. He said he must remain an active citizen on many fronts of the environment and it was gratifying to see that NJ TRANSIT did this. Mr. Rapaport said the Board has sat through so much this past year and that he was here for the children who cannot speak for themselves.

Joe Basralian thanked NJ TRANSIT for re-imagining the NJ TRANSITGRID project and although he thanks Governor Murphy and the Board, a special thanks goes to the people who do most of the work which are the employees at NJ TRANSIT. Mr. Basralian said the work that NJ TRANSIT employees do is not easy, and they are working really hard and it is appreciated. He said everyone should feel proud about the new direction NJ TRANSIT has taken to be on the right side of history, technology, the planet, efficiency, and justice. Mr. Basralian said there is a lot of talk about climate and NJ TRANSIT will not be adding

a massive new source of pollution to the lungs of hundreds of thousands of residents who are already in overburdened areas. He thanked the Board and said that the public is here to contribute along the entire way.

Tim Sevener Director of the New Jersey Association of Rail Passengers thanked the Board for listening and agreeing to move towards solar renewable rail. He hopes that this NJ TRANSITGRID project will chart a course for electrification of all NJ TRANSIT rail lines. He especially would like to see the Montclair/Boonton line electrified on the 8-mile segment to Denville and then power it out with renewable energy. This will make NJ TRANSIT the green transportation leader in the United States. Mr. Sevener thanked Governor Murphy and the Board for pivoting and listening.

Adam Reich said with the new vacancy in the Customer Advocate position and the ongoing critiques of NJ TRANSIT's customer service, it is imperative that they ensure that the selection process for a new advocate is competitive and transparent. He said there are a lot of members of the public who comment at meetings that are worthy of a look, if they want the job. The next person to fill the position should be more directly accessible to the average rider and should consider holding town hall-style events to field questions directly from the public, and if possible, bring along Board Members and Agency staff leaders as part of the discussions. In addition, the Customer Advocate should make use of the Customer Advisory Board as there is tremendous value in having an ongoing dialogue with riders that you cannot necessarily get from surveys. The Customer Advocate should also ensure they are transparent with negative information that can be relayed at Customer Service Committee meetings, rather than just hearing about response times for calls and tweets. There should be more discussed about rider complaints, cancellations, and what is being done or not done.

Mr. Reich said on the subject of face coverings, if riders are going to trust the agency, there needs to be greater clarity with regard to mask compliance. Common complaints on social media are rows on buses being blocked off, railcars on trains are being closed off, and non-compliance among employees and riders. While NJ TRANSIT representatives acknowledge these complaints and supposedly forward them to the appropriate division, the riding public does not seem to get any real follow up. Mr. Reich said in order for the public to trust NJ TRANSIT with their safety, they need to see detailed data on compliance and how it is being enforced and how many summonses have been issued for non-compliance. Mr. Reich asked President & CEO Corbett to answer two questions; what the replacement process will look like for the Customer Advocate position; and when can the pubic expect an update on the Customer Advisory Board, because the last time they received information was in early 2020.

Janet Glass said she lives in an environmentally vulnerable area, North Bergen, New Jersey, and was representing a Green Faith Circle, which is a coalition of nine congregations in the Hudson and Bergen county who are concerned about the environment. They were so glad to hear of NJ TRANSIT's new commitment to clean renewable energy regarding the proposed NJ TRANSITGRID. Ms. Glass said from their perspective NJ TRANSIT is now on the right side of history and this is the right call for

New Jersey by not using fossil fuel at a time when they all know better. Ms. Glass thanked everyone for listening to all of them, and said as challenging as this project might be, they urge NJ TRANSIT to stick with it.

Christian Nowell said he has been riding public transportation in many countries around the world and was always so impressed with how clean, quiet, bright, and on time local transportation was in these places. He lives in Fort Lee, New Jersey, didn't have access to his car, and wanted to visit a friend in Jersey City so he decided to take the 158 bus along River Road to the Light Rail. Mr. Nowell said a lot of the buses are old and noisy and sound like they are going to fall apart at any second. He said many tourists who come to this country take their buses, and he hoped what these tourists had was better, because he felt embarrassed. However, after getting off the ferry at Port Imperial, he got on the Light Rail and felt he had stepped into the future and said he felt a sense of pride knowing that this was in New Jersey.

Mr. Nowell said the metaphor of his story was that a fracked gas power plant would have relied on obsolete technology and fuel. The clean renewable energy alternative is the reality that they cannot afford to not have. Mr. Nowell said the decision that has been made today is not only an environmental and economically sound decision, it's ethical, and he really hopes NJ TRANSIT feels a sense of pride in making a commitment like this, which is how he felt when he got on NJ TRANSIT's Light Rail. He is so excited that together they all can make New Jersey a shining model for other cities, states, and countries around the world to emulate.

Brian Scanlan, former Councilman and Mayor of Wyckoff, New Jersey, and a volunteer with Food and Water Action, said he wanted to thank NJ TRANSIT for listening to them and providing feedback on the NJ TRANSITGRID project. He was an avid rider of NJ TRANSIT's 148 and 164 bus, rode it up until the pandemic, and was in that percentage of workers who are no longer using the service. Mr. Scanlan said he has been riding the bus for more than 30 years into Manhattan. He said 10 years ago NJ TRANSIT was a leader, and the reimagining of the power plant in Kearny is going to put NJ TRANSIT back on the map once again to be the leader in public transportation and he looks forward to hearing more.

Andy Weiss said he would like to thank Board Members Gordon and Adams for their great work. He said he contacted Board Member Gordon and told him that the Lincoln Tunnel's exclusive bus lane was closed, which is one of the most important bus lanes in the region, and Board Member Gordon had the problem fixed promptly and it helped thousands of commuters. Mr. Weiss said unfortunately he felt President & CEO Corbett ignored the most important bus lane in the United States that was closed and affects thousands of NJ TRANSIT commuters; he wanted Governor Murphy to know this was a major oversight on Chair Gutierrez-Scaccetti and President & CEO Corbett's part. He felt the bus lane would still be closed had it not been for Board Member Gordon.

Mr. Weiss said a bus departed a bus terminal with broken glass on the front door, he contacted NJ TRANSIT's Customer Service which he said does a great job, and a woman

responded promptly but he received two different and unusual stories about it. He believed that the head of Bus Operations, Mr. Kilcoyne, should be held accountable, and they can't have broken glass or hanging wires on buses.

Mr. Weiss said he couldn't understand why NJ TRANSIT and the Murphy Administration was hiring 26 more Transit Police Officers while cutting more buses and train service. He does not think this is fair for the State. He felt that Chief Trucillo spends too much money, already has more than enough Police Officers, and it's outrageous and selfish to hire more officers when the public only gets one bus an hour. Mr. Weiss questioned whether this was Governor Murphy's fair philosophy to hire more Transit Police while bus and train service is being cut.

Rachel Dawn Davis, Public Policy and Justice Organizer for Waterspirit, a non-partisan and non-profit spiritual ecology center, said they would like to thank NJ TRANSIT, Governor Murphy, and all the staff for their sensitivity to the NJ TRANSITGRID project. She said this was a historic decision to protect public health and put environmental justice at the forefront and focus on planning for a safe climate in New Jersey for future generations. Ms. Davis said the educational effort talked about at the last NJ TRANSIT Board meeting which yielded towns passing resolutions against a gas fired power plant proved that it was evident that communities knew this was not in their best interest. She said the follow-up commitment for NJ TRANSIT to provide construction with 100 percent of clean renewable energy demonstrates what is possible when communities are educated.

Ms. Davis said clean water is a human right and protecting it is their sacred duty. She said 100 percent renewable energy translates into 95 percent less water consumption than that used for conventional power generation. Developing this project with clean energy rather than natural gas will not only prevent climate and lung destroying fossil fuel pollution emissions in Kearny and other neighboring towns but will lessen their reliance on hydraulic fracking that is devastating to their communities living near drill sites. Ms. Davis said the amount of fresh water resources wasted through gas powering in all fossil fuel operations is an amount they cannot afford to waste any longer. She said it's so heartening to demonstrate to young people living not only in these impacted communities but all across the State, that through dialogue and discourse projects can be changed. Ms. Davis said the ad hoc committee will fit in nicely with the accomplishment of incorporating climate change throughout all of New Jersey's curriculum and hopes NJ TRANSIT will engage student and researcher input, which will keep the process transparent and make NJ TRANSIT a national leader.

Anthony Attanasio, Owner and CEO, of Hawk Strategies said in recent years NJ TRANSIT has been under constant assault and a lot was heard tonight. He said the reality is there was some justification for past previous years, not hiring enough locomotive engineers and bus drivers to keep pace with attrition, and also allowing the infrastructure to fall into a state of disrepair. Mr. Attanasio said if you fast-forward to the transit agency he sees today, it is impossible to ignore how far the agency has come in the last few years, despite COVID-19 and the impact on its workforce. He said

NJ TRANSIT's progress has been remarkable and noted the launching of a new Strategic and Capital Plan, for the first time outlining a long-term strategic vision to guide the agency.

Mr. Attanasio said NJ TRANSIT finally has a handle on the PTC Implementation and as heard there tonight in the presentation, is on target to meeting the December 31, 2020 deadline. He said the modification to the NJ TRANSITGRID to make it more environmentally friendly is great and moving these projects forward is critical for the region.

Mr. Attanasio said NJ TRANSIT receiving the final award for the Portal North Bridge Project was such an achievement, because an agency that's going backwards would not receive this type of federal support from the government. He believes the agency is definitely moving forward because they are moving over $4 billion dollars of capital investment over the next several years, which includes Portal North Bridge, have hired 700 Bus Operators, and plan to graduate more Locomotive Engineers than in the previous five years combined. Mr. Attanasio said NJ TRANSIT's response to COVID-19 and the focus on the health and safety of NJ TRANSIT customers and employees has been incredible, and while some criticism is deserved for things done in the past, what has been done recently deserves recognition. Mr. Attanasio said that Governor Murphy, Chair Gutierrez-Scaccetti, and President & CEO Corbett have done an amazing job.

Jerry Keenan, President of New Jersey Alliance for Action, a non-partisan, non-profit organization representing thousands of businesses, labor, government, and others, is dedicated to environmentally friendly infrastructure and capital construction to improve the economy, environment, and quality of life. Since 1974, their work to improve New Jersey's transportation, water, education, power, and healthcare have made the state a better place to live, work, and visit. They believe the NJ TRANSITGRID Project checks all the boxes, first providing resilient power to key NJ TRANSIT facilities and portions of the Northeast Corridor, Morris & Essex, Hudson-Bergen Light Rail, and signal systems. They all know the aggravation and disruption caused to their lives by transit failures. The system redundancy created by the NJ TRANSITGRID would be key to keeping trains running, people moving, and avoiding the system's breakdown caused by storms or other times when the system could be compromised.

Mr. Keenan said the NJ TRANSITGRID will also boost the economy by creating construction, as well as permanent jobs, and the better service it provides will attract new businesses and residents to the area. This NJ TRANSITGRID will also transform a brownfield area, and NJ TRANSIT's commitment to maximizing the use of clean renewable energy sources to power the microgrid to the greatest extent possible is going to have a great impact on the environment at time when they need most. Mr. Keenan thanked Chair Gutierrez-Scaccetti, the Board, and President & CEO Corbett for their leadership in moving forward with this project.

Patty Cronheim, Campaign Director for the New Jersey League of Conservation Voters (NJLCV), thanked NJ TRANSIT for their decision to take the NJ TRANSITGRID project

in a new clean energy direction. They are very encouraged that NJ TRANSIT is establishing a bidding process that incentivizes alternative clean renewable energy solutions as a replacement to the original gas fired power plant.

While they are very encouraged, they are concerned whether the previous project's pre-determined energy needs requirement is exactly in sync with the new renewable energy goals. NJLCV urged the Board to review the requirements based on an independent needs analysis that is built on and integrates its new stated goals for the renewable project from the beginning and reach out to the Rocky Mountain Institute because they are trusted renewable energy experts. They highly recommend Rocky Mountain Institute or others of this caliber to look at the project.

Ms. Cronheim said rather than adding renewables onto an old project, they should start from scratch in creating a desirable project outcome for NJ TRANSITGRID 2.0 for success. NJLCV said as an act of good faith, if NJ TRANSIT wants to demonstrate to the public that they are committed to renewable solutions, they strongly suggest removing the NJDEP Air Permit for gas fired power plant. She said this plant would emit about 575,000 tons carbon dioxide per year in Hudson County's already overburdened communities. Ms. Cronheim said in keeping the original plan alive, it falls under outdated rules allowing it to spew more toxins into the air and voids the new cumulative impact bill to protect environmental justice communities as well as the new state bill that requires the State to use 20-year time horizons rather than a 100-year horizon to evaluate the impact of greenhouse gases, such as methane. She believes NJ TRANSIT should hold to the highest standards of law by withdrawing the air permit and redesigning the new project from the ground up.

Robert Hale said he wanted to discuss the NJ TRANSIT Capital Plan, stating while in general it's a good blueprint, there is still a lot of work that needs to be done. He said there should be no investments in ferries because one ferry can only carry a maximum of two-three railcars worth of people and have way too low of a capacity. Mr. Hale said the entire ridership of New York Waterway is 15,000 people in and back out every day, and ridership across the Hudson Tunnel today is about 200,000, with 100,000 in and back out. He noted that the cost of the ferry in the Capital Plan plus the NJ TRANSITGRID is almost $1 billion.

Mr. Hale said for cost control measures, NJ TRANSIT must get as much tunnel out of every dollar just as the MTA got under the Second Avenue Subway Project, and if this is done, NJ TRANSIT can build the Hudson Tunnel at that cost of $500 million a mile. He said that $1 billion being proposed to spend on the NJ TRANSITGRID and ferries gets most of the way to Hudson Tunnel. He believes if they build it at the channel cost of $350 million a mile, they get to it inside of $1 billion.

Mr. Hale said what NJ TRANSIT has to do now along with Amtrak and the Port Authority is invest in bringing down project costs, not just for all of its state of good repair work. On expansion work, he believes they should invest in internal design and planning work and have staff cut-out most of, if not all, the need for consultants. Mr. Hale urged learning from

overseas rail operators and infrastructure managers on how to build and coordinate projects, noting most of the supervision and planning is done in-house, and quoted a piece from Brian Rosenthal about the Second Avenue Subway, “Scant Consultants Everywhere Else but in America.”

Mr. Hale thanked Board Member Gordon and Adams for their time and listening and said don’t buy the multi-level railcars because they add a minute to every stop, cannot through-run, and need to consider going with something like the Class 700 railcars. Lastly, he urged them to rethink the Monmouth County Bus routes because it just wastes money.

David Pringle was pleased to see that NJ TRANSIT has reversed its course on the NJ TRANSITGRID project. He gave a shout-out to the grassroots movement, Senate Majority Leader Loretta Weinberg, and many others for making this historic night possible to discuss the changes to the NJ TRANSITGRID Project, noting they are truly the difference makers. Mr. Pringle believes constructing this new NJ TRANSITGRID is taking the right step in the direction of Governor Murphy’s Clean Energy Master Plan. He wants to make New Jersey the leader it should be in clean renewable energy.

John Reichman is the Chair of the Blue Wave New Jersey Environmental Committee and sits on the Steering Committee for Empower New Jersey. He would like to thank the Board Chair and the rest of the Board for reversing their course on the NJ TRANSITGRID Project. Mr. Reichman said it’s not easy for anyone, much less a government agency that has been working on a project for years, to reverse course. He thanked them for having the wisdom and the courage to do this.

Mr. Reichman discussed the lack of NJ TRANSIT’s funding for its Capital Plan and the Commissioner and Board’s failure to fight for the funding transit needs. He believes the 5-year Capital and 10-year Strategic Plans were an important step forward in identifying transit’s needs, including the electrification of the bus fleet, as President & CEO Corbett referred to in his opening comments. Mr. Reichman believes the plans are not worth the paper they were printed on if there is no way to fund them.

Mr. Reichman said NJ TRANSIT has been under-funded historically and has continued in the Fiscal Year 2021 Budget. He said approximately $4 billion dollars has been diverted from NJ TRANSIT’s capital funds to cover operating expenses for the past 10-years. Mr. Reichman said the Turnpike’s contribution to NJ TRANSIT is steadily declining and transit is the only large public transportation agency that does not have a dedicated funding source.

Mr. Reichman said the Commissioner previously said that the Turnpike Authority would donate $375 million in funding to NJ TRANSIT and then that commitment was withdrawn, and the reason being was that CARES Act was sufficient enough to support NJ TRANSIT’s operations. He said this is not the case because once again in this Fiscal Year 2021 Budget funds were diverted from the capital fund to pay for operating costs. Mr. Reichman believes the public needs the Board to fight for funding because none of the plans are going work without money. He believes they also need an explanation from

the Board Chair on the $246 million that was supposed to go to transit, but did not, and was supposedly now in an escrow fund.

Kailey McAllister said she called into the Operations & Customer Service Committee meeting last month to voice her concerns about public comment periods during Board and Committee meetings. Ms. McAllister felt that the public comment period has become overly negative with personal attacks from people posing as advocates but who are really just agitators. She said tonight this comment period has been much more respectful than most, but yet they heard again tonight from folks like Andrew Weiss whose Twitter profile states “I sit around all day and complain about NJ TRANSIT.”

Ms. McAllister believes this is not the profile of a legitimate advocate, but rather an agitator. She said frankly anyone that is sitting around all day complaining about NJ TRANSIT is not an advocate for the transit system and has way too much time on their hands. Her concern was that this sort of disrespectful feedback becomes destructive rather than constructive and it would appear that Mr. Weiss was working with the legitimate advocates in the way he responded to the feedback on the NJ TRANSITGRID Project. She was happy to hear that more Transit Police Officers will be hired to keep the system safe.

Ms. McAllister said there has been substantial progress at NJ TRANSIT over the last two years. She said it is not perfect, but transit needs the support of the public. Ms. McAllister said she has full confidence in this Board who have done a very good job since joining, and it is her sincere hope that the Board continues to ensure positive momentum and not be distracted by people who clearly do not have the customers best interest at heart.

Brad London expressed his appreciation along with everyone else to Governor Murphy, the Board, and the NJ TRANSIT staff on the re-envisioning of the NJ TRANSITGRID project. He said all people these days are more aware of what’s going on around them and have seen a lot of ups and downs this year, and people of all ages, and background are much more engaged. Mr. London will continue to watch, advocate, and hopefully to applaud the NJ TRANSITGRID. He thought the presentation was top notch. Mr. London said it was crazy when they consider investing in dirty fossil fuels. Although they may not have all the answers, he said they must continue looking out for people’s health, and the environment for generations to come.

Aleta Dupree thanked NJ TRANSIT for the updated My Tix App in which she is now able to buy individual Light Rail tickets on her telephone. She read the Capital Plan and said there were a lot of good things in it, thought ADA accessibility is very important, and all stations on NJ TRANSIT lines should be ADA accessible. She likes the idea of NJ TRANSIT purchasing electric buses and hopes the whole fleet will be in the future. Ms. Dupree said she will continue to advocate for the electrification of the Raritan Valley Line because she has used this line quite a bit. She likes the idea of buying dual locomotives and said whenever they are under wire, they should use electricity to run locomotives instead of diesel, and to look for diesel renewable products that release the least amount of emissions.

Ms. Dupree thanked NJ TRANSIT and the Board for re-envisioning the NJ TRANSITGRID and wants to see a 100 percent renewable solution of at least 100 megawatts. She looks forward to NJ TRANSIT engaging with the brightest minds in the world to build this legendary project. She also thanked NJ TRANSIT for approving the Portal North Bridge Project.

Paul DiMaggio of GMax Tidal Energy said the new initiatives to present a carbon free solution for the new NJ TRANSITGRID is exceptional. He said in a time with unique challenges, NJ TRANSIT is spearheading a realistic national model for clean energy on a utility scale. Mr. DiMaggio said presently renewable energy tidal technology such as theirs is now ready for commercialization on both the generation and storage side. They will be actively bidding on this project and they appreciate the past and present interest in forming new pathways to expedite this project within three to five years.

Mr. DiMaggio said turnkey initiatives as mentioned by Ms. Strickland, the ad hoc committee, and the Capital Plan will facilitate and spring forward the scope of work necessary to achieve the customers' goal. Since most of the in-place costs are inherited, they strongly recommend NJ TRANSIT consider increasing the megawatt size of renewable energy because in their case the Hackensack River provides more than enough energy in addition to the 140 megawatts; the only issues are on the storage side in terms of getting 27 megawatts per second, which is required for the locomotives.

Mr. DiMaggio said although they may think this is a lot of work ahead, they all must come together with the right mindset on the NJ TRANSITGRID because it could become a national model. He thanked all those involved in this project because this is 100 pounds off of generators back in terms of clean energy on a utility scale. Mr. DiMaggio thanked everyone for all of their hard work. He said they have to make this happen now and it must be effective and less expensive than fossil fuel. Mr. DiMaggio said he has sat with a lot of investors and they want to initiate a lend-lease program to NJ TRANSIT so NJ TRANSIT will be held harmless because of this new technology.

Julianne Watson, Board Member, for the Climate Mobilization's Republican Chapter, North New Jersey Chapter, and the Hoboken Democratic Committee thanked Governor Murphy and NJ TRANSIT for this historic decision to reimagine the NJ TRANSITGRID Project after she and many other advocates have been fighting for months and years towards a clean renewable energy solution for New Jersey. Ms. Watson said it's going to be so exciting to see this project come to fruition and she is excited to partner with NJ TRANSIT in a public capacity. They are excited to see renewables as a solution for a power plant on the microgrid as a whole.

Michael Watson is a Member of the Hoboken Democratic Committee and President of the North New Jersey Chapter Climate Mobilization. He echoed what everyone has said. Mr. Watson said this was an exciting time for them and it's great that they no longer have to fight about air quality for their lungs, but rather fight for something amazing and visionary that they can look forward to. He thanked Governor Murphy and NJ TRANSIT

for reimagining their plans for the NJ TRANSITGRID project, and believes it's a beautiful thing.

Christine Clark, Environmental Activist, mother of four children which includes a child with Asthma, steering committee member with the Jersey Renews Coalition, member of the NAACP Environment and Climate Justice Team, and a recent COVID-19 disease survivor said she is so grateful to applaud NJ TRANSIT's decision to choose a hybrid power mix primarily reliant on modern solar technology for the NJ TRANSITGRID project rather than a gas fired power plant. As the "Don't Gas the Meadowlands Coalition" demonstrated in their July 15, 2020 report refuting the initial dismissal of renewable energy being a viable option for the power plant, she believes now it is not only possible but preferable to choose solar with battery storage and supplementary wind and hydroelectric power rather than move forward with a gas fired power plant that would emit toxins into already overburdened environmental justice communities.

Ms. Clark said the very concept of this injustice was rejected by New Jersey in the Cumulative Impacts Bill, which now becomes all the more important in the wake of COVID-19. To those who have become ill with the disease including herself, and about 78 percent are left with permanent heart and lung damage, air quality is becoming a much more serious issue in New Jersey. Ms. Clark said the NJ TRANSITGRID Project is a win for all of New Jersey and she appreciates it so much that NJ TRANSIT is considering this idea and brings us one-step closer to meeting the goal of New Jersey's Energy Master Plan.

Action Item

2010-64: NJ TRANSIT RESILIENCE PROGRAM – NJ TRANSIT MICROGRID CENTRAL FACILITY STIPEND PROGRAM

President & CEO Corbett introduced Eric Daleo, Senior Vice President, Capital Programs, to present Action Item #2010-64. Eric Daleo recommended approval of Action Item #2010-64: NJ TRANSIT Resilience Program – NJ TRANSIT Microgrid Central Facility Stipend Program.

The development and institution of a stipend program in support of a two-step procurement process for the NJ TRANSITGRID procurement is in the best interest of and provides the best value to NJ TRANSIT.

Approval was requested to develop and institute a stipend program to support the NJ TRANSITGRID Microgrid Central Facility procurement process, as detailed in enabling legislation and corresponding regulations, N.J.A.C. 16:72-4.1, at a cost not to exceed $3,000,000, subject to the availability of funds.

Approval was also requested to direct NJ TRANSIT staff to review eligible submissions and administer and cause to pay stipends to eligible proposers.

Board Member Adams asked for clarification about the $3 million incentive with up to $1 million per proposer but the firms shortlisted could be up to four firms. Mr. Daleo explained staff is recommending $3 million be set aside for awards up to $1 million per proposer. They plan to shortlist up to four firms. The three that are not successful, would be eligible for the stipend. The one firm that prepares a submission that the Board chooses to accept, would be the successful bidder and awarded the full contract.

Board Member Gordon noted in 12 days they would know who the President would be for the next four years. If there is no change in the administration, he believes they will likely see a continuation of policies aimed at preserving the fossil fuel industry. He spoke as someone who's dealing with the Federal Energy Regulatory Commission on a regular basis and can attest to that. In their briefing on the NJ TRANSITGRID project, he thought he heard it said that the federal grants of over $400 million were contingent on satisfying certain obligations that were made regarding the capacity of the system and the duration of the power can be supplied. Board Member Gordon asked if the new design does not supply the requirements, do they risk losing the federal money, and if so, would they move forward without the grant.

Mr. Daleo said they were in communications with the Federal Transit Administration (FTA) regarding the grant that NJ TRANSIT has received, and their obligations consistent with the grant. Even today, staff discussed the RFQ/RFP process with them. Their intent is to remain faithful to the grant as they reimagine the project, and they will work very closely with the FTA to do that. There is no clear answer now other than to say, they are working with the FTA to make sure the $410 million that was secured stays in New Jersey.

Board Member Gordon said on a more positive note, if there is a change in administration, he thinks they will see large sums of money devoted to clean energy infrastructure. He anticipates initiatives on the order of the Manhattan project, or the Apollo program and technological changes, and things like battery storage that they anticipated would be 10 years, are going to be accelerated. Board Member Gordon believes there is a huge opportunity for NJ TRANSIT if those programs developed. As they develop their time, he wants them to keep in mind that they need to be able to take advantage of these programs when they become available and have something equivalent to being “shovel ready.” He is very excited about the opportunities they have and commended staff for their good work.

Board Member Bob M. Gordon made a motion and Board Member Cedrick T. Fulton seconded the motion. Chair Gutierrez-Scaccetti asked for a roll call vote and the item was adopted.

Roll Call Vote:

Adams	Ajmani	Doshi	Fulton	Gordon	Maroko	Narra	Wilton	Gutierrez-Scaccetti
Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

Advisory Committee Report

Suzanne Mack presented the Advisory Committee Report. She was pleased to have attended the New Jersey TransAction Conference and wanted to thank the NJ TRANSIT staff and NJDOT staff for such enlightening presentations and said it captured everything that has been going on since COVID. Ms. Mack said for those who don't know this conference is held once a year and that staff from NJ TRANSIT, NJDOT, and other transit agencies attend this conference. She said the updates that were given by Board Chair Gutierrez-Scaccetti and President & CEO Corbett were remarkable and they capsulized what has been going on. Ms. Mack said if the public would listen to some of this information from the conference, they will see just what has been going on.

Ms. Mack said she normally would go to the Board meetings to find out what was going on but there is much more information that can be learned and wondered has anyone ever looked at what they faced with COVID since March. There were 50 percent of people on the road back in March and the usage on the road is still not up because people still aren't going back to work. Ms. Mack said NJ TRANSIT is held to the accountability of being an agency that has to serve the public. She is a resident of Hudson County and is in Jersey City, Hoboken, and Bayonne and sees a lot of buses on the road every day with passengers on it. Ms. Mack said they are on it because NJ TRANSIT is fulfilling its commitment to be a transit agency that serves the public.

Ms. Mack does not see how they can begin to have a meeting to discuss the new budget, which was presented to their Advisory Board on October 14, 2020, without facing the reality that they have been through the worst crisis in the world, yet still functioning. She praised Chair Gutierrez-Scaccetti, the Board, President & CEO Corbett, and staff for their remarkable work because NJ TRANSIT buses are there with people on them because they need public transportation. The Advisory Board has seen the budget and have looked at it . She noted the one comment made this evening from Mr. Clift who says there is always more information that can be presented, and this is something that should always be addressed.

Ms. Mack said in the past two years she has been attending the Board meetings and listening to advocates who speak to have had their problems resolved. She said the NJ TRANSITGRID issue was being resolved tonight and there were many other issues she could list that have been resolved. Ms. Mack said while they can't respond during the meetings, they do respond. She thanked the Board for their participation and thinks the public should be a little more patient and realize that this Board's track record is one that responds.

Ms. Mack said she was asked by her Co-Chair Anna Marie Gonnella from South Jersey to thank Chair Gutierrez-Scaccetti for suggesting that the Advisory Board have Zoom meetings, and that they have had two. Ms. Mack said the North and South Jersey Advisory Board supports NJ TRANSIT and felt they have done the best they can with the budget.

Board Operations and Customer Service Committee Report

Board Member Wilton presented the report for the Operations and Customer Service Committee. The Operations and Customer Service Committee received an update on the trends, analysis, and actions for rail, bus, light rail, and Access Link. The Committee also received an update on the COVID-19 Travel Survey Results and an update on the Cost of Service.

Board Administration Committee Report

Board Member Maroko presented the report for the Administration Committee. The Administration Committee received a Financial Update. This included a summary of operating results, major variances, the impact of COVID-19 on ticket sales, major balance sheet items, and Cares Act drawdown. Additional information was provided as part of the agenda materials, including the cost of service key performance indicators, history of vacancies, attrition and hires, ridership, revenue, and a budget to actual comparison of revenue by division.

Capital Planning, Policy, and Privatization Committee Report

Board Member Fulton presented the report for the Capital Planning, Policy and Privatization Committee. The Committee discussed the board items for the Morris & Essex Line Traction Power Circuit Breaker Replacement Project; Market Street Bus Garage Rehabilitation Project – Construction Contract and Construction Management Services Contract Award; and Contracting Out – Monmouth County Local Bus Service Extension.

Safety Committee Report

Board Member Adams presented the report for the Safety Committee. The Committee discussed the Office of System Safety's activities and the performance indicators for Rail, Bus, Light Rail and Access Link. Additionally, the Committee received a briefing regarding the Safety Education Program.

The NJ TRANSIT Office of System Safety continues to create and implement proactive safety programs, working collaboratively with both internal operational departments as well as external stakeholders and regulatory agencies. Their core mission is to continue to provide a safe environment for customers, colleagues, and the local neighborhoods NJ TRANSIT travels through. The foundation of having a proactive safety program is informing people of risks and hazards as early as possible. The Office of System Safety conducts their Safety Education Program throughout the entire state, year-round, both in-person and recently virtually, to get the message out to school aged children about how to remain safe while utilizing the transportation services NJ TRANSIT provides.

The Committee also received an update from Chief Trucillo regarding the work of the New Jersey Transit Police Department. The New Jersey Transit Police Department continues to conduct “mask details” throughout our system on buses in terminals and stations and on-board heavy rail and light rail equipment in an effort to educate, get compliance and if necessary, supply a face mask for those who may not have one, or who have forgotten theirs.

The New Jersey Transit Police Department has also expanded its “Outreach Unit” from two to five officers to be better positioned to help those who seek shelter in our transit stations and terminals prior to the cold seasons and to create a safer and healthier environment for our customers as they return to use our service.

Action Items

2010-60: FISCAL YEAR 2021 OPERATING BUDGET

President & CEO Corbett introduced William Viqueira, Senior Vice President, Chief Financial Officer and Treasurer, to present Action Item #2010-60. William Viqueira recommended approval of Action Item #2010-60: Fiscal Year 2021 Operating Budget.

William Viqueira said he would be referring to the Operating Budget presentation found in the final Board agenda located on their website. He was pleased to present NJ TRANSIT’s Fiscal Year 2021 Operating Budget including expected sources of revenue and operating expenses for the period July 1, 2020 through June 30, 2021. The presentation can be found in the agenda including: 1. A review of recent state funding and support, 2. A comparison of the proposed budget to the budget presented at the March Board meeting and approved for transmittal to the legislature by April 1, 2020, as required by the NJ TRANSIT reform legislation, 3. A look at sources and uses of funds, 4. A review of fare revenue forecast and a more detailed review of anticipated expenses, including both mandatory cost increases as well as selected investments being made to advance elements of their strategic plan. Last, a brief discussion of some of the unique risks, variables, and uncertainties facing NJ TRANSIT for Fiscal Year 2021 and into Fiscal Year 2022.

Presented on page three was a comparison of Fiscal Year 2019 actual results, preliminary Fiscal Year 2020 results that are subject to the completion of their year-end audit, and the Fiscal Year 2021 budget. Before getting into the financials, Mr. Viqueira noted in the box on the right were a few key accomplishments achieved over this period, including: reducing their vacancy rate from 3.7 percent in January 2018 to 2.5 percent in June 2020; increasing their active roster of locomotive engineers to 373, up from a low of 331; hiring over 800 bus operators; and on expense management, saving more than $28 million annually, to targeted health benefit reforms.

One of their goals has been and continues to be, reducing their reliance on the capital to operating transfer. In Fiscal Year 19, they were successful in reducing the capital transfer by $15 million, from $511 million that was budgeted to $493 million due to favorable

operating performance and financial planning. They reduced the Fiscal Year 2020 amount by approximately $50 million to $460 million, compared to the $511 million budgeted in Fiscal Year 2019.

Turning to Fiscal Year 2021 in the third column, key highlights for Fiscal Year 2021 state assistance include: a general fund subsidy of $386 million in Fiscal Year 2021, bringing the cumulative state general fund subsidy under this administration to $615 million, an increase of 49 percent, over the prior three-year period. The Fiscal Year 2021 budget also includes $129 million of New Jersey Turnpike Authority funds and $30 million has been allocated to NJ TRANSIT from the State's Coronavirus Relief Funds (CRF). While not shown on this chart, he noted that total expenses of $2.359 billion compares to $2.391 billion originally budgeted for Fiscal Year 2020.

Turning to page four, Mr. Viqueira took a closer look at the final Fiscal Year 2021 budget in comparison to the budget reviewed at the March Board meeting. These changes have largely been driven, either directly or indirectly, by the COVID pandemic. First, despite the recent increases in ridership that they have been reporting on, passenger revenue for the year is estimated at only $375 million, or 62 percent below their prior estimate of $994 million. This estimate was developed by a combination of NJ TRANSIT's Finance and Planning departments, working with external expert consultants. He will provide more detail on the next page. They have also seen a significant decline in other commercial revenue including lost parking, and advertising fees and rents from tenants at their facilities, as a result of the COVID pandemic.

As previously mentioned, their state general fund subsidy is $386 million, a decline of $203 million from the April budget. He noted the subsidy will received entirely in quarters two, three and four of Fiscal Year 2021. Also, the last line under resources that the State has made $30 million of their Coronavirus Relief Funds allocation available to NJ TRANSIT, which they expect to use prior to the end of December. Together, the decline in fares, other commercial revenue, and the state operating subsidy from the original budget totals $860 million. However, they expect to be able to offset the decline in these resources by relying on the CARES Act funds allocated to NJ TRANSIT.

In Fiscal Year 2021, they expect to use $912 million of their CARES Act allocation in addition to the $36 million they drew down in the final months of Fiscal Year 2020. Assuming continued steady growth in revenue occurs, NJ TRANSIT expects to use over 90 percent of their allocation by the end of Fiscal Year 2021. Given the uncertainties, they have budgeted contingencies for potential expenses, or additional loss revenue, related to COVID and that's reflected in the significant increase in the materials and supplies line item. They also chose to defer nearly all strategic plan initiatives to January 2021 and have been filling only essential positions. Those contingencies largely account for the $104.1 million growth in the total budget, from $2.5 billion to $2.6 billion, or compared to the Fiscal Year 2020 budget, a growth of $246 million or nearly 10 percent.

Page five provides an alternative view of the budget by breaking down the sources and use of funds. NJ TRANSIT's Fiscal Year 2021 budget totals $2.637 billion, with only 14

percent expected to be funded through the farebox, down significantly from historical operating ratio of over 40 percent. Also, other reimbursements include CARES Act funding and the CRF allocation. On the expense side, labor and fringe, typically around 63 percent of their expenses, are approximately 58 percent of budgeted expenses due to budgeted COVID expenses in materials and supplies and offset partially by health benefit savings initiatives.

Turning to page six, Finance, along with Planning and outside consultants, AECOM and VHB, have developed a range of possible recovery scenarios for the purpose of developing their Fiscal Year 2021 budget which is centered on the slow recovery scenario seen on this page. In NJ TRANSIT's budget, the average farebox loss for the year is 62 percent or approximately $620 million, recovering from a low of 81 percent loss in July, to a 41 percent loss next June. Importantly, even within the slow recovery scenario, the range of farebox revenue swings, by up to $200 million. They believe they have prudently budgeted to manage through the range of a slow recovery.

Page seven builds progressively from the Fiscal Year 2020 budget which was $2.4 billion. Mr. Viqueira noted that NJ TRANSIT's costs are relatively fixed with approximately 90 percent of the labor force subject contractual agreements. Labor and fringe alone are expected to increase in excess of $30 million. Altogether, all contractual escalations, including labor, insurance premiums, purchased transportation, and other contracts are estimated to be $87 million.

What they refer to as other externalities include other fixed costs, but for Fiscal Year 2021 is largely comprised of a contingency for potential additional COVID related expenses of $120 million. This could include things like, ultraviolet or enhanced cleaning, additional hardware or IT expenses to better monitor crowding, and additional PPE and cleaning requirements. In general, it is meant to protect against the unknown, including the possible lower farebox revenue than projected. Fuel is also included in this line item and their price is hedged through January 2022. Next are state and federal mandates, such as operating expenses related to PTC, and needs to meet reform legislation. Lastly, these are offset by efficiencies and savings that they have not only identified but have already initiated. The largest items here are continued expected savings from their health benefit reforms.

Page eight builds from the operating budget, including the mandatory cost increases by layering the relatively small percentage of the budget that is discretionary spending on top. First at a high level and then they will turn to a closer look on the following slide. These investments are directly related to the strategic plan, NJT 2030, published in June 2020 and available at njtplans.com. Given time constraints, this is not an in-depth discussion of treatment plan but rather highlights the connection between the budget and the strategic plan. He will specifically call out some page numbers in the strategic plan for those who might be interested in reading more details.

NJT 2030, is designed to transform the agency into innovative, world-class public transportation provider that meets the travel needs of every customer. It sets five

overarching goals for NJ TRANSIT to achieve that vision. First, they want to ensure the reliability and continued safety of their transit system which begins on page 20 of NJT 2030. Second, they want to deliver a high-quality experience for all customers with the entire journey in mind, which begins on page 28. Third, they want to power a stronger and fairer economy for all communities in the region, as noted on page 40. Fourth, they want to promote a more sustainable future for their planet, beginning on page 52. Fifth, they want to build an accountable, innovative, and inclusive organization, as noted on page 62. He noted that the majority of their additional discretionary investments in these strategic goals were deferred to begin in January 2021, pending greater clarity on financial results and funding sources.

Mr. Viqueira noted more details on Fiscal Year 2021 strategic investments are on page nine and highlighted a few. In addition to continued investment in their locomotive engineer and assistant conductor training programs, to ensure reliability, they are investing in targeted bus service enhancements on their most congested routes and will expand critical rail operations and maintenance staff. The operating budget is also funding training for their battery electrification program and they will add additional resources to promote Transit-Oriented Development (TOD). They will also continue upgrading their information in digital technology, both customer facing and critical internal systems, and will continue to engage with small and/or disadvantaged businesses to improve diversity. They will also fund a feasibility study for Access Link's same day service.

In all, NJT 2030 identifies more than 100 specific strategic initiatives to implement and the investments being made in 2021 will set the foundation and begin their progress toward achieving those goals. Again, for a deeper dive on the agency's strategic direction, the plans are at njtplans.com.

On page 10, there was a different view of the Fiscal Year 2021 budget, looking at the budget, headcount, and the headcount growth by department. Mr. Viqueira noted that 85 percent of the budget supports Operations, IT, and Safety, while 92 percent of headcount supports those same areas. Out of 408 new positions, which represents growth of three percent in headcount, 373 or 91 percent were Operations, IT, and Safety oriented. He noted again that a significant part of the growth in the admin budget dollars was due only to the COVID mitigation funding, which they have budgeted centrally and is included in that line item.

Lastly, on page 11 they are facing some unique variables and uncertainties ahead, but they believe they have prudently accounted for them in the budget, by conservatively budgeting for potential COVID related expenses and allowing some of the CARES Act funds to cover possible shortfalls. Among the uncertainties is how quickly ridership returns. This will be dependent on numerous variables including timing of a safe, effective COVID vaccines, work from home patterns, and the return of economic activity in New York City and throughout the State.

The State of New Jersey has of course been severely impacted by COVID. They have already begun the Fiscal Year 2022 budgeting process internally and will gain a better

idea of what level of support NJ TRANSIT can expect from the State in the Fiscal Year 2022 over the next few months. Currently, the CARES Act is effectively replacing the loss in revenue, state subsidy, and increased expenses but, as of right now, there is no federal aid to replace the CARES Act.

As mentioned earlier, while they continue to pursue possible efficiencies, costs are largely fixed and subject to contractual agreements, significantly limiting their financial flexibility. Deferring strategic initiatives reduces a relatively small amount of their expenses but also potentially puts in jeopardy the progress they have made in turning around an agency that has been starved for years. Lastly, the yet unknown impact of the pandemic could include things like mitigation, additional cleaning, crowd monitoring, etc. And that concludes my prepared presentation. We ask for your approval of Item 2010-60.

And lastly, the yet unknown impacts from the pandemic that could include things like litigation, additional cleaning, crowd monitoring etc.

Approval of Action Item #2010-60: Fiscal Year 2021 Operating Budget was requested. Board Member Shanti Narra made a motion and Board Member Brian T. Wilton seconded the motion.

Board Member Adams said if his memory serves him correctly, the budget was first presented to the Board in March and at that time, they were asked to approve the transmittal of Exhibits A and B to the Commissioner, the President of the Senate, etc. and stated that the Board would get approval rights for this budget in July. That didn't happen and he understands why because of the Governor's budget and how much money they would get for NJ TRANSIT. But he would have expected to have more dialogue with the staff and probably working sessions. In addition, he would have expected to have a temporary budget for the months of July, August, and September.

Board Member Adams said the material that was submitted for their review was submitted the day before their briefing, so the Board really didn't have the opportunity to look at the budget in great detail. He said there were no budget options presented and no working session. What was most challenging for him was the capital to operating transfers remained the same. Board Member Adams said he was fundamentally in disagreement with capital operating transfers. Lastly, if his math is correct, he said $120 million of CARES Act funding was not used in this budget which could have been used to help reduce that capital to operating transfer. Therefore, based on what he just said, he cannot support the budget the way it was presented.

Board Member Doshi said she would like some time to review a little more and thanked William Viqueira and his team for presenting it to them. She noted they did in March, go over some of it like Board Member Adams had mentioned.

Board Member Fulton thanked the team for working under some pretty tenuous circumstances. What he has seen since coming on board was, as talked about by a couple of the speakers, that in many areas NJ TRANSIT was really trending up, trying to

put behind them some of the challenges that they once faced, and then they came on Board as new Board Members and then COVID hit full bloom. And as a result, to echo some of what his colleagues said, this was not what he would consider to be a model budget cycle review period. Their ability to delve in was challenged in the first place because they were new on the Board and then thereafter the uncertainties associated with COVID.

Not notwithstanding, Board Member Fulton believes that at the end of the day, there is a responsibility NJ TRANSIT has to provide service to their customers. And so, his sense is that, to err on the side of believing that the staff in NJ TRANSIT are doing what they believe is in their best interest, recognizing that they haven't had the full opportunity to examine as closely as they would like to. They did see a representation earlier in the year, but things admittedly were moving very fast. But when they look at how the team has performed in light of COVID, he would say that it's a tenuous point for them.

Board Member Fulton said none of them have a crystal ball, but they have to keep moving the ball downfield to provide service to people who need the services. But as has been stated, they are already into the next budget cycle and it is his full hope and expectation that the level of oversight, clarity, and participation with the development of future year budgets will be intense, and the kind of participation that his colleagues are speaking to will be present. Board Member Fulton said good job doing the work that staff has done with what they had to work with. They know they have challenges ahead and it is looking like they will get through 2021 but what awaits them in 2022 remains to be seen, so there is much that that they have to talk about. So, while the process was not ideal, he believes this is something that they can work with.

Board Member Gordon thanked staff for their efforts in putting this budget together. He noted he was going to support the budget but shares his colleague’s disappointment in the process as it worked out this year. Board Member Gordon recognizes that this was a very difficult year to implement the reforms called for in the reform legislation. They have new Board Members coming on, then COVID hit. It was just an extraordinary year, but he would hope that as they begin the process for Fiscal Year 2022, the Board will be involved at an early stage that will include a discussion of budget options and priorities. Board Member Gordon recognizes that in a $2.6 billion budget, there is not a lot of discretionary funds in there and he believes that is only $35 million but they can discuss budget priorities and direction. He hopes they begin that with the Administration Committee and then the full Board.

Board Member Narra wanted to echo pretty much everything that Board Member Gordon just said. Understanding all the challenges this year, it would be better in the future if they had more ability to spend some more time on it, especially if they are going to add more new members such as herself, and give them an opportunity to really, fully be able to participate in and do their jobs, as they all want to contribute to NJ TRANSIT’s future. She thanked staff because even though they did get the materials pretty late in the process, she very much appreciated the staff's willingness to take some extra time and answer questions that they had during their briefing and then offline.

Board Member Rasmussen thanked William Viqueira and the staff for the good presentation.

Board Member Wilton thanked William Viqueira and the entire staff for getting this together and for the hard work that they have done under extremely trying circumstances. Many of the same team had to face serious operational challenges yet were able to get this together in a presentable and understandable fashion. He understands the concerns and criticisms shared by the other Board Members but their decision to still vote for the budget. So, he thanked them all and again thanked the team.

Chair Gutierrez-Scaccetti echoed the comments of Board Member Wilton and asked for a roll call vote. The item was adopted.

Roll Call Vote:

Adams	Ajmani	Doshi	Fulton	Gordon	Maroko	Narra	Wilton	Gutierrez-Scaccetti
No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

2010-61: NJ TRANSIT FY2021 – FY2025 CAPITAL PLAN ADOPTION AND FY2021 AUTHORIZATION TO SECURE CAPITAL FUNDING

President & CEO Corbett introduced Eric Daleo, Senior Vice President, Capital Programs, to present Action Item #2010-61. Eric Daleo recommended approval of Action Item #2010-61: NJ TRANSIT FY2021 – FY2025 Capital Plan Adoption and FY2021 Authorization to Secure Capital Funding.

Eric Daleo said he would be referring to the presentation that was included in the agenda materials. On slide two, they can see that today's presentation will be divided into three parts. In the first part, he will discuss their progress in Fiscal Year 2020, during this challenging time. He will highlight several ongoing capital projects, particularly construction activity milestones, that were either achieved in Fiscal Year 2020, or will be realized shortly. Then he would hand the presentation over to Chief Engineer Rich Schaefer who would go over the development of their Five-Year Capital Plan and highlight some of the key expenditures that will occur during this fiscal year. Finally, Lori Thompson, Chief of Capital Programming and Administration, would explain to how they pay for capital projects. Specifically, she would go over the Fiscal Year 2021 Capital Appropriation, consistent with the Board's approval from the March 2020 Board meeting, and the sources of funds that pay for various multi-year projects in a Five-Year Capital Plan.

Mr. Daleo asked them to go to slide three. Despite the challenges of COVID-19, they have been able to continue improvements to equipment and infrastructure during this time. As they know, Governor Murphy designated transportation and utility construction

as essential. So, for that reason, they were able to proceed with almost all construction as scheduled and were also able to continue all design activity through the use of remote workstations. With regard to funding, they have continued to operate with available Transportation Trust Funds and Federal Transit Administration funding. They have also aggressively pursued and secured approximately $57 million in competitive grants, including a grant to help with an electric bus acquisition project at Hilton Garage.

Transitioning to slide four, Mr. Daleo highlighted a few key 2020 milestones, which were even more remarkable, given the incredible challenges that everyone faced in 2020. First, as President Corbett and the Commissioner have repeatedly said, the Positive Train Control project maintains the highest priority to the Corporation, especially given the safety implications, the mandate requirements, the technical complexities, and importance for Rail Operations. The project is managed by their Rail Operations colleagues and they were able to advance the project into Extended Revenue Service Demonstration, increased testing territory to approximately 100 miles, and submitted the PTC Safety Plan to the FRA for final system certification. Tonight, they heard Parsons discuss even more recent accomplishments. This is all in an effort to achieve full certification by December 31st, 2020.

Another important project in their Capital Program is the new Mason Substation, a critical piece of their power distribution network. They are building that under a joint development agreement with Public Service Electric and Gas. In 2020, the temporary substation was placed into operation, the existing facility was demolished, and construction started on the permanent new substation which they anticipate will be completed in February 2022.

Highlighted on slide five, this year, major deliveries of rolling stock continued as scheduled. They included cruiser buses, the last of which is expected to be delivered in 2022. And 110 new articulated buses, which is the first growth of their fleet in a decade, and the last of which is expected to arrive early next year.

Slide six highlights other major rolling stock purchases. There were 113 Multi-Level III railcars awarded this past fiscal year. They are on schedule for delivery, with the first six pilot vehicles scheduled to arrive in 2023. And they will also be purchasing 16 battery electric buses, with eight for Camden and eight for Essex County. These buses are expected for delivery in late 2021 and 2022, respectively.

Slide seven highlights two major projects that started construction in 2020. The Hoboken Long Slip Fill and Rail Enhancement Project started construction in February. The filling of that canal will allow for future resiliency by reducing storm surge in Hoboken Yard, and even to the Hoboken community. Future development of tracks at high level platforms will allow service to be more quickly restored following extreme weather events. That construction is proceeding on schedule.

Also, in September, they awarded the first phase of the Raritan River Bridge Replacement, a $595 million project. The Governor, Commissioner, other Board

Members, and President & CEO Corbett were there for the groundbreaking for the first contract worth $248 million, which will build the approach spans for the bridge.

Turning to slide eight, this year they are also moving ahead to accelerate many improvements planned for Newark Penn Station. Historic bench restoration, bathroom upgrades with no touch fixtures, improved lighting, and historic tile repairs are underway. Design work is in progress for paving and lighting of bus waiting areas, additional ADA elevators, and a deep clean of the facade and floors. And moving to design soon are the restoration of platform D, and improvements to the rest of the train shed platforms and interior layout.

Shown on slide nine, they have a few other major construction contracts that are active. The Elizabeth Station Rehabilitation contract is proceeding at a cost of $49.27 million. Other current construction contracts include flood wall construction at the Meadows Maintenance Complex and electrical substation work at both Hoboken Depot and Henderson Street locations.

Turning to slide 10, in the development stage are two major construction projects. They talked a lot tonight about NJ TRANSITGRID and the concrete steps they are taking to pivot this project moving forward. During this past fiscal year, they received the Record of Decision from the FTA, which allowed them to obligate that means to secure the $409 million in federal aid that was allocated to the project. With regard to a much-needed Northern Bus Garage, they also received approval from the Board to purchase a key land parcel in Bergen County, started environmental evaluations, retained professional design services to progress preliminary engineering, and are now evaluating alternative procurement strategies for the project.

Finally, they have completed or are nearing completion of a number of designs that will allow them to move forward to construction, as shown on slide 11. The slide shows the projects initiated. They have always said that Portal North Bridge is shovel ready, and it is. They have 100 percent designs and specs ready to go. They are working with the FTA on a full funding grant agreement for that project. Newark Penn Station historic restoration and Newton Bus Garage electric bus infrastructure also were recently completed. There are eight other projects listed on the slide that are near completion. The staff in Capital Programs and across the agency worked under pretty extreme circumstances to do the work summarized. Most of this work happened after March, after the shelter in place and other orders, so it is a real tribute to the staff of Capital Programs.

Shown on slide 12, another high priority program that they initiated this year was a state of good repair customer facing facility program. The Federal Transit Administration requires NJ TRANSIT to conduct facility inspections of all facilities. They prioritize customer facing facilities throughout the State of New Jersey. They required those inspections to be completed in four years and NJ TRANSIT did them in three. The results of the surveys identified a number of defects and deficiencies that needed to be addressed and that they need to address it in accelerated time frame. They plan to spend

approximately $29 million to quick hit a variety of items at a wide range of locations throughout the state. This year, they are developing individual location work plans.

Slide 13 shows the type of that will be addressed by the program. On the left of the slide is a deteriorated structural beam at Trenton Train Station and the fix that was done. On the right at New Brunswick Station, is a deteriorated structural staircase with holes in the staircase, and the fix to the stairs shown on the right. These are exactly the types of conditions they are all concerned about customers experiencing, and that they are prioritizing fixing, through a dedicated program aimed at identifying the deficiencies and prioritizing the repairs.

Noted on slide 14, they will begin the next session of the presentation with a brief overview of their rolling Five-Year Capital Plan.

Slide 15 notes a Five-Year Capital Plan, spanning the fiscal years 2021 to 2025, was released by Governor Murphy on June 8, 2020, after briefings to the Board. The Five-Year plan contains two sets of projects. The first set includes a $11.21 billion worth of projects already funded from previous, current, or future expected funding resources. The second set identified another $5.78 billion worth of projects without any source of past, current, or future funding. Although, there are no identified source of funding for these additional projects, they are necessary to achieve their vision of providing world class service which increases the reliability of their service by reducing equipment breakdowns, infrastructure failures, and service interruptions. The development of a Five-Year Capital Plan was led by Rich Schaefer, Chief Engineer. Rich will review some key aspects of that plan.

Rich Schaefer said he would begin with slide 16. As Eric stated, a Five-Year Capital Plan was released by Governor Murphy in June 2020, after briefings with the Board Members. The plan consists of three parts including a text executive summary, a graphics heavy project summary sheet set, and a financial summary spreadsheet. These materials have been made available online website on njtplans.com and are included as Exhibit A to the proposed Board resolution.

On slide 17 there are three parts, broken down into the executive summary, a narrative document that describes why and how the program is generated, and explains its value to the State of New Jersey and the surrounding region. The second part contains the individual project sheets for over 100 projects ranging in size from $1 million to over $3 billion, that are already in progress or exist in conceptual phases. The third part is an unconstrained financial summary which is a very detailed expenditure-based budget and forecast view how these projects could progress over a five year and multiyear timeframe. Each project is color coded to distinguish between funded and unfunded portions of the plan.

Shown on slide 18, in putting together the plan, they were guided by a four-part vision. First the aspirational where everything they do should aim for returning to a world class transit agency. Secondly, in order to achieve that, the customer must come first. Third,

any plan put forth must be balanced to address system-wide needs after what has been a decade of neglect and flexible in its approach over time, so it can be revisited annually for efficiency and effectiveness. Finally, whatever they come up with, NJ TRANSIT is a statewide agency that must consider the value that it can give to the whole state, so everywhere the trains and buses stop, the state prospers.

Slide 19 shows when they went through the plan, they did find incredible challenges with achieving the vision. They have incredibly old infrastructure, much of which is undersized assets in very congested locations. They have a lack of system resiliency, overburdened with limited surplus capacity to handle disruptions. Infrastructures stretch across three states and all of it is critical to service but is essentially hidden from the general public's view. Finally, they have an aging fleet of rolling stock, either well past or rapidly approaching its useful life end.

Shown on slide 20, when they put this together, they asked the question of what is needed to drive these plans. Prior versions of Capital Plans always focus on limited funding and essentially answered the question what they can do with the limited funds that they have. The new version focuses on what is needed, what do they need to be the best in class, and how they focus on achieving a state of good repair for assets which are in many cases obsolete and are undersized for modern needs encountered today. The program was built using a cross functional team, with interests from all over the company, so project could be evaluated both objectively and subjectively by the people who have to use them as well as build them, to make sure they get the total picture. The development process promotes value-based projects that consider the life cycle costs of the assets and always look to answer the question, what's right for the State, not just what's easy to do.

Shown on slide 21, when cultivating project concepts, they had to review system capacity constraints with the complete understanding that they can't do everything that they need to get done, all at once. They need to determine constructability challenges that face these projects and understand that they can't shut down the whole system, or even part of it to execute these improvements. They need to create realistic and well researched cost estimates and schedules because they have to stay on time and on budget. And they need to encourage the right mix of short and long-term projects to make sure that all aspects of the system are touched. Lastly, they need to consider the life cycle costs of every project that they put forth and make sure that the State, NJ TRANSIT, and riders get the best bang for the buck.

On slide 22 is a financial summary of a Five-Year Capital Plan. This information can be found exactly as is, in Appendix A Table 1 of the plan. The total unconstrained program is $16.98 billion. The funded portion shown in the second to last line totals $11.21 billion. If they were to move ahead with the full unconstrained program, they would have to find an additional $5.78 billion of unfunded resources shown on the last line. The specific project details for all the individual projects are available online at njtplans.com and shown on tables two, three, and four of Appendix A.

Moving on to slide 23, focusing exclusively upon Fiscal Year 2021 group of projects, it is interesting to note that more than one-third of the Fiscal Year 2021 expenditures are applied to fixed expenses. This includes expenses such as the capital to operating transfer, debt service, pass through funding to non-NJ TRANSIT agencies and municipalities, and payments to Amtrak PRIIA. The remaining capital expenditures are to pay for standard capital improvement projects and programs.

Moving on to slide 24, some of the most notable capital expenditures occurred in this fiscal year include some of the projects shown on the next two slides. They will be expending for over $200 million this year for new cruiser and articulated buses, and over $100 million for new railcar purchases.

Moving on to slide 25, they will be expending a large sum of money on improvements to the Elizabeth Station undergrade bridges and track renewal and replacement. They will also expend over $70 million for the Raritan River Bridge Replacement project that began with the first three phases breaking ground last month. Mason Substation, Hoboken Long-Slip, and Hoboken Wayside Power Repair projects will also see significant capital expenditures this year. It will be busy year.

Lori Thompson, Chief of Capital Programs and Administration, presented the final section of the presentation, which is the Fiscal Year 2021 capital funding appropriation. She is responsible for programming and administrating a wide range of available funding sources to projects in NJ TRANSIT's Capital Plan.

Shown on slide 27, every year, NJ TRANSIT allocates approximately $1.4 billion in available federal, state, and other sources of funding to the Capital Program. In March 2020, as required by NJ TRANSIT reform law, and as part of NJ TRANSIT's budget approval process, the Board of Directors approved a two-year Capital Plan appropriation document for Fiscal Years 2021 and 2022. This Fiscal Year 2021 appropriation represents the first year of these two-year appropriations. During this cycle, the Board of Directors authorizes the Chair or President and CEO, to take the necessary actions required to seek and secure funding envisioned by this program. This Fiscal Year 2021 funding appropriation allocates approximately $1.4 billion of resources only to those multiyear projects with already assigned funding, most of which have begun construction, or are under contract currently. Please note that there are no funds in this appropriation which will be allocated to the $5.78 billion unfunded portion of the Five-Year Capital Plan.

On slide 28, a pie chart shows a breakout of the various funding sources of the Fiscal Year 2021 capital funding appropriation. This year's appropriation valued at $1.434 billion includes $260 million that was appropriated earlier in July by the State Legislature during their three-month extension of the 2020 Fiscal Year. The left-hand portion of the pie chart constitutes $760 million of State Transportation Trust Fund money. The next largest contribution to the capital appropriation, shown on the upper left and upper right portions of the chart, comes from the federal funding. There is $549 million from the Federal Transit Administration and $75 million in flexed funds from the Federal Highway Administration, provided through the New Jersey Department of Transportation. The

balance of funding, shown at the very top of the chart, consists of approximately $50 million, which is roughly three percent of the Capital Program. Of the $50 million, they anticipate receiving $25 million in flexed funding from the New Jersey Turnpike Authority, to be programmed to the Portal Bridge North Project. An additional $23 million is made up of Casino Revenue funding.

Eric Daleo moved onto slide 29, stating they have been laser focused on getting projects up more efficiently and on building out the program infrastructure that is needed to accomplish that. During this last fiscal year, they presented to the Board 31 separate votes authorizing over $450 million in construction, professional services, and new equipment purchases. Now aligned with the company's Strategic Plan, and this proposed Capital Plan, they are seeking to forge ahead aggressively to execute the $11.21 billion funded portion of the plan. He noted, at the same time, they need to find ways to source the $5.78 billion unfunded portion of the plan. From a capital perspective, years of limited funding has deprived the organization of the funding needed to advance critical state of good repair initiatives and other initiatives that will improve the customer experience. They appreciate the Board's leadership on this issue.

Approval of Action Item #2010-61: NJ TRANSIT FY2021 – FY2025 Capital Plan Adoption and FY2021 Authorization to Secure Capital Funding was requested. Board Member Brian T. Wilton made a motion and Board Member Shanti Narra seconded the motion.

Board Member Adams thanked the staff for putting together an excellent presentation and said he fully supports the Capital Plan. To one of the other caller’s points, it is not just the Chair and Kevin's responsibility to provide, or to find additional funding, it is all the Board Members’ responsibility to help to get this plan fully funded. Also, he mentioned that, with any ambitious Capital Plan like this, they need the proper staffing. He is hoping that the Administration is looking to making sure that they have the proper NJ TRANSIT staff, and if they don't have them on board, that they are hiring them as quickly as possible.

Board Member Doshi thanked the staff as well for their detailed presentation and said she supports it.

Board Member Fulton said it was excellent and commended the forward thinking of the team. It’s a pleasure to have this presented shortly after they came on board. This is exactly what he would have asked for. Board Member Fulton believes aspiration is good. There's work to do to find the money. Additionally, he believes that they all need to put solid metrics in place so they can see how they are delivering. If they are asking, they need to be able to deliver it consistent with a schedule and budget. To Board Member Adams’ point, that often goes to whether or not they are staffed up to actually be able to deliver the amount of money they are asking for. So again, congratulations to the team for being forward thinking.

Board Member Gordon congratulated the staff for the excellent presentation. He agrees that an aspirational budget is a good thing to have because who knows, they may find

some additional federal money and need to have the plans to put these projects in motion, and he thinks they are well positioned for that. Board Member Gordon asked about what they have heard an awful lot about in recent years: the potential failure of the Hudson River Tunnels. He did not see anything in the Capital Budget that would address what they would do to address a failure of a rail tunnel. For example, there's been a good deal of talk about trying to ramp up ferry service, which would also require an extension of the Hudson-Bergen Light Rail into towns to the North. He did not see anything in the Capital Budget for that. He asked if there was any discussion of that, even in the unfunded portion of the Capital Plan, and if they wanted to make that a priority next year, what the process would be for doing that. Board Member Gordon asked if it would be just a modification of the Fiscal Year 2022 Capital Program.

President & CEO Corbett said on Gateway, as he may recall from one of their briefings, within their Capital Plan, the State of New Jersey has a commitment to Gateway Development Corporation, and now the Gateway Development Commission regarding the funding of the Gateway Tunnel. NJ TRANSIT is part of the broader Gateway program that Amtrak has come out with years ago, after ARC was killed. NJ TRANSIT is the lead agency for Portal and that is in their Capital Plan, but the Gateway Tunnel is more a state commitment, that also involves Port Authority of New York & New Jersey, and Amtrak and that is not in the Capital Plan.

Regarding the Hudson-Bergen Light Rail extension, that is in the Capital Plan and is going through the full environmental process. More than a year ago, before Board Member Gordon was on the Board, they authorized the final alignment and both federal and state funding will have to be secured when that comes out. NJ TRANSIT, the Port Authority, the MTA, as well as Amtrak and ferry services have contingency plans but there is nothing really that will adequately and in an efficient way compensate for the tunnels, if they were to go out.

Board Member Gordon thinks they might want to consider investing more resources into some of their ferry partners because that would seem the easiest way to increase Trans-Hudson capacity if the tunnels fail.

President & CEO Corbett noted that is part of their planning service and several meetings ago, they voted on funding some additional research for the analysis, updating the analysis of their Trans-Hudson backup plan and capacity plans.

Chair Gutierrez-Scaccetti asked Board Member Gordon if he was talking about the expansion of general port traffic along the Eastern Shore of New Jersey because the Trust Fund just invested in the development of two ports in Middlesex County; one in South Amboy and one in Carteret and so that's coming out of the Trust Fund on the DOT side.

Board Member Gordon said he was not aware of the details and maybe this is more of a DOT responsibility, than NJ TRANSIT. If they are thinking about a Plan B if the rail tunnel fails, one option is to try to ramp up ferry service. He has had been told that in addition to

greater infrastructure needs for the ferry services, they are going to need to extend the Hudson-Bergen Light Rail to Bergen to get the people to the ferries. So, it seems to him that they might want to start thinking about putting resources into those projects.

Chair Gutierrez-Scaccetti said, as President & CEO Corbett noted, the Hudson-Bergen Light Rail is being addressed, but the infrastructure for ferry service to a large extent, is being addressed through her day job at the New Jersey DOT. They just announced an additional $600 million of capital this year for Fiscal Year 2021 and included in that are the developments of two new ferry terminals. One will be in South Amboy and one in Carteret. She hopes that helps him in terms of looking at their ability to continue to support Trans-Hudson traffic, in the event they have any other type of a situation with the rail.

Board Member Gordon thanked her and said he actually overheard her conversation with the Speaker at the Raritan Bridge, so he was glad they are putting resources into that.

Board Member Maroko said it was very encouraging to hear, that after years of stagnation and erosion of capital assets, they finally have a forward looking, proactive, and aspirational Capital Program. So, he complimented the agency for putting it together. Board Member Maroko thinks it is terrific.

Board Member Narra said, as a Middlesex County Freeholder, she was going to shout out about South Amboy and Carteret's projects, that Middlesex County is appreciative of, and thinks everybody in the State will be happy increasing those ferry options. She complimented the staff. Board Member Narra thinks this Capital fund plan is terrific. She was very impressed with all the hard work and the presentation they got as a Board Member and thanked the staff for providing that comprehensive report to the public. Board Member Narra is very excited about the plan.

Board Member Rasmussen thanked the staff for their presentation.

Chair Gutierrez-Scaccetti asked for a roll call vote and the item was adopted.

Roll Call Vote:

Adams	Ajmani	Doshi	Fulton	Gordon	Maroko	Narra	Wilton	Gutierrez-Scaccetti
Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

President & CEO Corbett said that was great and thanked everyone. He said it is extremely exciting, thanked the presenters, and noted it was an extremely exciting time after a couple of years of really hard work, to be at this point. He appreciates the support from everyone.

2010-62: MORRIS & ESSEX LINE TRACTION POWER CIRCUIT BREAKER REPLACEMENT PROJECT

President & CEO Corbett introduced James Sincaglia, Acting Senior Vice President and General Manager, Rail Operations, to present Action Item #2010-62. James Sincaglia recommended approval of Action Item #2010-62: Morris & Essex Line Traction Power Circuit Breaker Replacement Project.

Approval was requested to enter into a contract with Asplundh Construction LLC to perform design build services to replace 126 single pole and 35 two pole circuit breakers at 16 traction power high voltage substations and to provide 20 single pole and 12 two pole spares, not to exceed $30,825,671.06 plus five percent for contingencies, subject to the availability of funds.

This project is vital to ensure the traction power system continues to operate reliably by replacing obsolete breakers that reached their useful life. The new diagnostic features on the breakers will incorporate condition-based maintenance technology to increase preventative maintenance efficiency.

Board Member Shanti Narra made a motion and Board Member Sangeeta Doshi seconded the motion. Chair Gutierrez-Scaccetti asked for a roll call vote and the item was adopted.

Roll Call Vote:

Adams	Ajmani	Doshi	Fulton	Gordon	Maroko	Narra	Wilton	Gutierrez-Scaccetti
Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

Board Secretary Zuczek noted Board Member Adams was recused from the next item 2010-63. The Operator removed Board Member Adams from the meetings.

2010-63: MARKET STREET BUS GARAGE REHABILITATION PROJECT – CONSTRUCTION CONTRACT AND CONSTRUCTION MANAGEMENT SERVICES CONTRACT AWARD

President & CEO Corbett introduced Eric Daleo, Senior Vice President, Capital Programs, to present Action Item #2010-63. Eric Daleo recommended approval of Action Item #2010-63: Market Street Bus Garage Rehabilitation Project – Construction Contract and Construction Management Services Contract Award.

The Market Street Bus Garage Rehabilitation will include upgrades to key components of the building, improving the facility's serviceability.

Approval was requested to enter into a contract with DMR Construction Services, Inc. of Waldwick, New Jersey, for the construction of the Market Street Bus Garage Rehabilitation Project in the amount not to exceed $18,319,341.23, plus ten percent for contingencies, subject to the availability of funds.

Approval was also requested to enter into a contract with AECOM Tishman of Piscataway, New Jersey, for the construction management of the Market Street Bus Garage Rehabilitation Project in the amount not to exceed $2,857,155.00, plus five percent for contingencies, subject to the availability of funds.

Approval of this construction and construction management contract will allow for upgrades to many outdated areas in the bus garage. These upgrades will improve the conditions of the historic facility and allow it to operate more efficiently, as well as accommodate for anticipated fleet growth.

Board Member Brian T. Wilton made a motion and Board Member Cedrick T. Fulton seconded the motion. Chair Gutierrez-Scaccetti asked for a roll call vote and the item was adopted.

Roll Call Vote:

Adams	Ajmani	Doshi	Fulton	Gordon	Maroko	Narra	Wilton	Gutierrez-Scaccetti
Recused	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

Board Member Adams returned to the meetings.

2010-65: CONTRACTING OUT – MONMOUTH COUNTY LOCAL BUS SERVICE EXTENSION

President & CEO Corbett introduced Ronald Nichols, Chief, Light Rail and Contract Services, to present Action Item #2010-65. Ronald Nichols recommended approval of Action Item #2010-65: Contracting Out – Monmouth County Local Bus Service Extension.

Approval was requested to extend a contract with Transdev Services, Inc. of Lombard, Illinois, to operate the Monmouth County Local Bus Service for an additional three-month period of December 13, 2020 through March 19, 2021 at a cost not to exceed $1,745,836, plus five percent for contingencies, for a total contract authorization of $1,833,128, subject to the availability of funds.

Board Member Richard A. Maroko made a motion and Board Member Sangeeta Doshi seconded the motion. Chair Gutierrez-Scaccetti asked for a roll call vote and the item was adopted.

Roll Call Vote:

Adams	Ajmani	Doshi	Fulton	Gordon	Maroko	Narra	Wilton	Gutierrez-Scaccetti
Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

Board Secretary Zuczek noted Board Member Rasmussen was recused from the next three items 2010-66, 2010-67, and 2010-68. The Operator removed Board Member Rasmussen from the meetings.

President & CEO Corbett, on behalf of the staff, praised making Board Member Fulton the Vice Chair. They worked with him when he was on their side of operations at the Port Authority.

2010-66: PERSONAL INJURY CLAIM OF THE ESTATE OF ANNIE ELIZABETH MCALLISTER

President & CEO Corbett introduced William Viqueira, Senior Vice President, Chief Financial Officer and Treasurer, to present Action Item #2010-66. William Viqueira recommended approval of Action Item #2010-66: Personal Injury Claim of the Estate of Annie Elizabeth McAllister.

Approval was requested to settle the claim of The Estate of Annie Elizabeth McAllister through the estate's attorney, at an amount discussed in executive session. The Attorney General has approved the proposed settlement, subject to the availability of funds.

Board Member Shanti Narra made a motion and Board Member James D. Adams seconded the motion. Chair Gutierrez-Scaccetti asked for a roll call vote and the item was adopted.

Roll Call Vote:

Adams	Ajmani	Doshi	Fulton	Gordon	Maroko	Narra	Wilton	Gutierrez-Scaccetti
Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

Board Secretary Zuczek noted Board Member Gordon was recused from the next two items 2010-67 and 2010-68. The Operator removed Board Member Gordon from the meetings.

2010-67: PERSONAL INJURY CLAIM OF RICKY WILLIAMS

President & CEO Corbett introduced William Viqueira, Senior Vice President, Chief Financial Officer and Treasurer, to present Action Item #2010-67. William Viqueira recommended approval of Action Item #2010-67: Personal Injury Claim of Ricky Williams.

Approval was requested to settle the claim of Ricky Williams through his attorney, at an amount discussed in executive session. The Attorney General has approved the proposed settlement, subject to the availability of funds.

Board Member Cedrick T. Fulton made a motion and Board Member Richard A. Maroko seconded the motion. Chair Gutierrez-Scaccetti asked for a roll call vote and the item was adopted.

Roll Call Vote:

Adams	Ajmani	Doshi	Fulton	Gordon	Maroko	Narra	Wilton	Gutierrez-Scaccetti
Yes	Yes	Yes	Yes	Recused	Yes	Yes	Yes	Yes

2010-68: PERSONAL INJURY CLAIM OF CANDY MARCHAN

President & CEO Corbett introduced William Viqueira, Senior Vice President, Chief Financial Officer and Treasurer, to present Action Item #2010-68. William Viqueira recommended approval of Action Item #2010-68: Personal Injury Claim of Candy Marchan.

Approval was requested to settle the claim of Candy Marchan through her attorney, at an amount discussed in executive session. The Attorney General has approved the proposed settlement, subject to the availability of funds.

Board Member Shanti Narra made a motion and Board Member Richard A. Maroko seconded the motion. Chair Gutierrez-Scaccetti asked for a roll call vote and the item was adopted.

Roll Call Vote:

Adams	Ajmani	Doshi	Fulton	Gordon	Maroko	Narra	Wilton	Gutierrez-Scaccetti
Yes	Yes	Absent	Yes	Recused	Yes	Yes	Yes	Yes

Board Members Gordon and Rasmussen returned to the meetings.

Executive Session Authorization

Chair Gutierrez-Scaccetti noted they would adjourn to Executive Session, would only return to adjourn the meetings, and no further business would be conducted.

At approximately 10:54 p.m., Chair Gutierrez-Scaccetti requested a motion to enter Executive Session to discuss personnel matters, contract negotiations, the status of pending and anticipated litigation, and matters falling within the attorney-client privilege. Board Member Brian T. Wilton made a motion, Board Member Bob M. Gordon seconded the motion, and it was adopted.

Roll Call Vote:

Adams	Ajmani	Doshi	Fulton	Gordon	Maroko	Narra	Wilton	Gutierrez-Scaccetti
Yes	Yes	Absent	Yes	Yes	Yes	Yes	Yes	Yes

Return to Open Session

Board Secretary Zuczek conducted a Roll Call as Board Members returned to Open Session. All Board Members, except Board Member Ajmani, returned to Open Session at approximately 11:17 p.m.

Adjournment

Since there was no further business, a motion to adjourn was made by Board Member Brian T. Wilton, seconded by Board Member Bob M. Gordon, and adopted. The meetings were adjourned at approximately 11:18 p.m.

NEW JERSEY TRANSIT CORPORATION
NJ TRANSIT BUS OPERATIONS, INC.
NJ TRANSIT RAIL OPERATIONS, INC.
NJ TRANSIT MERCER, INC.
NJ TRANSIT MORRIS, INC.
REGULARLY SCHEDULED BOARD OF DIRECTORS' MEETINGS

OCTOBER 21, 2020

MINUTES

	PAGE
➢ **CALL TO ORDER**	-
➢ **APPROVAL OF MINUTES OF PREVIOUS MEETINGS**	58001
➢ **PRESIDENT & CEO'S MONTHLY REPORT**	58002
➢ **PUBLIC COMMENTS**	-
➢ **ADVISORY COMMITTEE REPORT**	-
➢ **BOARD COMMITTEE REPORT**	-

ACTION ITEMS

2010-60 **FISCAL YEAR 2021 OPERATING BUDGET** – Authorization to adopt the Fiscal Year 2021 Operating Budget in the amount of $2.637 billion. **58062**

2010-61 **NJ TRANSIT FY2021 – FY2025 CAPITAL PLAN ADOPTION AND FY2021 AUTHORIZATION TO SECURE CAPITAL FUNDING** – Authorization to adopt *A Five-Year Capital Plan* (Exhibit A) which is an unconstrained vision of projects to demonstrate opportunities for safety, service reliability, resiliency, sustainability, and other improvements critical to NJ TRANSIT. **58080**

2010-62 **MORRIS & ESSEX LINE TRACTION POWER CIRCUIT BREAKER REPLACEMENT PROJECT** – Authorization to enter into NJ TRANSIT Contract No. 19-011X with Asplundh Construction LLC, to provide design build services to replace 126 single pole and 35 two pole high voltage traction power circuit breakers; provide 20 single pole and 12 two pole spares; a comprehensive maintenance plan based on the integrated condition based diagnostic unit at a cost not to exceed $30,825,671.06, plus five percent contingencies, subject to the availability of funds. **58430**

2010-63 **MARKET STREET BUS GARAGE REHABILITATION PROJECT – CONSTRUCTION CONTRACT AND CONSTRUCTION MANAGEMENT SERVICES CONTRACT AWARD** – Authorization to enter into NJ TRANSIT Contract No. 19-021x with DMR Construction Services, Inc. of Waldwick, New Jersey, for the construction of the Market Street Bus Garage Rehabilitation - General Construction Contract in the amount not to exceed $18,319,341.23, plus ten percent for contingencies, subject to the availability of funds. **58432**

Authorization to enter into NJ TRANSIT Contract No. 19-056 with AECOM Tishman, to provide construction management services for the Market Street Bus Garage Rehabilitation Project in the amount not to exceed $2,857,155.00, plus five percent for contingencies, subject to the availability of funds.

2010-64 **NJ TRANSIT RESILIENCE PROGRAM – NJ TRANSIT MICROGRID CENTRAL FACILITY STIPEND PROGRAM** – Authorization to direct NJ TRANSIT staff to develop and institute a stipend program to support the NJ TRANSITGRID Microgrid Central Facility procurement process, as detailed in enabling legislation and corresponding regulations, N.J.A.C. 16:72-4.1, at a cost not to exceed $3,000,000, subject to the availability of funds. **58436**

Authorization to direct NJ TRANSIT staff to review eligible submissions and administer and cause to pay stipends to eligible proposers.

2010-65 **CONTRACTING OUT – MONMOUTH COUNTY LOCAL BUS SERVICE EXTENSION** – Authorization to extend NJ TRANSIT Contract No. 13-025 with Transdev Services, Inc. of Lombard, Illinois, to operate the Monmouth County Local Bus Service for an additional three-month period of December 13, 2020 through March 19, 2021 at a cost not to exceed $1,745,836, plus five percent for contingencies, for a total contract authorization of $1,833,128, subject to the availability of funds and Board approval of NJ TRANSIT's operating budget. **58437**

2010-66 **PERSONAL INJURY CLAIM OF THE ESTATE OF ANNIE ELIZABETH MCALLISTER** – Authorization to settle the claim of The Estate of Annie Elizabeth McAllister through the estate's attorney, at an amount discussed in executive session. The Attorney General has approved the proposed settlement, subject to the availability of funds. **58438**

2010-67 **PERSONAL INJURY CLAIM OF RICKY WILLIAMS** – Authorization to settle the claim of Ricky Williams through his attorney, at an amount discussed in executive session. The Attorney General has approved the proposed settlement, subject to the availability of funds. **58439**

2010-68 **PERSONAL INJURY CLAIM OF CANDY MARCHAN** – Authorization to settle the claim of Candy Marchan through her attorney, at an amount discussed in executive session. The Attorney General has approved the proposed settlement, subject to the availability of funds. **58440**

- **EXECUTIVE SESSION AUTHORIZATION** **58441**
- **ADJOURNMENT**

APPROVAL OF MINUTES

WHEREAS, the By-Laws provide that the minutes of actions taken at meetings of the New Jersey Transit Corporation, NJ TRANSIT Rail Operations, Inc., NJ TRANSIT Bus Operations, Inc., NJ TRANSIT Mercer, Inc., and NJ TRANSIT Morris, Inc. Board of Directors be approved by the Board; and

WHEREAS, pursuant to Section 4(f) of the New Jersey Public Transportation Act of 1979, the minutes of actions taken at the September 9, 2020 Board Meetings of the New Jersey Transit Corporation, NJ TRANSIT Bus Operations, Inc., NJ TRANSIT Rail Operations, Inc., NJ TRANSIT Mercer, Inc., and NJ TRANSIT Morris, Inc. were forwarded to the Governor on September 17, 2020;

NOW, THEREFORE, BE IT RESOLVED that the minutes of actions taken at the September 9, 2020 New Jersey Transit Corporation, NJ TRANSIT Rail Operations, Inc., NJ TRANSIT Bus Operations, Inc., NJ TRANSIT Mercer, Inc., and NJ TRANSIT Morris, Inc. Board of Directors' meetings are hereby approved.

Philip D. Murphy, Governor
Sheila Y. Oliver, Lieutenant Governor
Diane Gutierrez-Scaccetti, Commissioner
Kevin S. Corbett, President & CEO

NJTRANSIT
One Penn Plaza East
Newark, NJ 07105-2246
973-491-7000

TO: BOARD OF DIRECTORS
FROM: KEVIN S. CORBETT
DATE: OCTOBER 21, 2020
SUBJECT: **PRESIDENT & CEO'S REPORT – OCTOBER 2020**

The highlight of this month's meeting is the Board's adoption of our Fiscal Year 2021 (FY21) Operating and Capital Budgets. The spending plans reflect Governor Murphy's commitment to NJ TRANSIT, and to providing the resources we need to keep our transit system – and our state – moving, amidst one of the most challenging economic times in recent history. We will continue to build on the significant progress we've made since 2018, continuing our investments in frontline personnel, infrastructure and equipment to maintain the system in a state-of-good repair, advancing our 10-year Strategic Plan (*NJT2030*) and maintaining our ongoing efforts to protect our customers and employees from the spread of COVID-19.

As NJ TRANSIT continues its extraordinary efforts to keep customers and employees safe, we're also taking a proactive approach to gathering and analyzing information that will help us prepare our system for the return of our customers. As part these efforts, on September 29th, we proudly partnered with Rutgers University's Bloustein School to convene a full-day, online symposium, examining the impacts of COVID-19 on transportation, the economy, and the business community. Ultimately, the information and insights we gathered will serve as a critical component in our ongoing planning and forecasting efforts. Videos of the symposium, including the keynotes and four expert panels, are now online and I encourage you all to take a look at njtransit.com/symposium.

In addition to planning and forecasting, we continue to add protective measures to our system to ensure our customers feel safe and comfortable as they return to the system. One initiative I'm particularly proud of is the introduction last month of the "How Full Is My Ride" feature on our mobile app. This innovative new technology feature allows customers to report and view capacity levels on buses and trains, enabling them to make better-informed decisions that optimize their comfort level as they return to our system.

Data is collected automatically on buses through onboard passenger counting technology, and through NJ TRANSIT's new handheld ticket validation devices, used by train crews to scan and validate tickets and passes on Raritan Valley, Atlantic City, and Morris & Essex Lines trains. For other rail lines, customers can crowdsource this information by self-reporting distancing levels – alerting fellow customers to how full their train is. Crowdsourcing will gradually be phased out as train crews on rail lines systemwide receive new handheld ticket validation devices, expected to be completed over the next five months.

Handheld ticket validation devices are not the only way we're working to modernize fare collection. On October 19th, we announced the launch of onboard ticket validators on our entire statewide bus fleet. These devices increase convenience and eliminate a frequent touchpoint by allowing customers to scan a barcode – from either a ticket, a pass, or a mobile phone – instead of handing a ticket or a pass to a bus operator. The fleet-wide installation process has begun on buses at our Oradell garage, and will proceed to other garages over the coming months. In subsequent phases of this modernization program, the validators will accept additional fare media, including contactless credit or debit cards, and a NJ TRANSIT fare card, currently in development.

I'm also proud that, despite the impacts of the pandemic, we've continued to advance a number of major capital projects. On September 15th, I was proud to join Governor Murphy and Commissioner Gutierrez-Scaccetti to celebrate the groundbreaking to replace the 112-year-old Raritan River Bridge. This $600 million-dollar project will allow us to continue moving customers to critical job centers and shore communities for years to come – without prolonged service interruptions related to severe weather events or infrastructure issues resulting from the age of the bridge. I was also pleased to share our new approach to the design of our TRANSITGRID project. We are committed to maximizing the use of renewable energy sources and delivering a microgrid. Our commitment is to deliver a project that meets the needs of our customers and remains consistent with Governor Phil Murphy's Energy Master Plan.

In closing, I want to note how pleased I am that fares will remain stable in FY21. Holding fares steady is especially important today, as we know how critically important mass transit is for essential workers and our transit-dependent customers, many of whom are facing financial uncertainty as a result of the pandemic.

PRESIDENT & CEO'S MONTHLY REPORT

OCTOBER 21, 2020

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OCTOBER 21, 2020

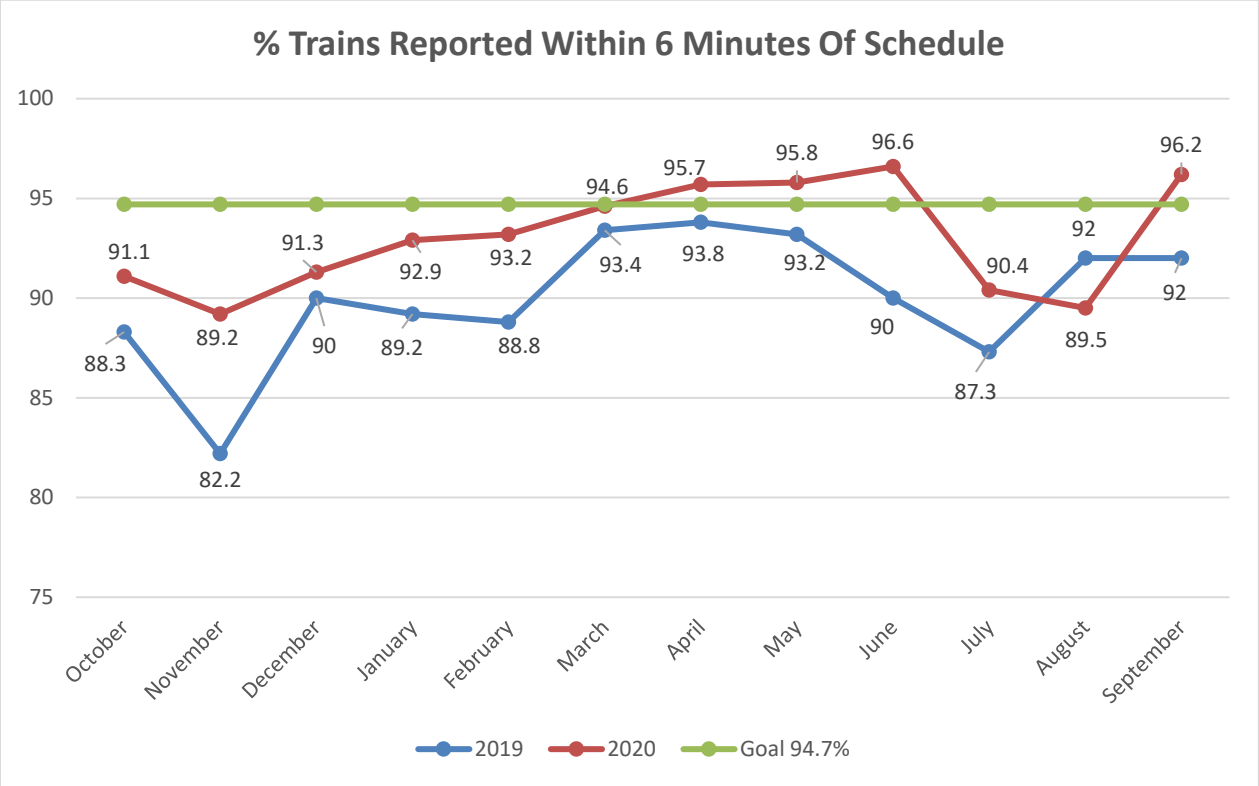
1. PERFORMANCE MEASURES

2. MEAN DISTANCE BETWEEN FAILURES

3. DBE/SBE PROGRAM

4. EMPLOYEE RECOGNITION

PERFORMANCE MEASURES



	2019	2020	%Change
September Comparison	92.0%	96.2%	4.2%
12-Month Average Sept. 2018 – Oct 2020	90.0%	93.0%	3.0%

Analysis:

Rail On-Time Performance was 96.2% for September 2020. Of the 16,808 trains scheduled to operate, 16,162 were on time, while 646 trains (or 3.8%) were delayed.

Key Causes included:

- NJT diesel issue, manpower shortage, shortage of equipment and arrow MU issues contributed to 52 delays on September 2.
- NJT bridge issues and staff shortage contributed to 23 delays on September 13.
- NJT struck debris and arrow MU issues contributed to 44 delays on September 16.

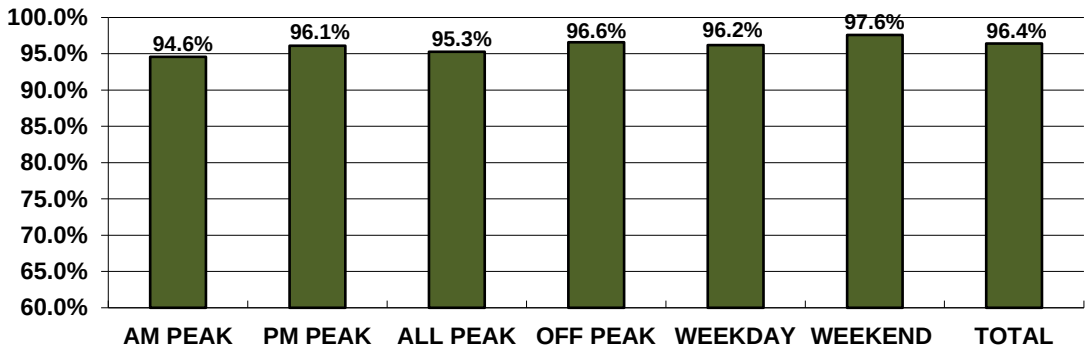
The 12-month Average for Rail On-Time Performance was 93.0%.

ON-TIME PERFORMANCE
RAIL

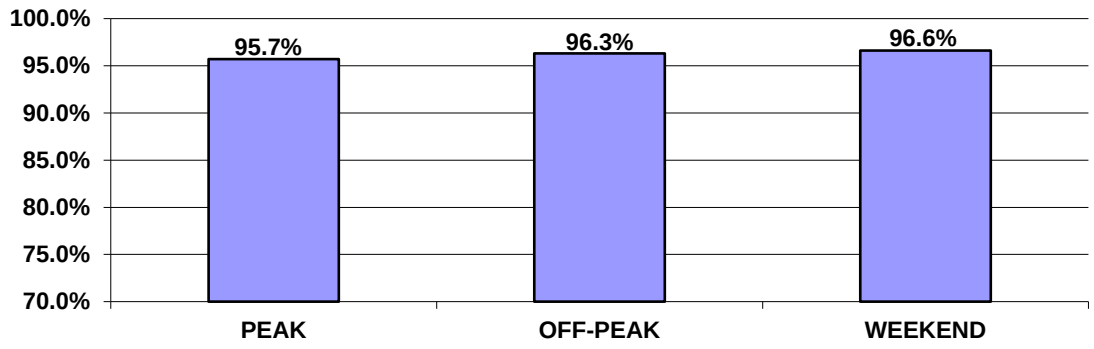
SUMMARY BY TIME PERIOD
SEPTEMBER 2020

*** NOTE: A train is reported late if it arrives at its final station stop more than 5:59 minutes later than the advertised schedule.**

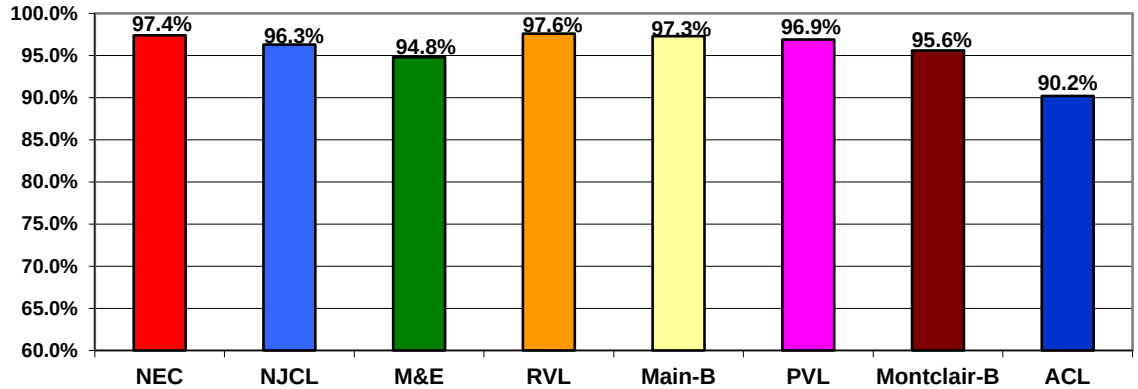
% NEW YORK PENN STATION Trains Reported On Time *



% SYSTEMWIDE Trains Reported On Time

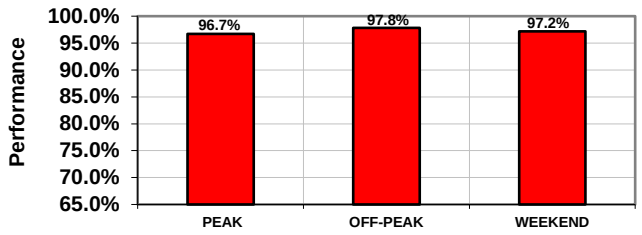


% BY LINE Trains Reported On Time

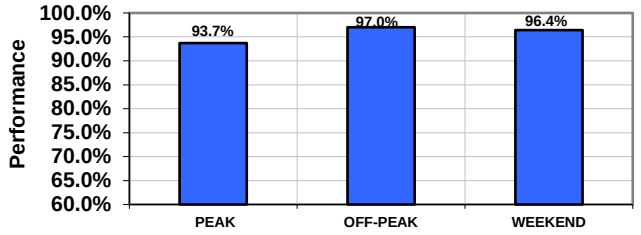


ON-TIME PERFORMANCE
BY RAIL LINE & TIME PERIOD
SEPTEMBER 2020

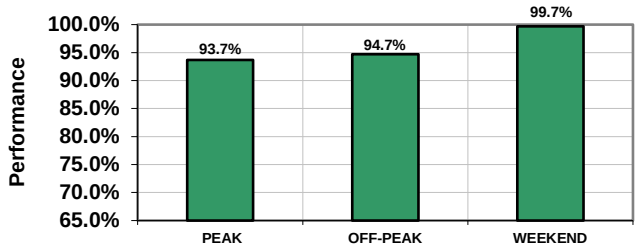
NORTHEAST CORRIDOR



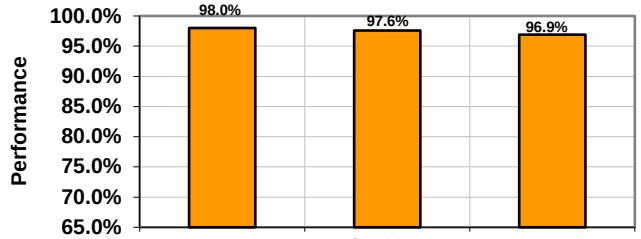
NORTH JERSEY COAST LINE



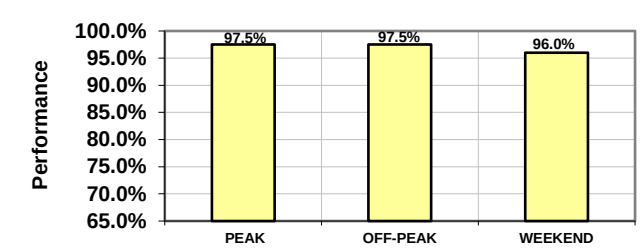
MORRIS & ESSEX



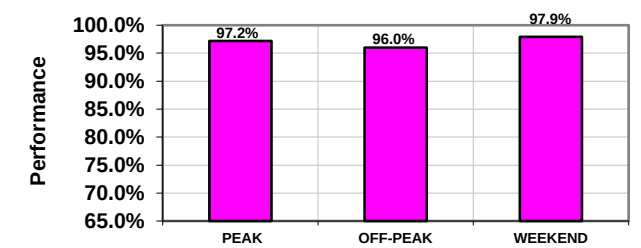
RARITAN VALLEY LINE



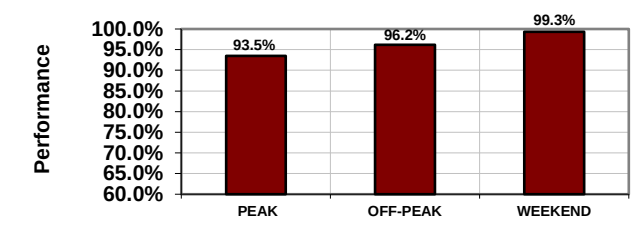
MAIN-BERGEN



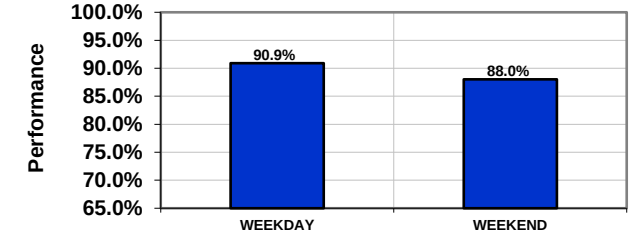
PASCACK VALLEY



MONTCLAIR-BOONTON



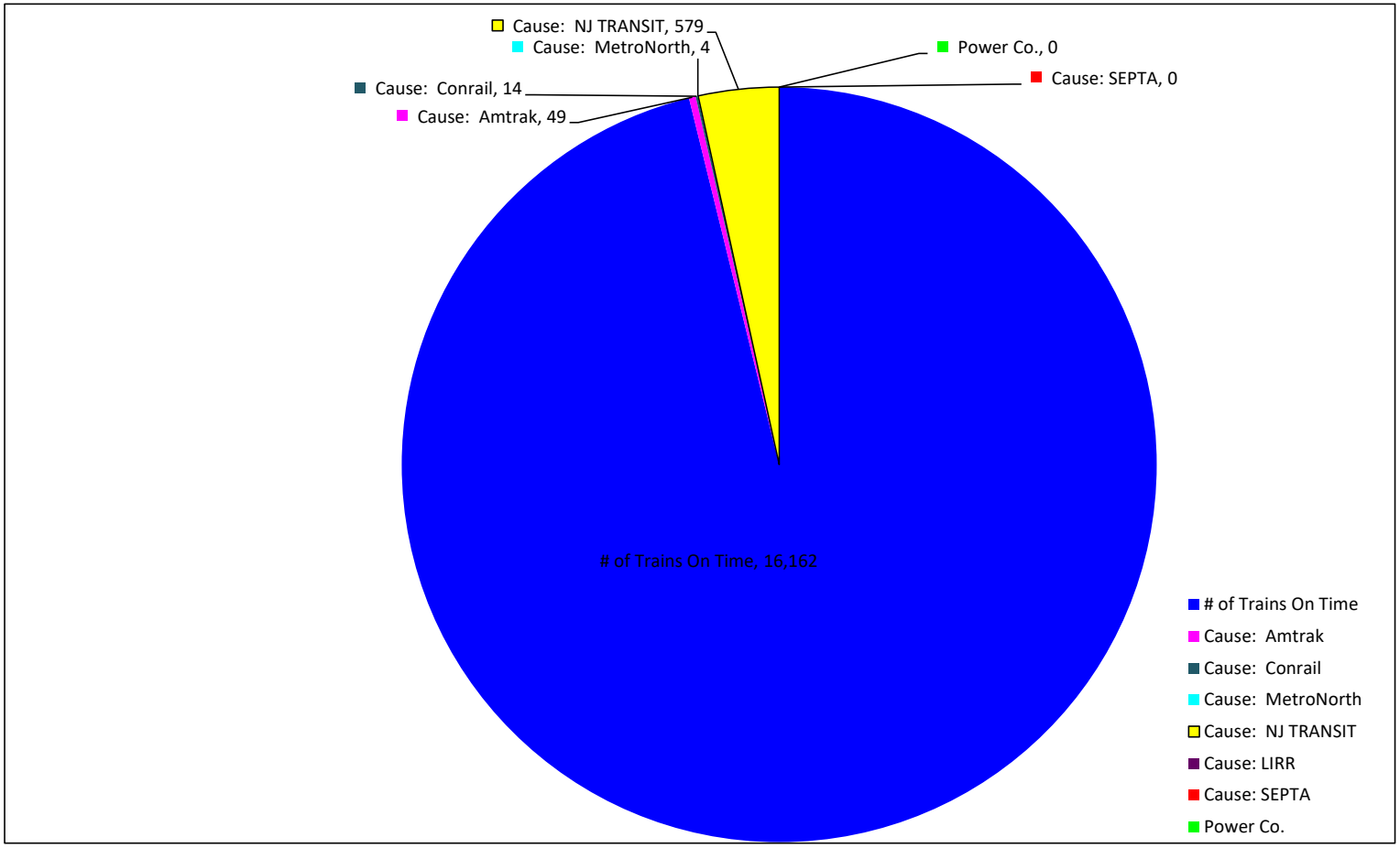
ATLANTIC CITY



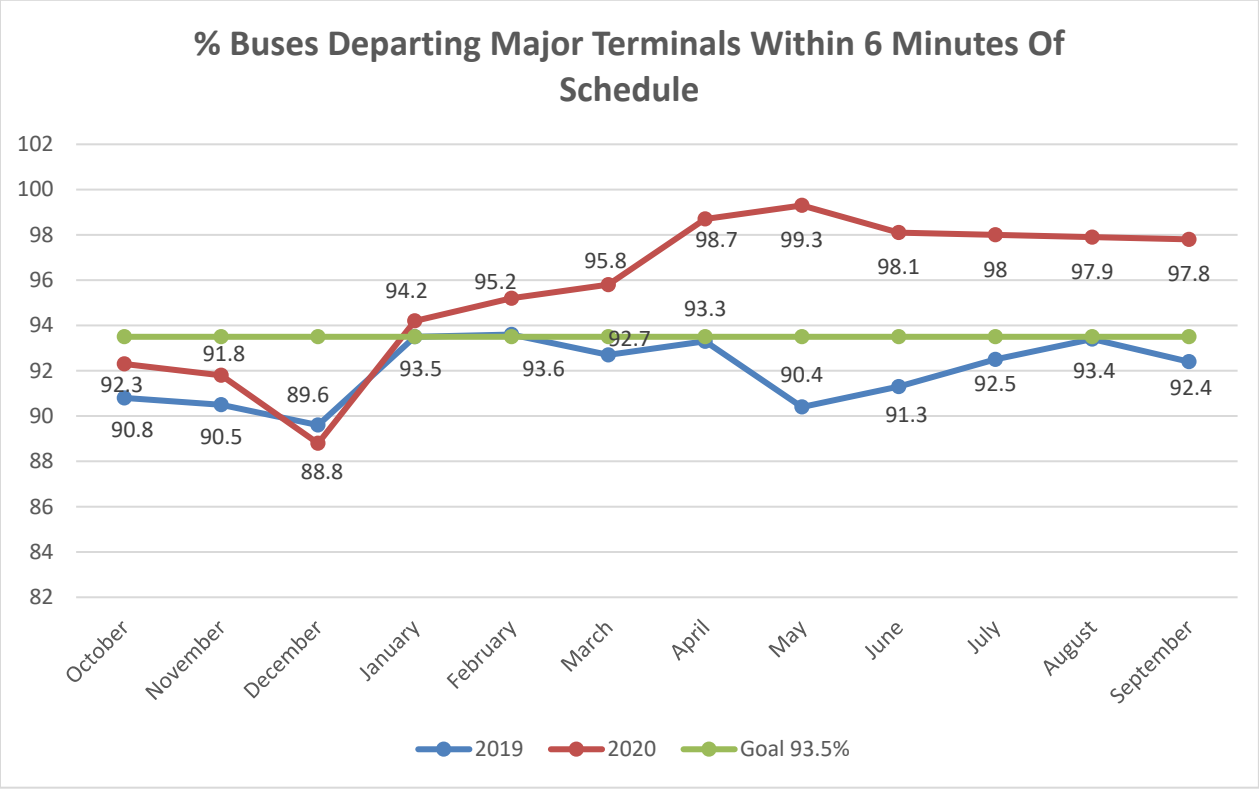
NJ TRANSIT Performance - SEPTEMBER 2020

Late NJ TRANSIT Trains

	# of Trains On	Cause: Amtrak	Cause: Conrail	Cause: MetroNorth	Cause: NJ TRANSIT	Cause: LIRR	Cause: SEPTA	Power Co.
# of Trains On Time	16,162	49	14	4	579		0	0
# of Late Trains	646	0.29%	0.08%	0.02%	3.44%	0.00%	0.00%	0.00%
Total # of Trains	16,808							
Percentage On Time	96.2%							



NJ TRANSIT
ON-TIME PERFORMANCE
BUS
October 2018 – September 2020



	2019	2020	%Change
September Comparison	92.4%	97.8%	5.4%
12-Month Average October 2018 – September 2020	92.0%	95.7%	3.7%

Analysis*:

Bus On-Time Performance systemwide was 97.8% for the month of September 2020. Of the 37,891 scheduled departures, 831 experienced delays.

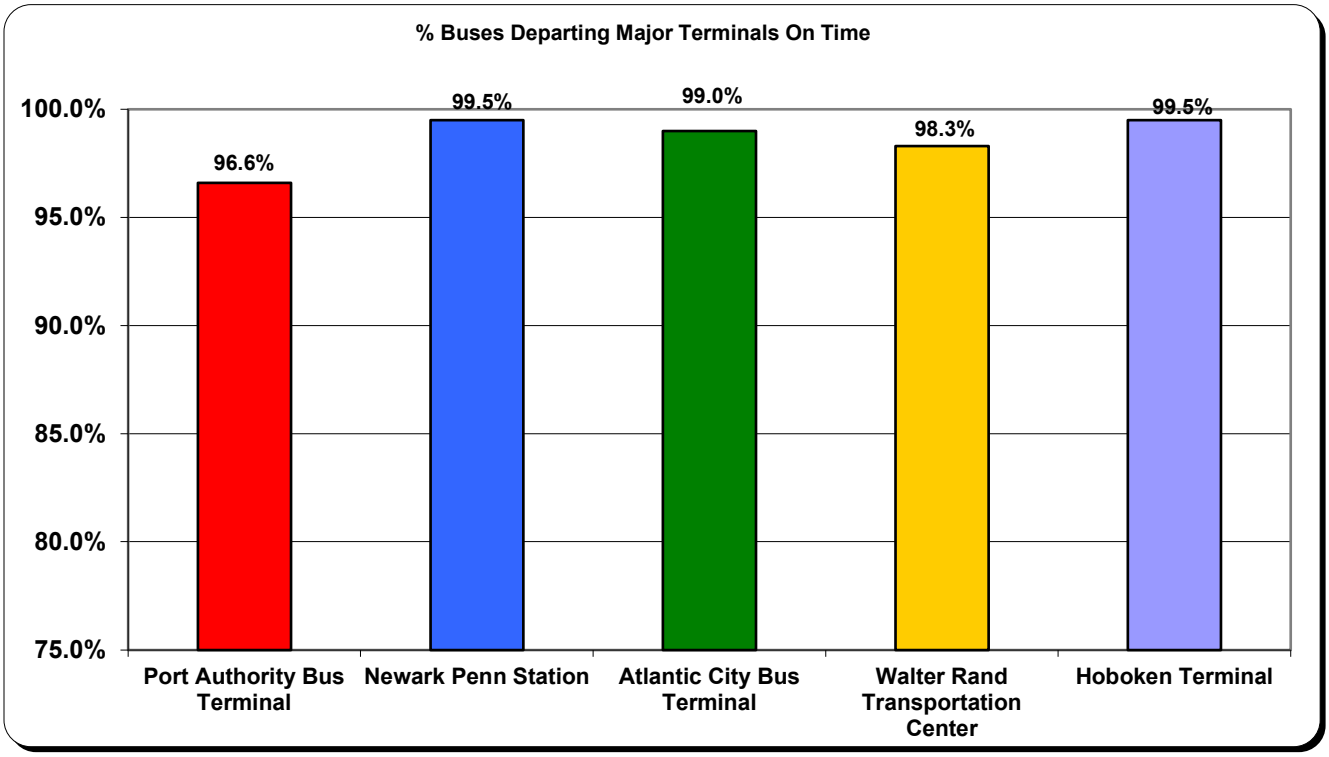
Key Causes included:

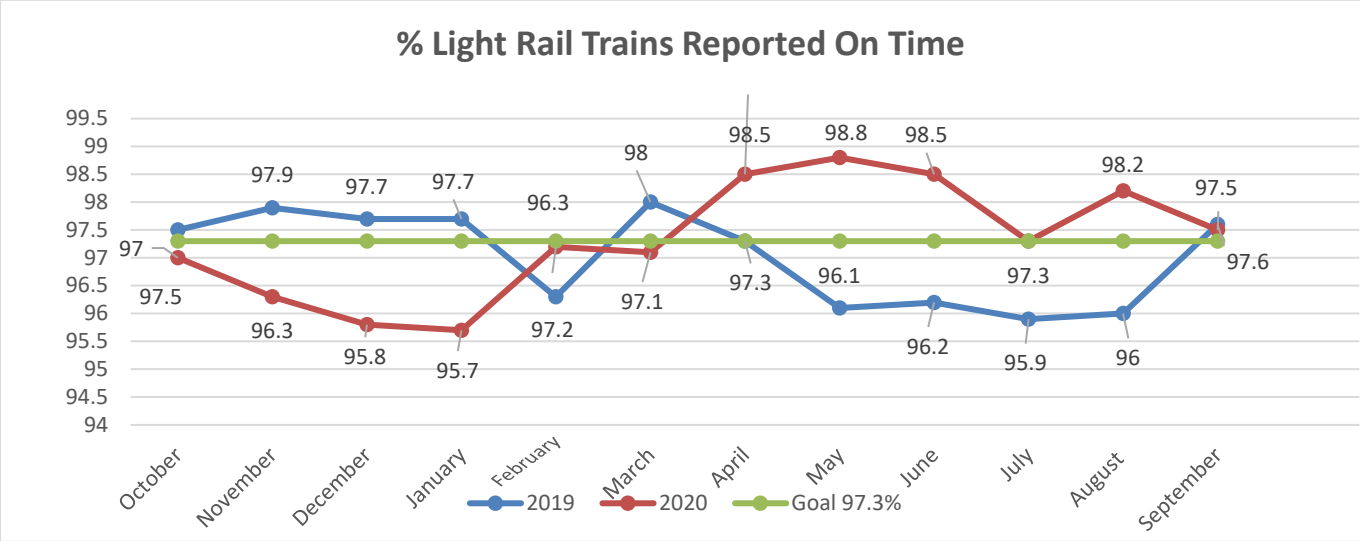
- Minor delays were caused due to weather, detours, traffic and road construction on various days at Port Authority Bus Terminal.
- Delays due to mechanical issues and congestion from road closures due to construction work on various days at Newark Penn.
- For various other locations, minor delays were caused due to weather, detours, traffic and road construction on various days.

The 12-month average for Bus On-Time Performance was 95.7%.

ON-TIME PERFORMANCE
BUS

SUMMARY BY TERMINAL





	2019	2020	%Change
September Comparison	97.6%	97.5%	-0.1 %
12-Month Average October 2019 – September 2020	96.5%	97.8%	1.3%

Analysis: Light Rail On-Time Performance system wide was 97.5% for the month of September 2020. Of the 26,998 scheduled departures, 541 experienced delays.

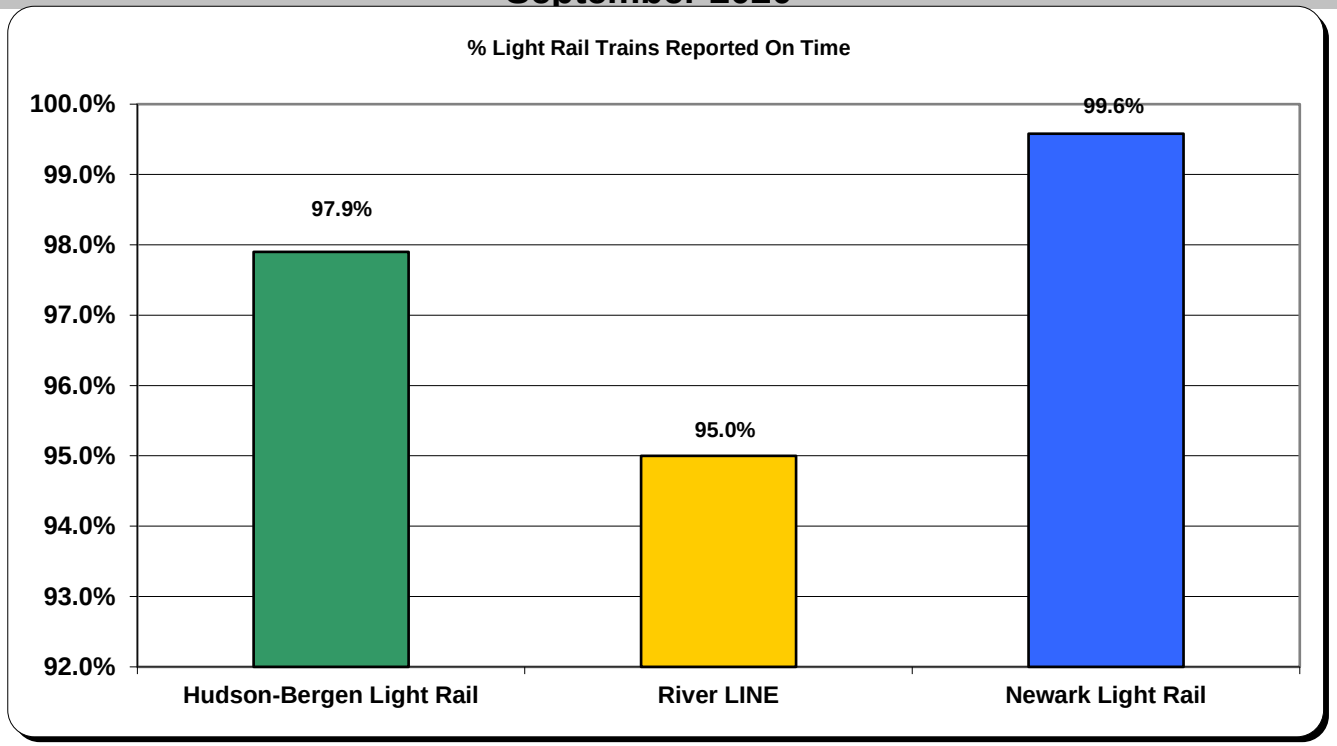
Key Causes included:

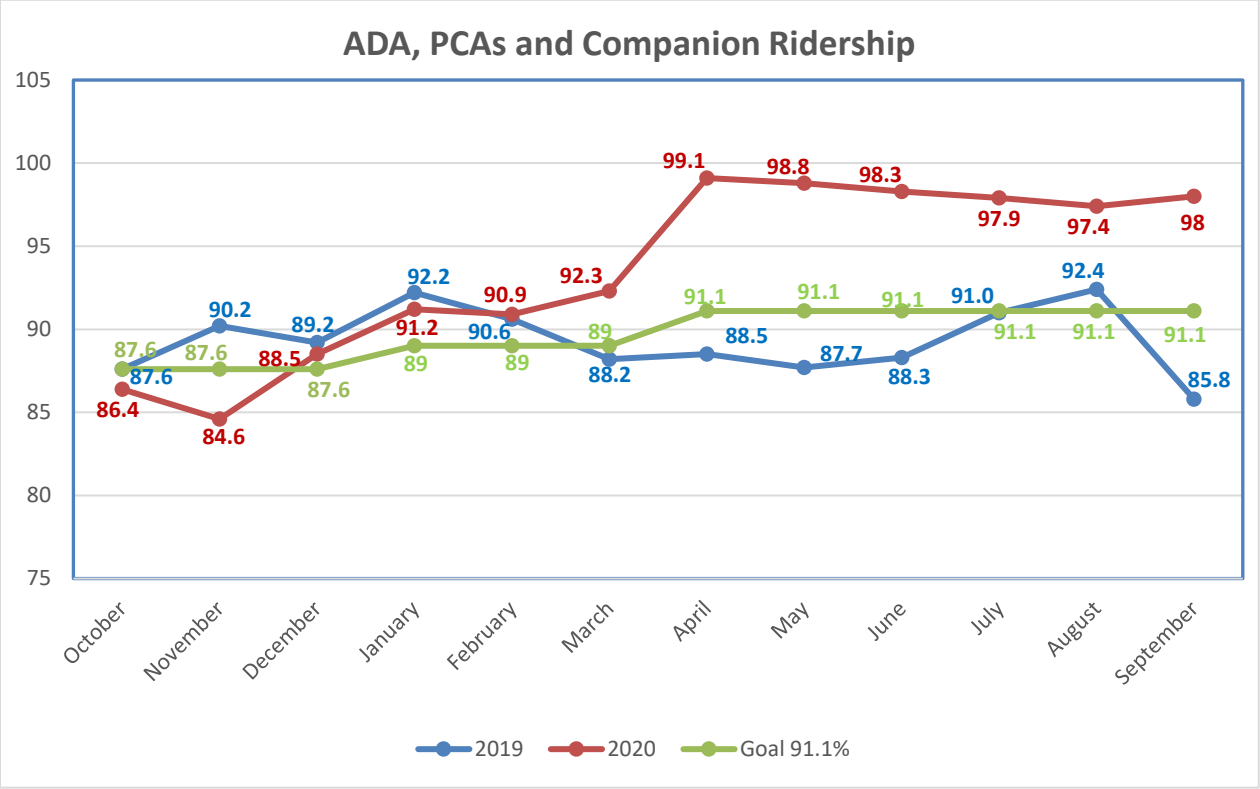
- Manpower shortages, mechanical issues and a track out impacted service on various days on Newark Light Rail.
- Equipment malfunctions, police activity and late personnel impacted service on various days on River Line.
- Door issues, police activity and track obstruction on various days impacted service on Hudson-Bergen Light Rail.

The 12-month Average for Light Rail On-Time Performance was 97.8%

ON-TIME PERFORMANCE
LIGHT RAIL

SUMMARY BY LINE
September 2020





	2019	2020	%Change
September Comparison	85.8%	98.0%	12.2%
September Ridership	140,416	75,077	-65,339
12-Month Average October 2018 – September 2020	88.7%	94.2%	5.5%

Analysis:

Access Link On-Time Performance was 98.0% for September 2020. In serving 83,965 total riders, for 75,077 ADA customers trips, 1,529 (or 2.0%) experienced delays.

Key Causes included:

- Customer no-shows and delays
- Vehicle operator coverage
- Delays related to a connection outage on September 4 in the southern (Region 2) area

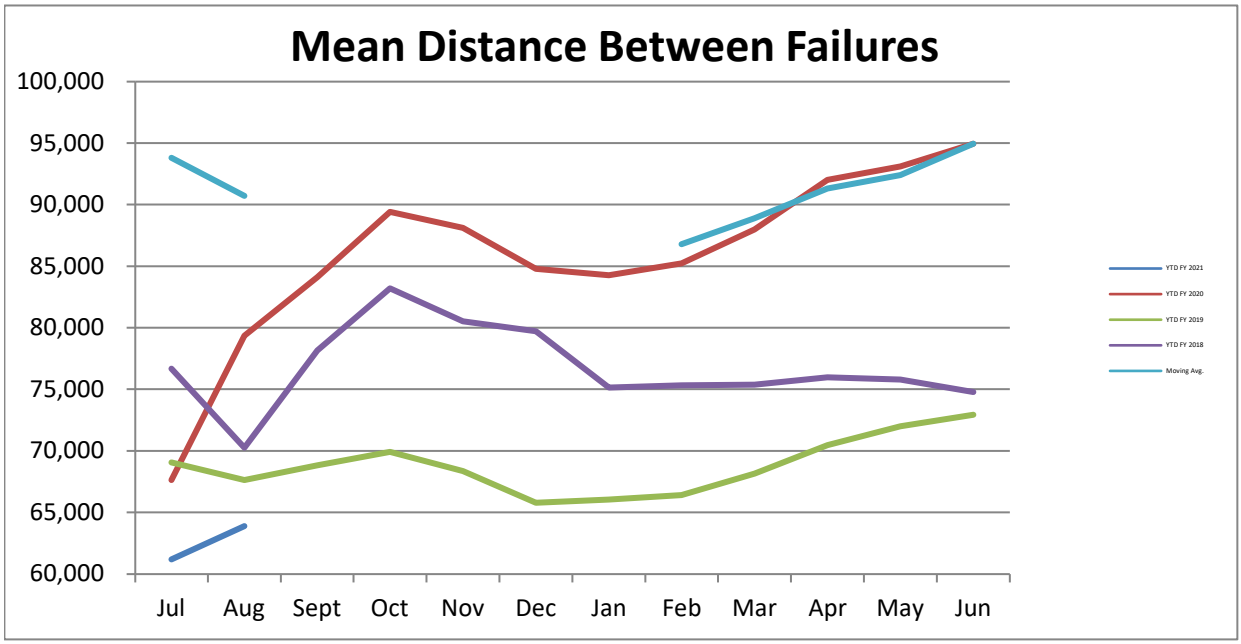
The 12-month Average for Access Link On-Time Performance was 94.2%.

MEAN DISTANCE BETWEEN FAILURES

August 2020

NJ TRANSIT Rail Operations
Mean Distance Between Failures

Month	YTD FY2021*	YTD FY2020	YTD FY2019	YTD FY2018	12 Month Moving Avg.
Jul	61,198	67,634	69,055	76,674	93,809
Aug	63,891	79,350	67,612	70,263	90,718
Sept	-	84,111	68,823	78,151	-
Oct	-	89,410	69,913	83,213	-
Nov	-	88,101	68,356	80,523	-
Dec	-	84,773	65,796	79,711	-
Jan	-	84,273	66,025	75,139	-
Feb	-	85,233	66,391	75,324	86,792
Mar	-	87,973	68,141	75,376	88,881
Apr	-	92,007	70,447	75,968	91,313
May	-	93,119	71,986	75,787	92,406
Jun	-	94,969	72,930	74,776	94,969

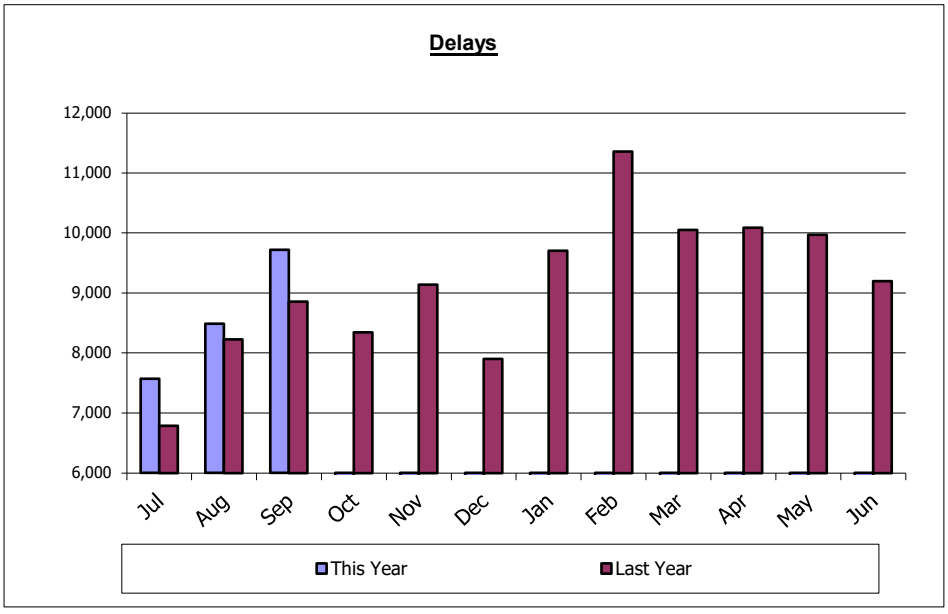


*** FY2021 Numbers corrected to reflect start of FY2021**

Garage Performance Parameters

September 2020

Location	Miles Between In-Service Delays			
	FY2021 Goal	This Month	FY2021 YTD	FY2020 YTD
Fairview	5,500	3,751	3,311	3,081
Greenville	7,000	6,048	5,162	3,967
Market Street	8,000	5,836	5,189	6,106
Meadowlands	9,500	5,270	5,204	4,525
Oradell	10,000	8,428	7,746	5,215
Wayne	16,000	20,624	16,103	13,823
Northern Division	**-**	**7,291**	**6,590**	**5,630**
Big Tree	8,800	4,601	3,818	5,007
Hilton	10,200	7,261	6,121	7,649
Howell	16,750	26,071	27,582	29,410
Ironbound	9,600	11,661	8,225	5,850
Orange	9,250	5,133	4,473	5,037
Morris	10,500	47,774	28,090	35,494
Central Division	**-**	**9,435**	**7,880**	**7,999**
Egg Harbor	15,500	14,351	15,681	17,087
Hamilton	13,000	13,084	11,098	9,673
Newton Avenue	12,000	20,006	15,796	11,079
Washington Twp.	14,500	26,864	19,076	18,594
Southern Division	**-**	**17,910**	**15,852**	**14,716**
	-	-	-	-
Bus Operations	***-***	***9,717***	***8,472***	***7,832***

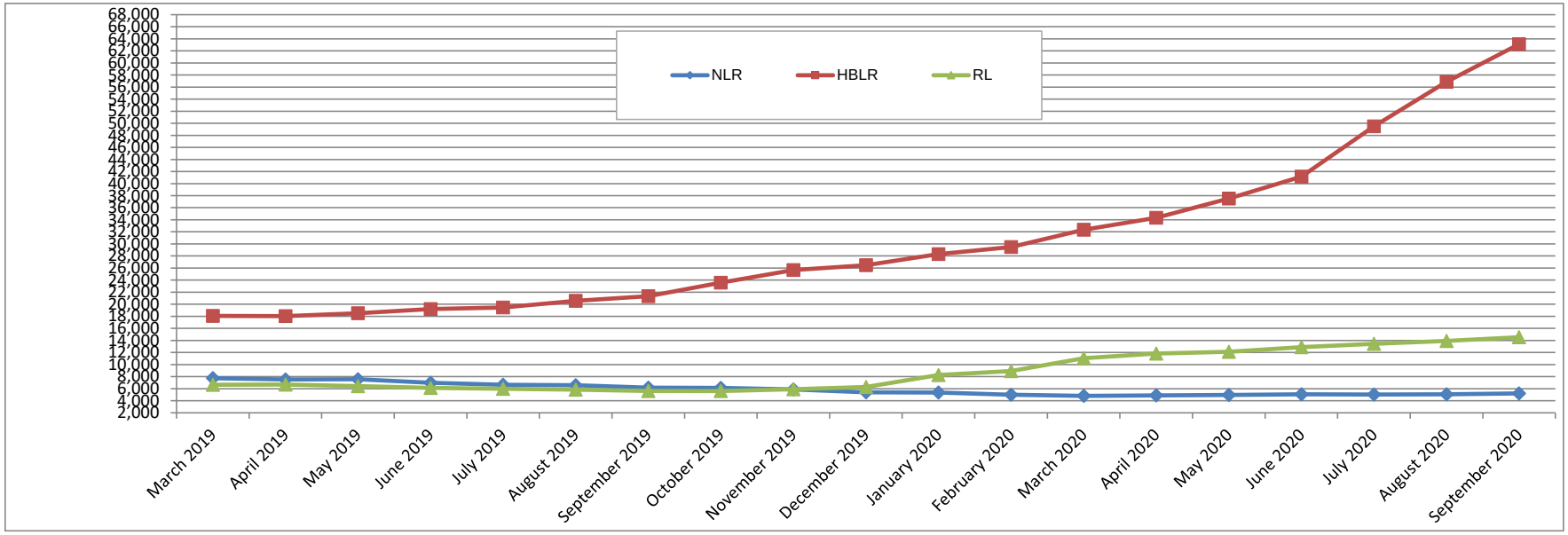


NJ TRANSIT - LIGHT RAIL, September 2020

Average Miles Between In Service Failures

NJT LIGHT RAIL	MDBSF * September 2020	MDBSF * August 2020
Newark Light Rail	5,211	5,064
Hudson Bergen	63,108	56,873
River LINE	14,531	13,903

AVERAGE MILES BETWEEN IN-SERVICE MECHANICAL FAILURES



DBE/SBE PROGRAM

NJ TRANSIT - DBE/SBE Participation for September 2020

State Funded Contracts

State Fiscal Year 2021 - July 1, 2020 through June 30, 2021

During the month **September 2020**, NJ TRANSIT awarded **$14,260,746.92** in state funded contracts. Of that total, Small Business Enterprises (SBEs) received **$1,804,131.00** or **12.65%.**

State Fiscal Year 2021 YTD (July 1, 2020 through September 30, 2020) NJ TRANSIT awarded **$19,427,996.49** in state funded contracts. Of that total, SBEs received **$6,303,350.13** or **32.44%.**

Note: The above reflects the Procurement Report of Awards received October 5, 2020.

SBE Goal Attainment from July 1, 2020 through June 30, 2021 (SFY 2021)

Category 1 SBEs	$0.00	0.00%
Category 2 SBEs	$1,823,690.83	9.39%
Category 3 SBEs	$482,675.26	2.48%
Category 4 SBEs	$24,000.00	0.12%
Category 5 SBEs	$199,211.04	1.03%
Category 6 SBEs	$3,773,773.00	19.42%

FTA Funded Contracts (Updated Quarterly – next update will occur January 2021)

Federal Fiscal Year 2020 - October 1, 2019 through September 30, 2020

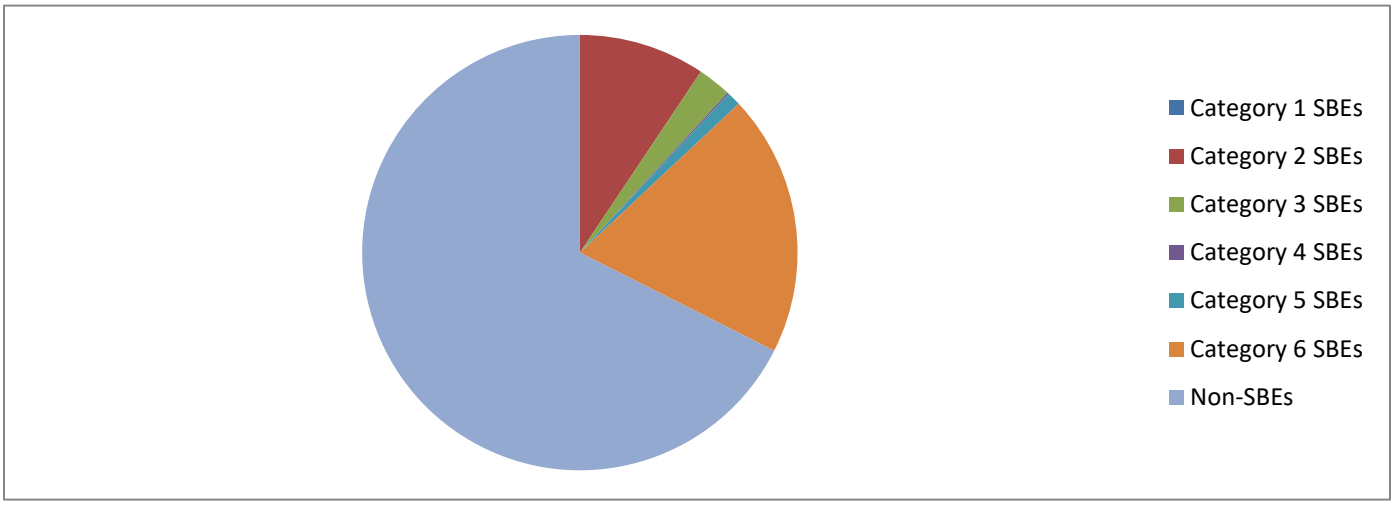
During the **4th Quarter** (July 1, 2020 – September 30, 2020) the FTA funded share of NJ TRANSIT's federal contracts awarded was **$2,020,212.76**. Of that total, Disadvantaged Business Enterprises (DBEs) received **$397,189.12** or **19.66%.**

Federal Fiscal Year 2020 Year through Q4 (October 1, 2019 – September 30, 2020) NJ TRANSIT awarded **$314,607,240.50**** in federally funded contracts. Of that total, DBEs received **$18,408,002.87** or **5.85%.**

**Numbers reflect federal share*
*** Number includes subrecipient awards*

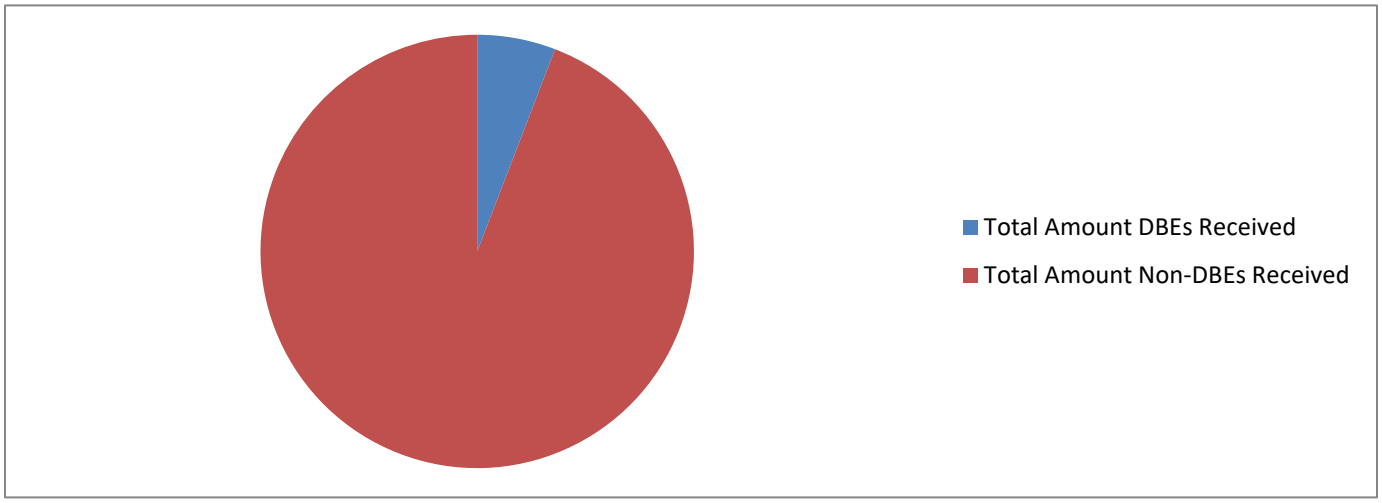
STATE CONTRACTS
STATE FYTD 2021

Category 1 SBEs	**$0.00**	**0.00%**
Category 2 SBEs	**$1,823,690.83**	**9.39%**
Category 3 SBEs	**$482,675.26**	**2.48%**
Category 4 SBEs	**$24,000.00**	**0.12%**
Category 5 SBEs	**$199,211.04**	**1.03%**
Category 6 SBEs	**$3,773,773.00**	**19.42%**
Non-SBEs	$13,124,646.36	67.56%



DBE PARTICIPATION
FEDERAL CONTRACTS
FEDERAL FY Q4 2020

Total Amount DBEs Received	**$18,408,002.87**	**5.85%**
Total Amount Non-DBEs Received	$296,199,237.63	94.15%



EMPLOYEE RECOGNITION

NJ TRANSIT employees bid farewell after outstanding careers

NJ TRANSIT employees who retired recently:

1. Alvino Lane, Electrician -- Long Branch -- 13 years
2. Doretha Bembry-Boswell, Sr. Clerk Typist -- MMC -- 32 years
3. Joseph Burkert, Conductor -- Various -- 25 years
4. John Calzaretta, FRA Foreman -- Wood-Ridge -- 42 years
5. Richard Manly, Machinist -- MMC -- 19 years
6. Debra McCoy, Crew Caller -- MMC -- 34 years
7. James Moore, Technician -- MMC -- 31 years
8. Frank Ruggiero, Supv. Communications & Signals -- Red Bank -- 37 years
9. Rudys Santana, Vehicle Operator -- Hoboken -- 25 years
10. Gordon Smith, Technician -- Hoboken -- 34 years
11. Warren Bronson, Operator -- Market St. -- 18 years
12. Edith Davis, Operator -- Newton Avenue -- 16 years
13. Steven Goss, Cleaner -- Egg Harbor -- 20 years
14. David Jonathas, Operator -- Egg Harbor -- 14 years
15. Loc Tran, Mechanic A -- Newark Bus -- 17 years
16. Bernardo Caro, Operator -- Fairview -- 22 years
17. James Dixon, Operator -- Egg Harbor -- 13 years
18. Joseph Hussey III, Sr. Training Spec. -- Ferry St. -- 24 years
19. Peter Mazza, Sr. Maintenance Instructor -- Ferry St. -- 25 years
20. Juan Nunez, Sr. Maintenance Instructor -- Ferry St. -- 25 years
21. Ronald Noel, Princ. Tech. Specialist -- Maplewood -- 31 years

COVID Travel Survey #2

Conducted June 22 to July 3, 2020

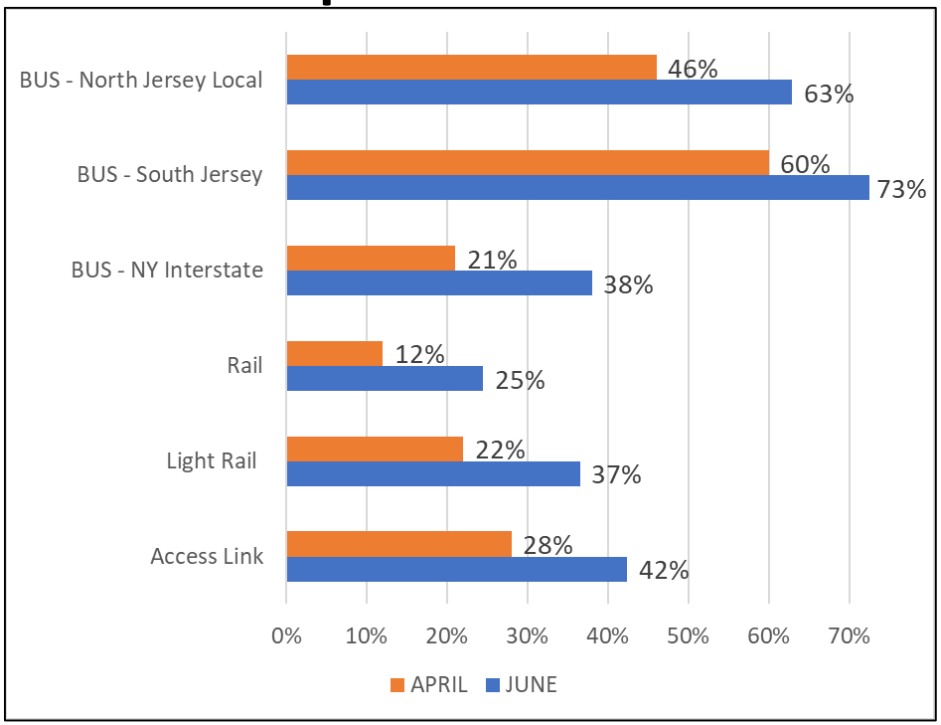
Survey Findings

NJ TRANSIT
Market Research
October 2020

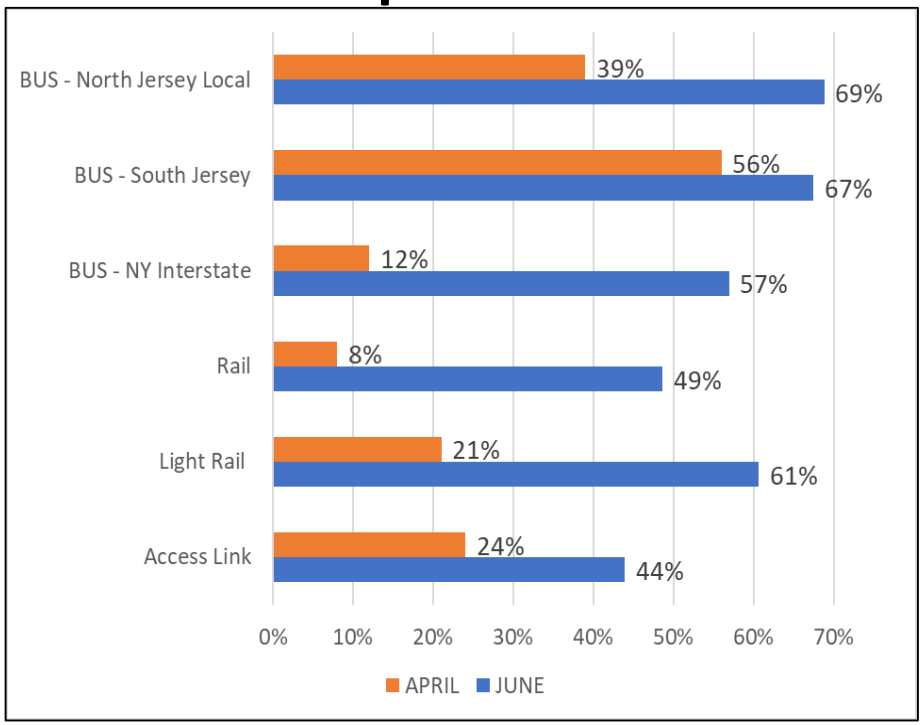
NJTRANSIT
The Way To Go.®

Percent of Customers Traveling at least once per week *During COVID* in April & June 2020

Work Trips



Non-Work Trips



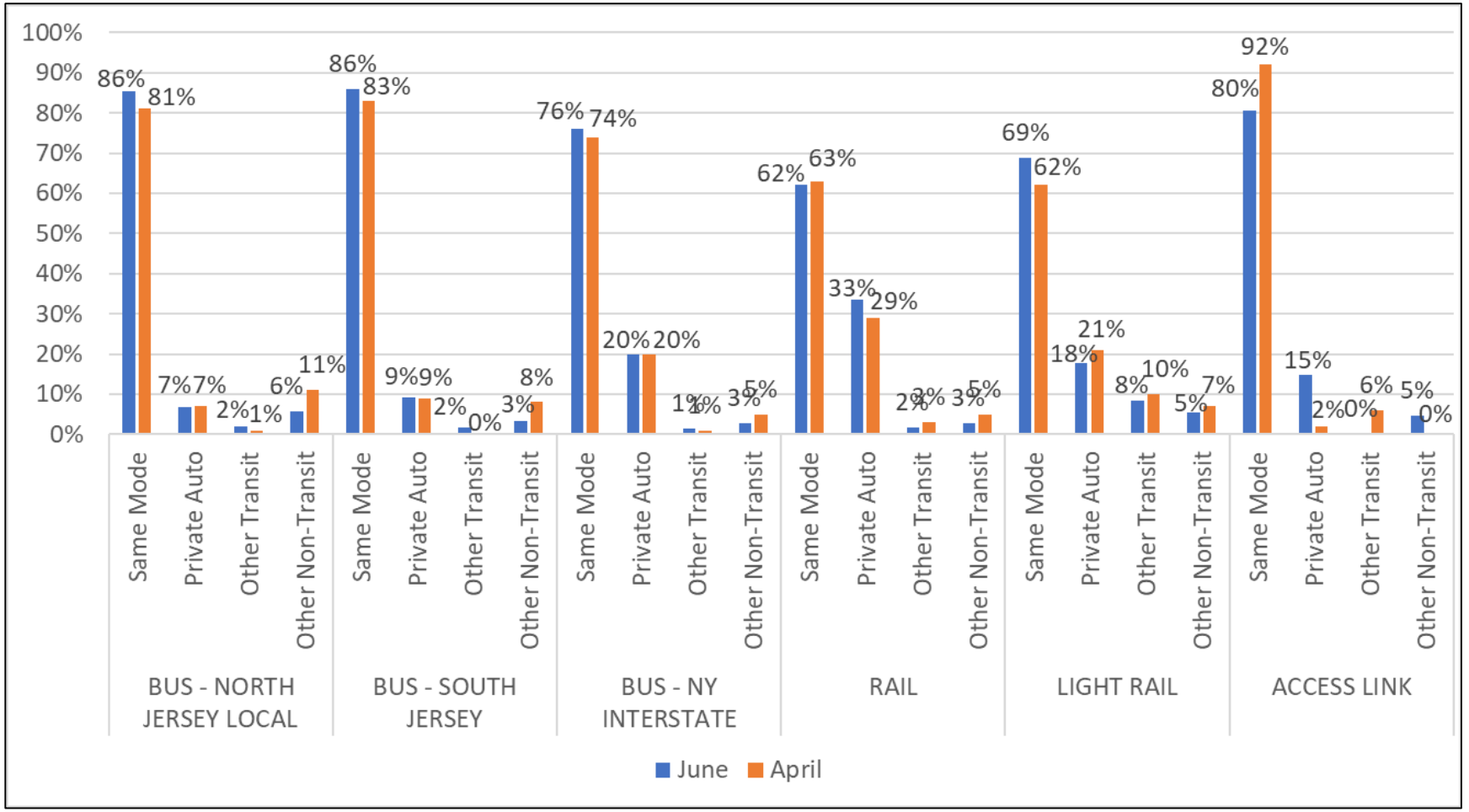
- As the travel restrictions have lessened and businesses are re-opening, the percent of customers traveling has increased in June.
- The largest increases are in Non-Work trips.
- Of the customers that were traveling in June but not in April, about half were not working in April and the other half were working from home.

Note: the modes shown on this slide is the mode customers used before COVID.

NJTRANSIT The Way To Go.

Percent of Customers Still Traveling by Mode

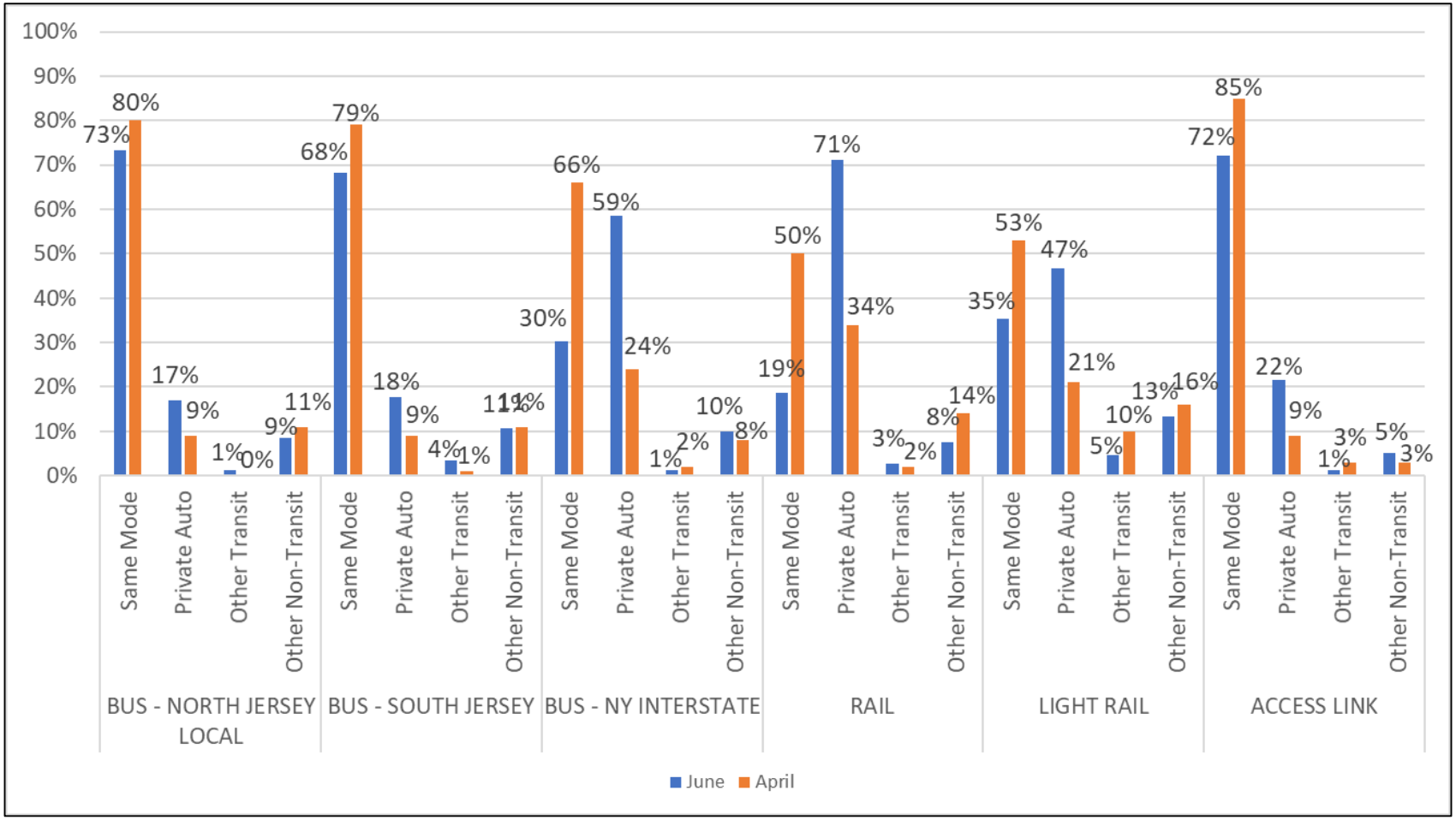
WORK TRIPS



- The percent customers traveling for a Work Trip using the SAME NJ TRANSIT mode as *before COVID* has increased for most modes/markets

Percent of Customers Still Traveling by Mode

Non-Work TRIPS

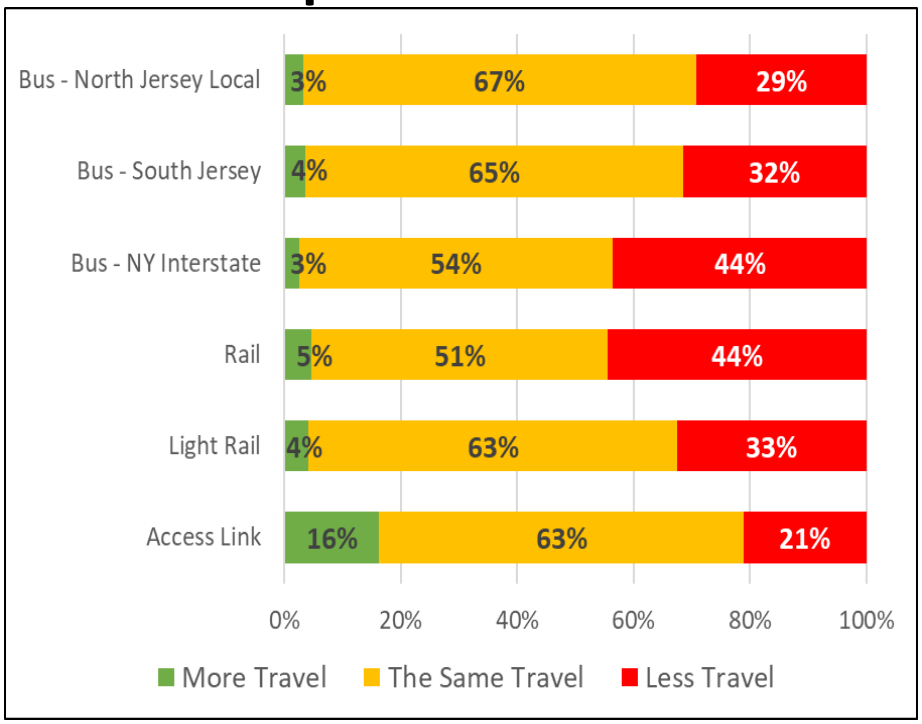


- The percent of customers making Non-Work trips using the SAME NJ TRANSIT mode as *before COVID* has decreased from April to June

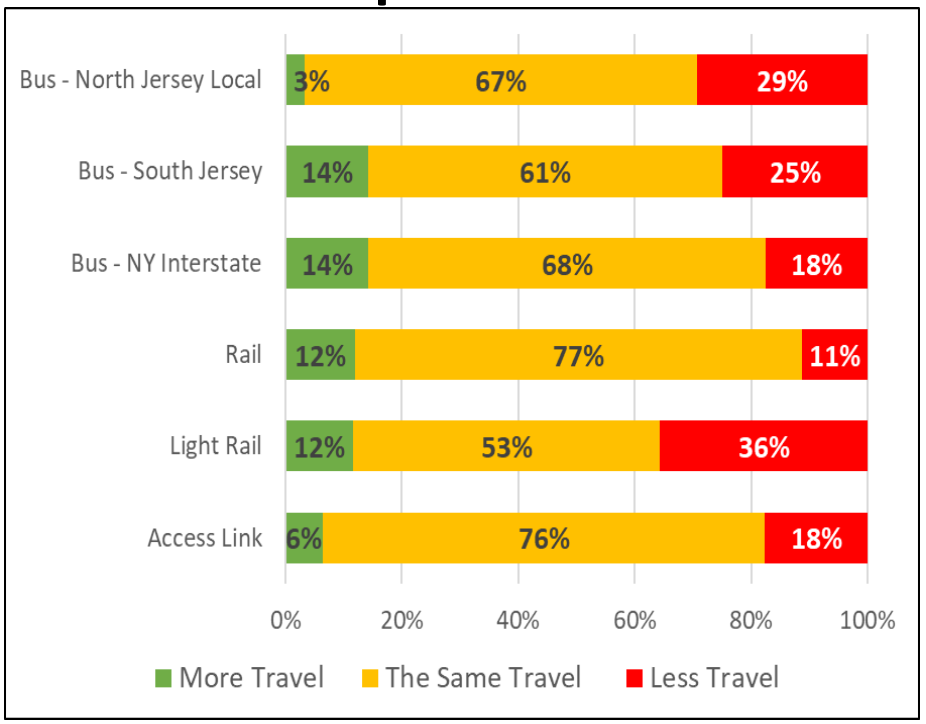
NJTRANSIT The Way To Go.

June Trip Frequency Compared to *Before COVID* Trip Frequency

Work Trips



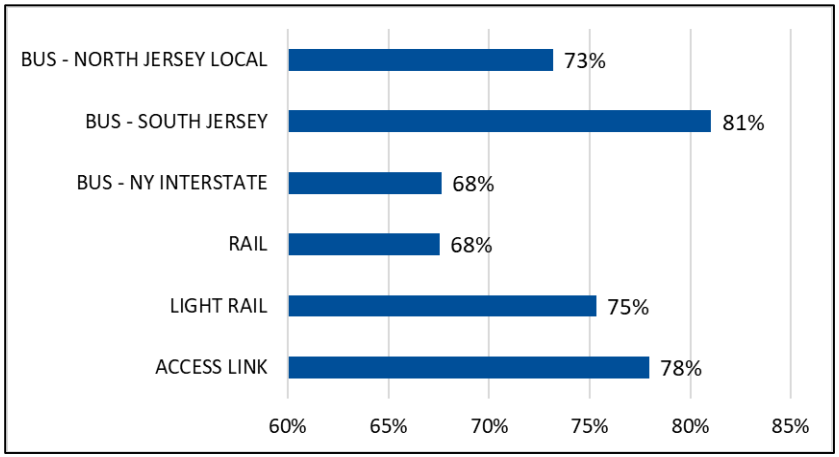
Non-Work Trips



- In June, most of the Work and Non-Work trips were occurring at the same frequency as before COVID
- NY Interstate Bus and Rail have the highest percentage of Work Trips that are occurring less frequently than before COVID

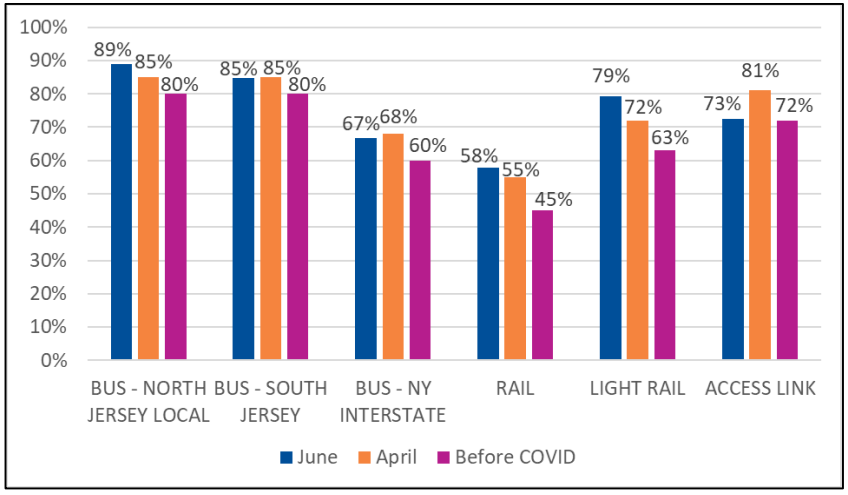
Demographic Comparisons

Percent of Customers Traveling in June that Self-Identified as an Essential Workers

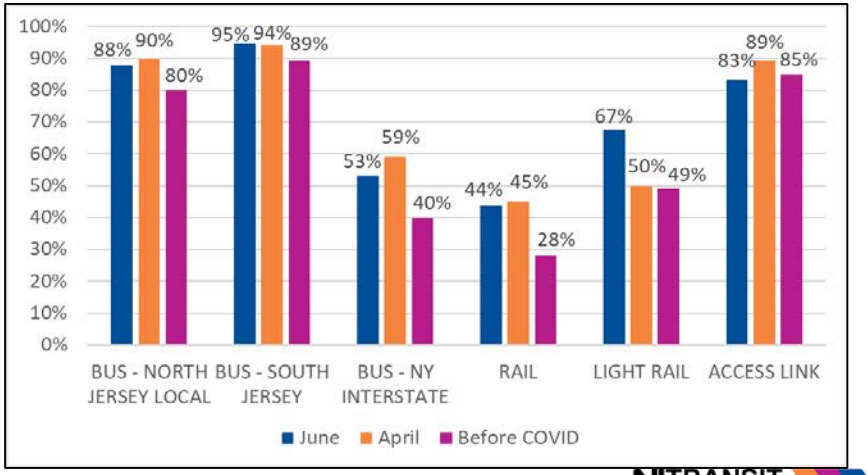


- Essential Workers (Health care, Emergency Management, Food Service, Delivery Drivers, Utilities, Transportation, etc.) remain a major portion of the customers traveling
- Over 85 percent of the North and South Jersey Local Bus customers traveling in June own 1 or no autos and about the same percentage earn less than $75,000 per year.

Percent of Customers Making a Work Trip that Own 1 or 0 Autos

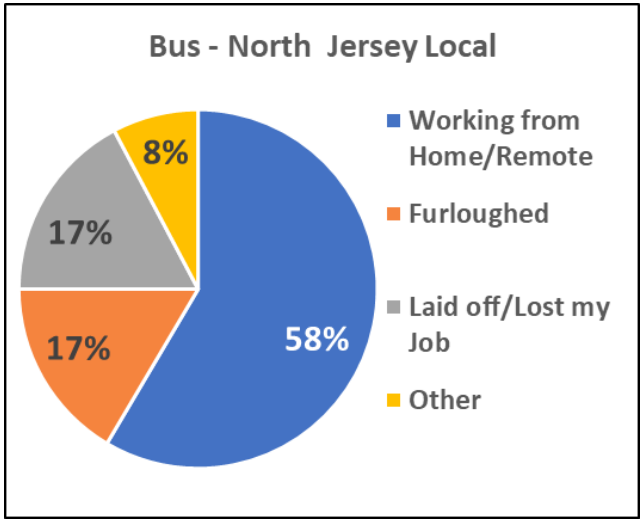


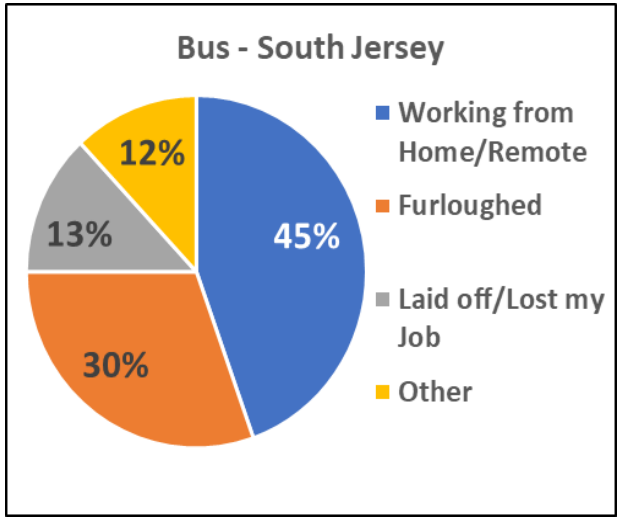
Percent of Customers Making a Work Trip with a Household Income Less than $75,000

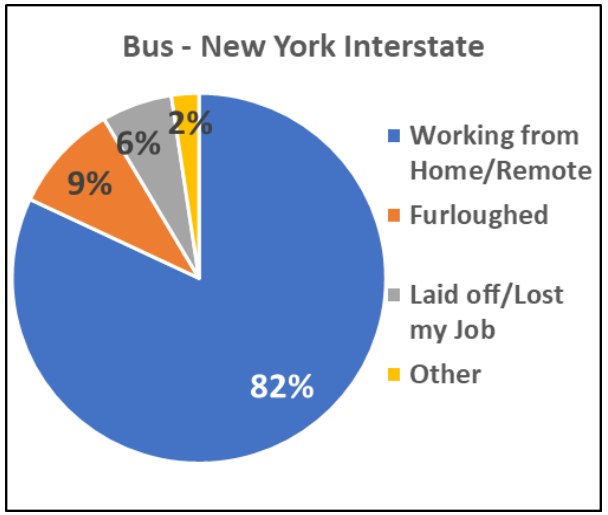


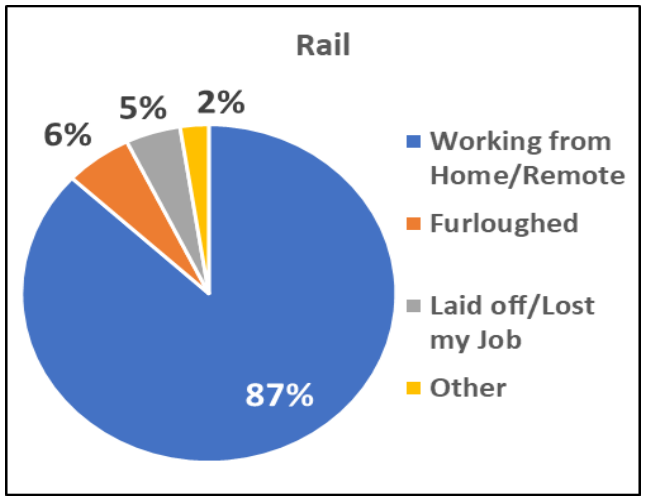
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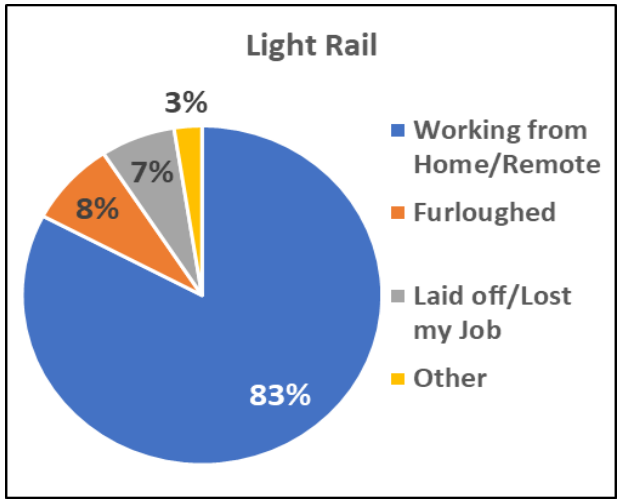
WORK TRIPS – Why not Traveling in June

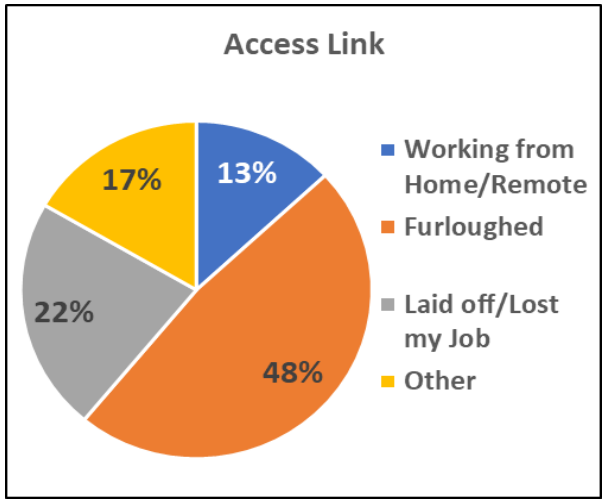










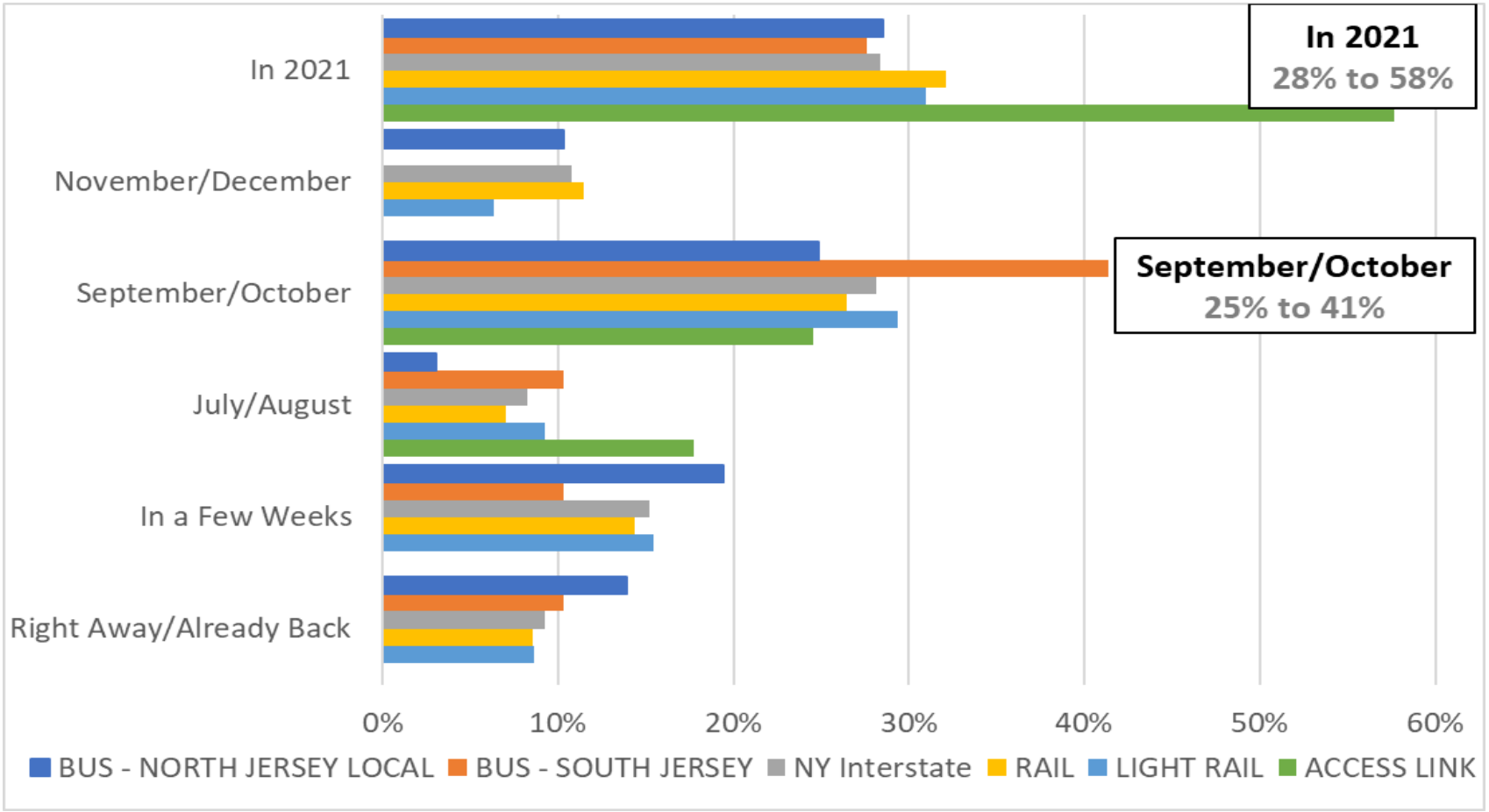


- Rail, NY Interstate Bus and Light Rail have the highest percentage of WFH
- North & South Jersey Bus have higher furlough and laid off percentages

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Return to Work Preference

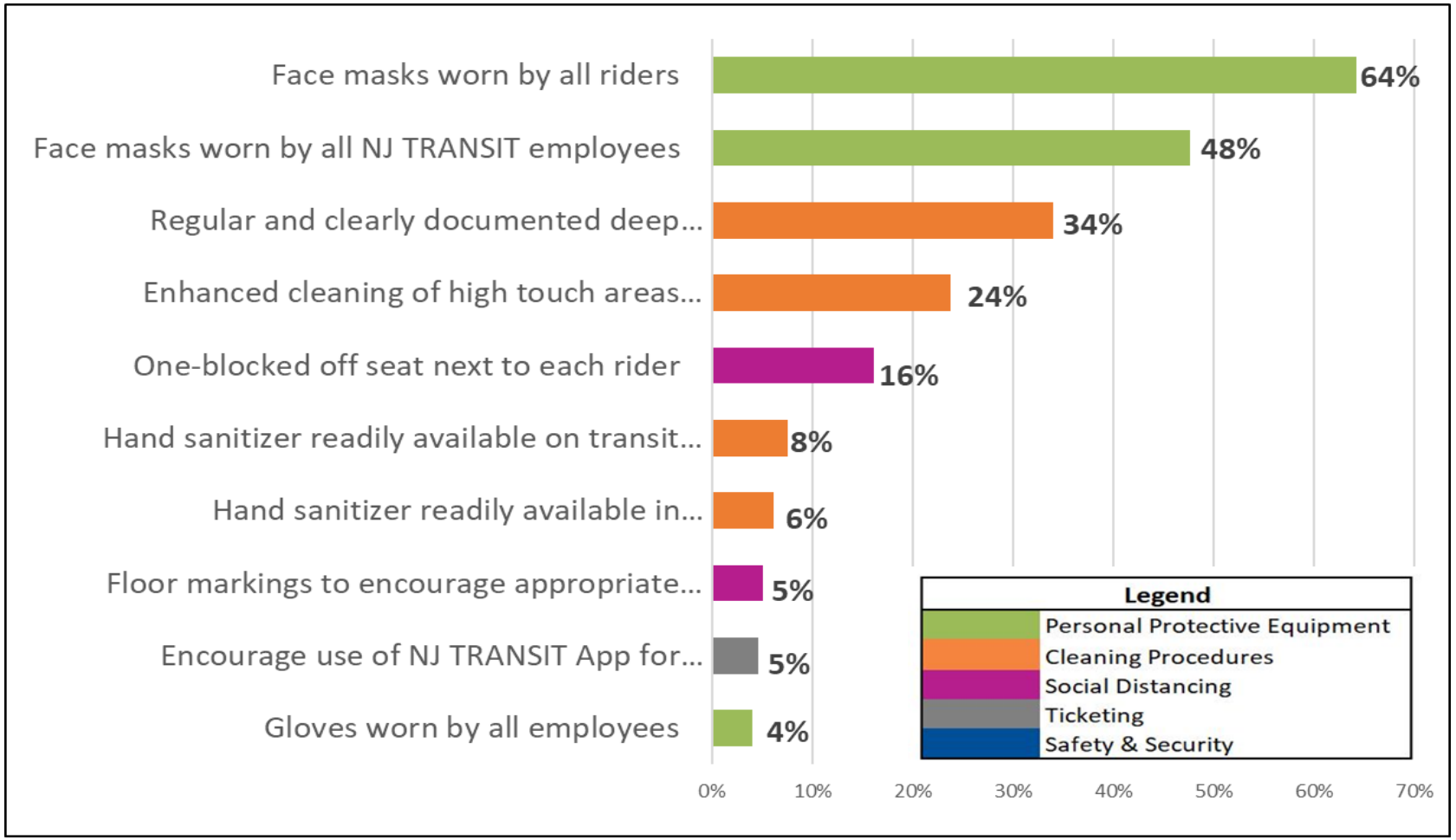
Once government guidance allows and businesses start re-opening, if it was up to you, would you prefer to return to your office/worksite . . . ?



Of customers working from home or remote in JUNE, most prefer to return to work either in September/October or in 2021

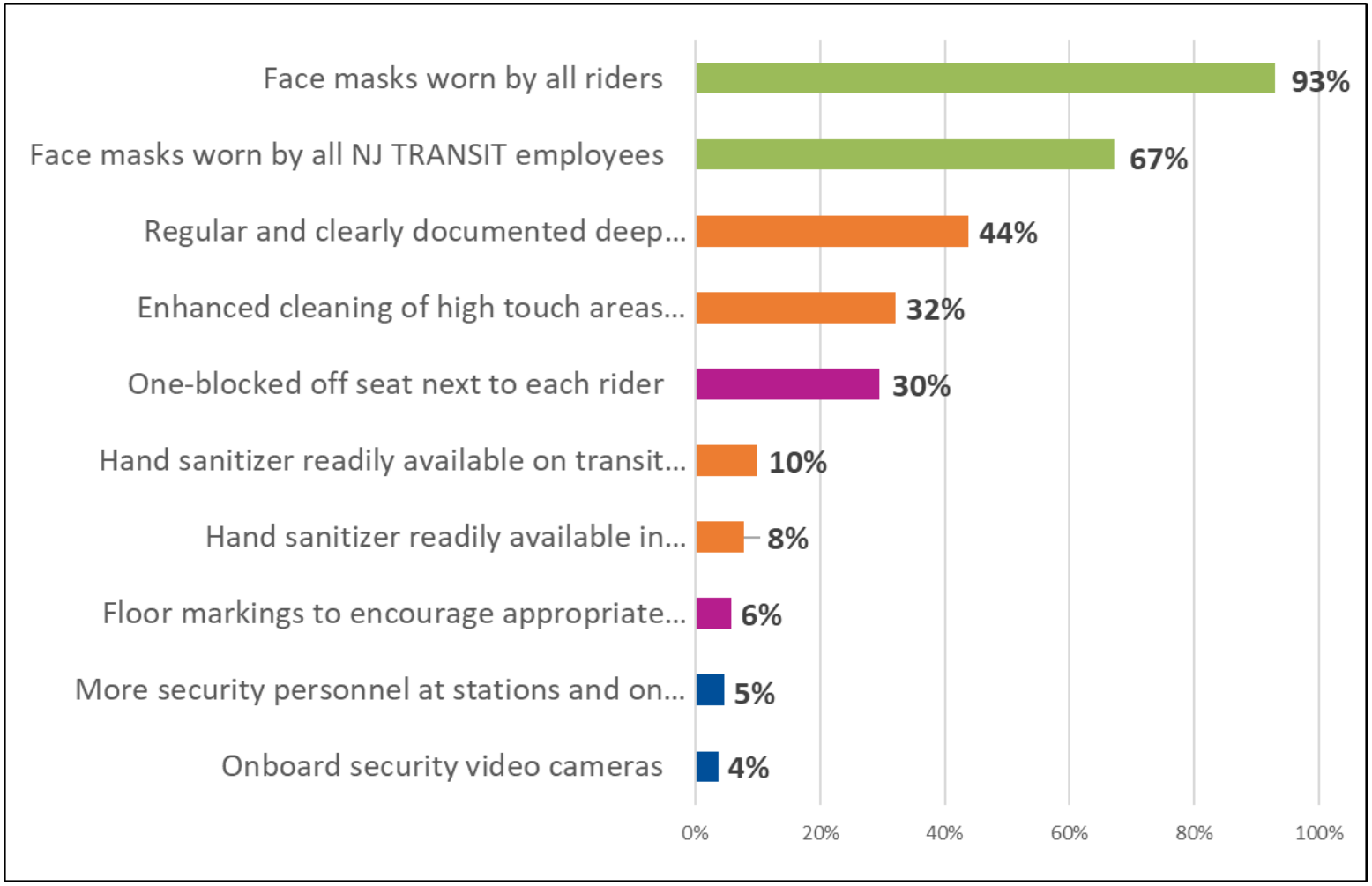
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Top 10 Measures
Most Important to Customers TRAVELING in JUNE



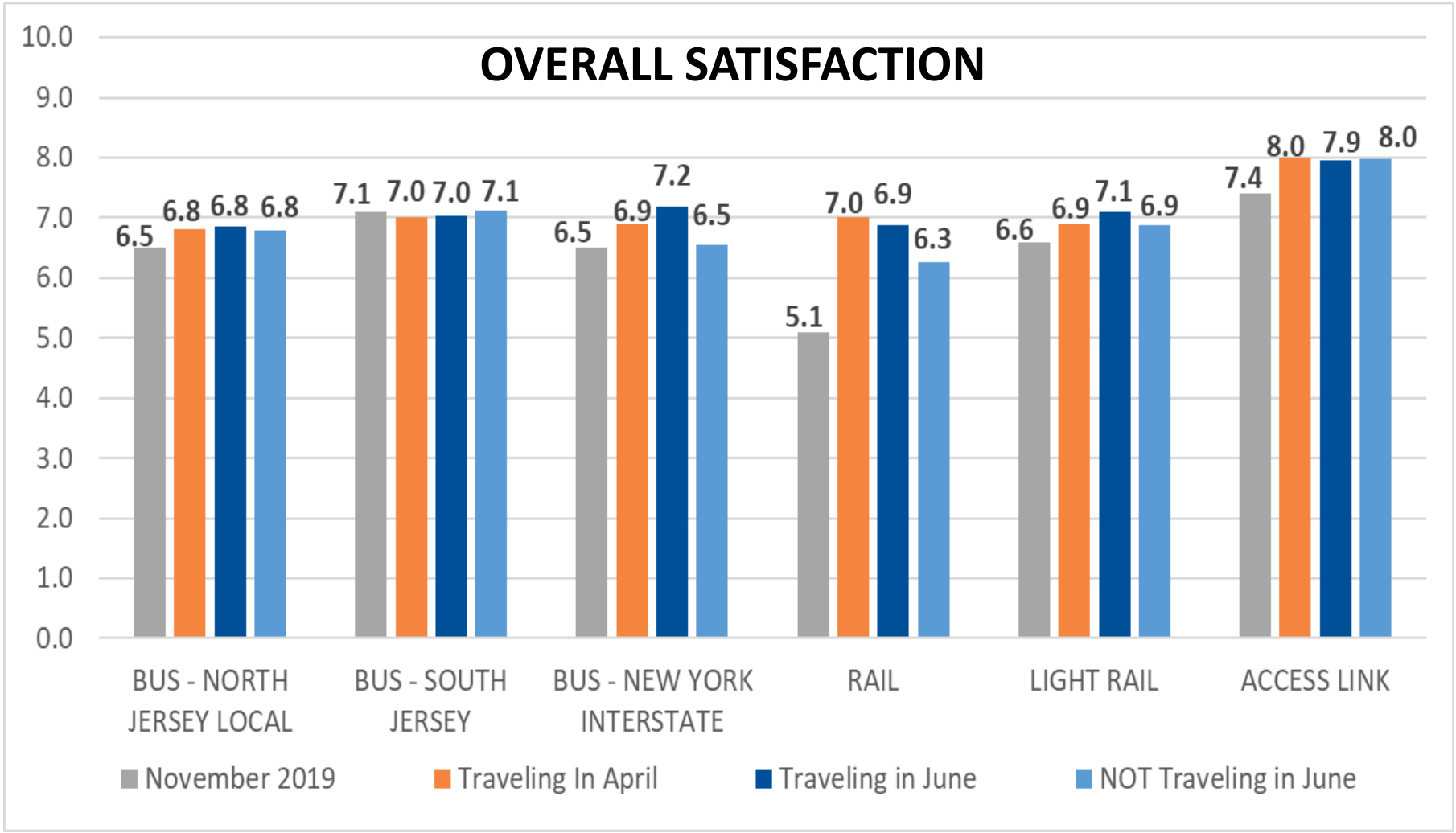
Cleaning protocols are 4 of the top 10 and PPE are 3 of the top 10 measures for customers currently traveling

Top 10 Measures
Most Important to Customers NOT TRAVELING in JUNE



The top 8 measures are the same for BOTH customers that traveled in June and those that are not traveling

Customer Satisfaction Ratings



Overall Satisfaction with NJ TRANSIT with both travelers and non-travelers is higher or as high as it was Before COVID (November 2019)

COVID Travel Survey #2 – Next Steps

- Share results with senior management, operating groups, pandemic planning groups, Board Customer Service Committee
- Next COVID Travel Survey, likely in October after schools settle into a routine
  - Begin developing questions
  - Include a limited number of Customer Satisfaction questions in lieu of a full survey in the fall

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NJ TRANSITGRID

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RELIABLY POWERING THE FUTURE



Briefing to the
NJ TRANSIT Board of Directors

October 21, 2020

NJTRANSIT
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TODAY'S SPEAKERS



Lenora Isaac
Senior Director
Resilience Program



Kiran Patel
Chief
Project Management



John Geitner
Senior Director
Environment, Energy & Sustainability



Megan Strickland
Chief
Capital Compliance, Budget & Administration

PROJECT OVERVIEW

NJ **TRANSITGRID**

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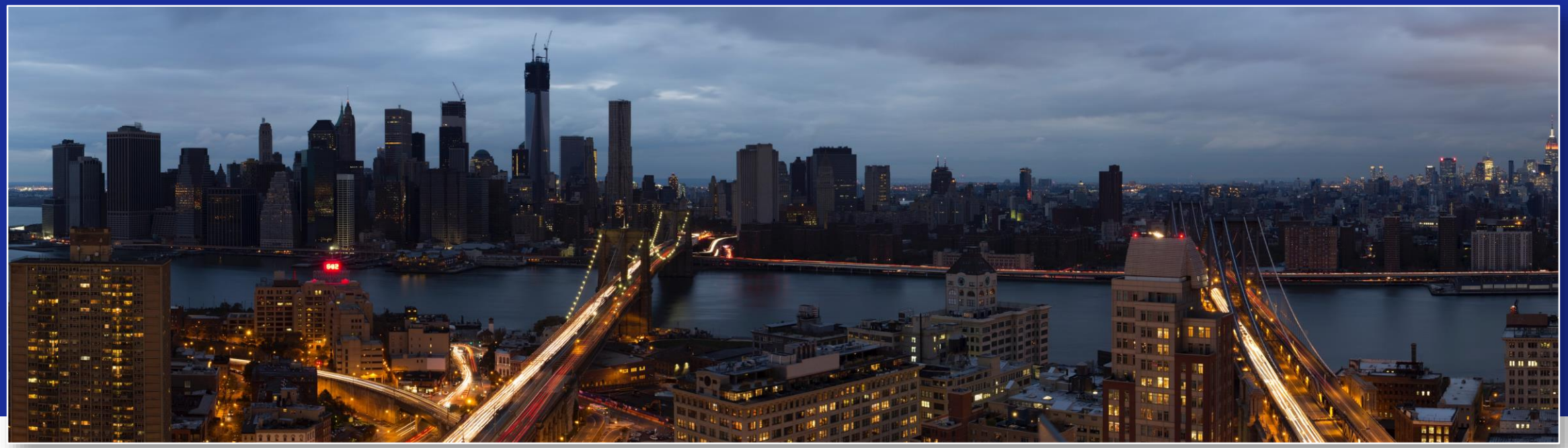
Initiated by the Christie Administration after Superstorm Sandy, NJ TRANSITGRID was originally envisioned as a natural gas turbine powered facility, prior to advancements in renewable technologies

The Murphy Administration is committed to a process that re-envisions the design of this project to prioritize green technology and will deliver power that aligns with Governor Murphy's clean energy priorities

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EVENTS AFFECTING NJ TRANSIT & OUR REGION

	YEAR:	EVENT:	SCOPE:
	2003	**Northeast Blackout** Single Power Line Failure in Ohio	50M people lost power from Ohio to New York and Canada. **Largest Blackout in North America**
	2011	**Hurricane Irene** Category 1 Hurricane Tropical Storm	North Carolina to New York. **Significant Power Failures and Storm Surge**
	2012	**Superstorm Sandy** Category 2 Hurricane Tropical Storm	North Carolina to Vermont. **Catastrophic Power Failures and Storm Surge**
	2019	**Summer Outages** July 13, 2019 – Manhattan Blackout July 22-26, 2019 – NJ Storm Outage	Closed stations; cancelled, limited & delayed service; **Hundreds of thousands without power and mobility**
	2020	**Tropical Storm Isaias** Category 1 Hurricane Tropical Storm	Caribbean to East Coast of United States. **Catastrophic Power Failures and Storm Surge**



PREPARING FOR THE FUTURE

- Without decisive action, more outages are expected in the future
- The Rutgers University Center for Energy, Economic, and Environmental Policy (Rutgers CEEP) concluded that “[t]here are real and significant threats to New Jersey and the nation’s power systems including but not limited to severe weather,” and predicted “1.2 hurricanes or tropical storms per year…”

IMPACT OF AN EXTENDED POWER OUTAGE

>53 MILLION

Commuter Rail Trips In and Out of New York City Each Year

Any loss of power can severely constrain the regional economy



A Regional Power Outage Would Impact

200,000

NJ TRANSIT and Amtrak Customers

Costing **$42 million** in lost wages each day

RELIABLE TRANSIT NEEDS POWER

Energy Resilience is Key to Transportation

- After floodwater subsides, electric power is needed to resume service

Energy Speeds Recovery

- Electrical outages serve only to complicate the path to recovery, forcing reliance on emergency generators to energize key equipment, pump stations, and facilities

Diesel Generators are NOT the Solution

- Diesel fuel supply risks following major events
- Diesel generators provide temporary backup power
- Diesel generators raise air quality and emissions concerns



In 2014, the Federal Transit Administration

ALLOCATED $410 MILLION

Out of the estimated **$577 Million** to build the NJ TRANSITGRID Project

- Inspired by President Obama's *Hurricane Sandy Rebuilding Strategy*
- Originally developed in conjunction with Sandia National Laboratories and the U.S. Department of Energy
- NJ TRANSITGRID is a microgrid providing highly reliable power to a core segment of NJ TRANSIT and Amtrak's critical service territory during extreme weather or outages in the commercial power grid

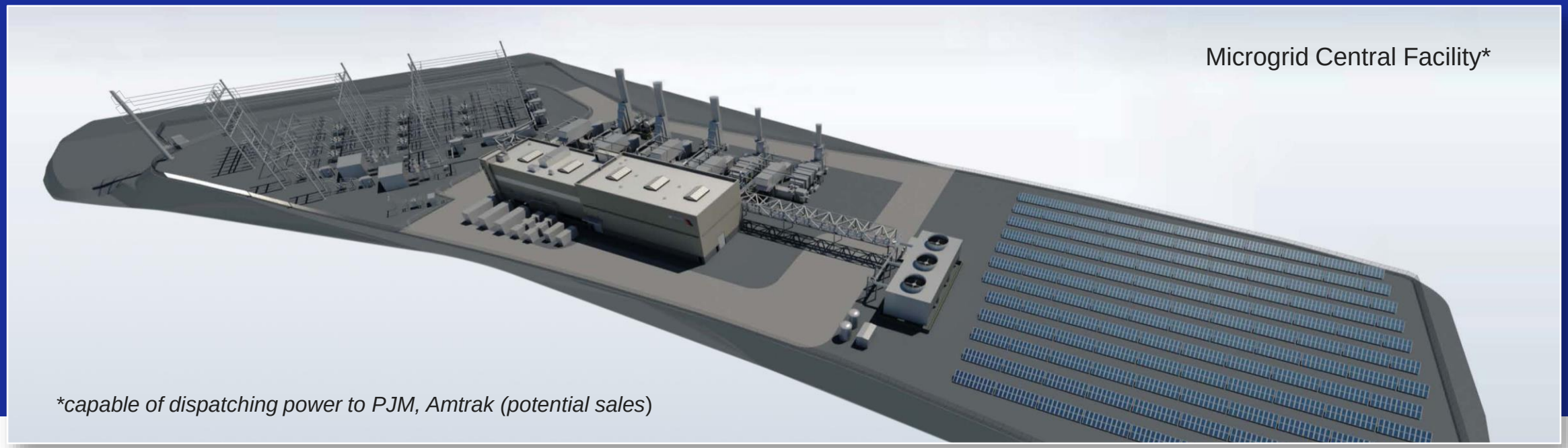




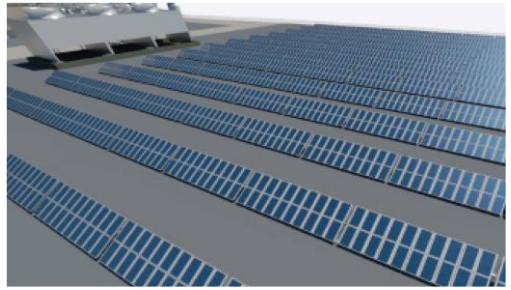
HIGHLY RELIABLE POWER

The facilities will operate 24/7 and be sized to handle limited operations during grid outages on:

- The Northeast Corridor between New York's Penn Station and NJ TRANSIT's Jersey Avenue Station in New Brunswick
- The Morris & Essex line between Hoboken Terminal and Maplewood Station
- A portion of the Main Line, for signal systems
- The Hudson-Bergen Light Rail (HBLR) Transit System



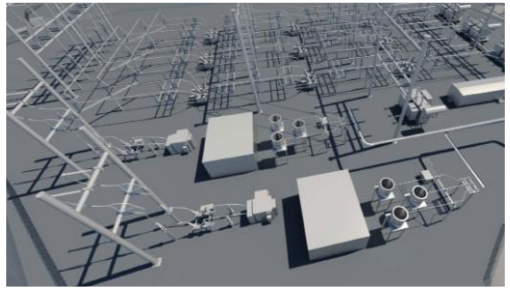
FACILITIES IN THE FTA-APPROVED RECORD OF DECISION



Solar & Energy Storage



Combined-Cycle Technology



Hardened Substation



Distribution & Critical Infrastructure

PROJECT BENEFITS

Reliability

- Prepares NJ TRANSIT to better withstand, and recover from, extreme **weather and other events**
- Ensures NJ TRANSIT is not subject to broader **cyber security threats** that could otherwise disrupt transit service
- Eliminates single point of failure at existing interconnection points to reduce cascading impacts of service issues and mitigates **commercial grid vulnerability**
- As a critical infrastructure operator that customers depend on, NJ TRANSIT must provide reliable service; energy is critical to this mission



PROJECT BENEFITS

Ensures communities have access to transit when they need it most

Will provide a reliable transportation resource serving our communities, allowing those who rely on mass transit as their only mobility option to travel locally to work, school, and other venues that would otherwise be inaccessible during a commercial grid outage



Creates Jobs

Will create employment opportunities in facility operations, maintenance, and ancillary services

Will create operating revenue via power sales

One-time economic impact on the New Jersey economy of **$749 million**

Creation of **4,200 jobs**; **$291 million in earnings**

Ongoing economic impact to the New Jersey economy of **more than $20 million** annually

SOURCE
December 10, 2019, Rutgers University – Center for Advanced Infrastructure and Transportation (CAIT)
"*Economic and Fiscal Impacts of NJ TRANSITGRID's Construction and Operations*"

MAKING THE PROJECT BETTER

Development

- **Initiated by the Christie Administration after Superstorm Sandy, NJ TRANSITGRID will deliver power that aligns with Governor Murphy's clean energy priorities**
- Since the project was conceived by Sandia National Laboratories in 2014, there have been advancements in technology that the market is best positioned to identify that allow NJ TRANSITGRID to deliver even cleaner power than contemplated



AN EYE TOWARD THE FUTURE: CLEAN ENERGY GOALS

NJ TRANSITGRID

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NJT2030: A 10-YEAR STRATEGIC PLAN

KEY GOAL: "PROMOTE A MORE SUSTAINABLE FUTURE FOR OUR PLANET"

NJ TRANSIT is already advancing toward meeting this goal:



- Investing in a cleaner rail and bus fleet
- Producing a first-ever Sustainability Plan
- Expanding and optimizing solar energy assets
- Implementing energy efficiency and conservation measures
- **Investing in cleaner power**

NJ TRANSITGRID: RELIABILITY *AND* SUSTAINABILITY

2014

NJ TRANSIT proposes to be the first transit agency in the nation to invest in its own reliable electric power supply through NJ TRANSITGRID

2018-2019

NJ TRANSIT refines project design to now include solar, flywheel storage, efficient turbine engines, and control systems to provide the critical infrastructure necessary for NJ TRANSITGRID to allow for further use of **green** technology

Today

NJ TRANSIT announces ambitious, multi-point plan to reimagine the NJ TRANSITGRID project to increase the project's renewables and zero-emissions profile

Tomorrow and Beyond

Challenge the global design community to increase planned investment in solar, storage, and other **green** technologies to power our system with reliable and sustainable power consistent with the Energy Master Plan and the governor's clean energy vision

NJ TRANSITGRID: NEXT STEPS AND PROPOSED PATH FORWARD

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PROPOSED NEXT STEPS

Consistent with Governor Murphy's Energy Master Plan and Clean Energy Goals, NJ TRANSIT intends to solicit an updated review of renewable or other zero emissions energy technologies that may supplement or replace the current power generation design for the proposed Microgrid Central Facility

To accomplish this goal, NJ TRANSIT proposes taking the following steps:



Hire a renewables energy consultant

In progress



Host a Microgrid Market Outreach event in

October 2020



Release a Request for Qualifications (RFQ) on

November 25, 2020



Release a Request for Proposal (RFP) that encourages new, thoughtful renewables integration

December 2021



Select a project option and award contract to developer

December 2022

And to facilitate this plan, today we are seeking authorization to develop a stipend program

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Hire a renewables energy consultant

In progress

- Hire a consultant to review the renewables elements of the NJ TRANSITGRID project
- Will assist in maximizing renewables scope of project
- Will conduct a review of recent utility scale renewables and storage projects of similar capabilities
- Support NJ TRANSIT in evaluating renewables team experience in response to the Request for Qualifications
- Assist NJ TRANSIT in drafting the Request for Proposals where renewables energy generation alternative designs will be required to be submitted by potential developers, to the extent technically feasible



Host a Microgrid Market Outreach event

October 2020

- Hosting a Microgrid Market Outreach event will encourage developers to rethink plans and add substantial renewables team support, consistent with the RFQ
- The event will review the project's renewables energy strategy, allowing time for potential bidders to form a renewables team
- Disadvantaged business enterprise firms will be invited to this event to learn about opportunities to partner with developers
- NJ TRANSIT is planning separate outreach opportunities to solicit input and update the public



Release a Request for Qualifications (RFQ)

November 25, 2020

NJ TRANSIT plans to require:

- Experience in “at least 140 megawatts in renewables deployment”
- Experience with “long-duration energy storage projects greater than 5 megawatts,” including design, construction, and commissioning of alternative energy technologies/ generation of power, *e.g.*, solar, storage

NJ TRANSIT is utilizing a two-step competitive process to procure design / build / finance / operation / maintenance services

Step One: Prequalification of up to 4 respondents through the RFQ process ensures respondents have the necessary qualifications and experience. Qualified respondents will be invited to proceed to the next step



Release a Request for Proposal (RFP) that encourages new, thoughtful renewables integration

December 2021

- Request for Proposals (RFPs) is **Step Two** in the two-step competitive process to procure design / build / finance / operation / maintenance services
- **Qualified proposers will be invited to submit comprehensive technical proposals** outlining their plans for a long-term contractual agreement
- The RFP is anticipated to require bidders to submit alternative clean energy options, including a 100% renewables option, to the extent technically feasible



Select a project option and award contract to developer

December 2022

- Begin construction on a resilient and sustainable microgrid that will support 4,200 good-paying jobs and propel New Jersey's energy economy
- Creating a reliable transit system for all
- Ensuring all federal dollars secured are expended



Proposed Board Action:

Demonstrate commitment to process and encourage innovation through design stipends

A stipend program should result in innovative ideas that challenge the marketplace

- A stipend value of $1 million will be assigned to all eligible submissions
- The total anticipated value of the stipend program will not exceed $3 million

The stipend program will:

- Solicit the best possible technical design and construction solutions from industry experts
- Increase market competition and retain participant interest
- Demonstrate NJ TRANSIT's commitment to building the project
- Purchase intellectual property included in the proposal (including designs, architectural drawings, and other concepts)

FOR MORE INFORMATION VISIT WWW.NJTRANSITRESILIENCEPROGRAM.COM

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ACTION ITEMS

NJ TRANSIT
FY21 Operating Budget

OCTOBER 2020

Agenda

- Recent State Funding and Support
- FY21 April Transmittal vs Final FY21 Budget
- FY21 Operating Budget - Sources and Uses
- FY21 Fare Revenue Scenarios
- FY21 Mandatory Costs
- FY21 Additional Discretionary Strategic Investments
- FY21 Summary by Department
- Current Variables and Uncertainties

Recent State Funding and Support

($ in millions)	FY 2019 Actual	FY 2020 Prelim	FY 2021 Budget
Farebox Revenue	$ 973.8	$ 738.9	$ 374.6
Other Commercial Revenue	140.5	111.9	82.0
State Operating Subsidy	307.5	457.5	386.1
Turnpike Funding	154.0	129.0	129.0
Clean Energy Fund	82.1	82.1	82.1
Capital Transfers	493.5	460.0	460.8
Other Reimbursements	154.1	186.1	167.3
CARES Act (5307 Operating Assistance)	-	360.8	911.8
CARES Act (5311 Pass-Through)	-	-	13.3
Coronavirus Relief Fund (CRF)	-	-	30.0
TOTAL RESOURCES	**$ 2,305.5**	**$ 2,526.3**	**$ 2,637.0**
Labor	$ 748.9	$ 791.9	$ 855.8
Fringe Benefits	616.3	627.1	682.2
Services	165.4	174.0	194.8
Fuel & Power	97.0	103.9	116.2
Utilities	44.5	46.4	47.0
Purchased Transportation	246.3	240.8	281.8
Materials & Supplies	197.3	180.1	273.0
Tolls, Trackage & Fees	85.1	86.9	91.1
Claims & Insurance	57.6	69.9	42.4
All Other Expenses	46.7	38.0	52.7
TOTAL EXPENSES	**$ 2,305.1**	**$ 2,359.0**	**$ 2,637.0**
Farebox Recovery Ratio	*42%*	*31%*	*14%*

State Assistance

- Three-year cumulative State Operating Subsidy under the Murphy Administration is $836M more or 73% higher than FY16-FY18
- $386M General Fund subsidy
- $129M from the NJ Turnpike Authority
  - FY21 is the final year of the current contractual funding agreement
- $30M from State's Coronavirus Relief Fund

Reducing Longstanding Capital Transfers

- Reduced TTF capital transfer by $15M in FY19 due to favorable operating performance
- $50M reduction in the budgeted FY20 capital transfer from the previous year

Key Accomplishments

- Reduced vacancy rate from 3.7% in Jan 2018 to 2.5% in June 2020
- 373 locomotive engineers on active roster; up from a low of 331
- Hired over 800 bus operators
- Saved more than $28m in targeted health benefit reforms

FY21 April Transmittal vs Final FY21 Budget

($ in millions)	FY 2021		
	April Transmittal	FY21 Budget	Difference
Farebox Revenue	$ 993.7	$ 374.6	$ (619.1)
Other Commercial Revenue	119.5	82.0	(37.5)
State Operating Subsidy	589.5	386.1	(203.4)
Turnpike Funding	129.0	129.0	-
Clean Energy Fund	82.1	82.1	-
Capital Transfers	460.8	460.8	-
Other Reimbursements	158.3	167.3	9.0
CARES Act (5307 Operating Assistance)	-	911.8	911.8
CARES Act (5311 Pass-Through)	-	13.3	13.3
Coronavirus Relief Fund (CRF)	-	30.0	30.0
TOTAL RESOURCES	**$ 2,532.9**	**$ 2,637.0**	**$ 104.1**
Labor	$ 855.3	$ 855.8	$ 0.5
Fringe Benefits	699.8	682.2	(17.6)
Services	178.7	194.8	16.1
Fuel & Power	115.9	116.2	0.3
Utilities	46.7	47.0	0.3
Purchased Transportation	263.0	281.8	18.8
Materials & Supplies	186.8	273.0	86.2
Tolls, Trackage & Fees	93.9	91.1	(2.8)
Claims & Insurance	38.4	42.4	4.0
All Other Expenses	54.5	52.7	(1.8)
TOTAL EXPENSES	**$ 2,532.9**	**$ 2,637.0**	**$ 104.1**
Farebox Recovery Ratio	*39%*	*14%*	*-25%*

Significant fare & other revenue losses

- Assumes 62% loss in passenger revenue and 31% loss in other commercial revenue
- Gradual ridership/revenue improvements throughout the fiscal year with no presumed second wave
- Developed in concert with outside experts and NJT's Planning department

Federal stimulus funding - CARES Act

- $361M utilized in FY20 (5307)
- Projected to utilize ~90% of the remaining funds in FY21
- $30M from the State's CRF allocation

Reduction in the State Operating Subsidy

- No State support in Q1 of FY21
- Elimination of the proposed $132M increase
- $386.1m is ~15% below FY20 amount
  - $203.4m lower than anticipated in April

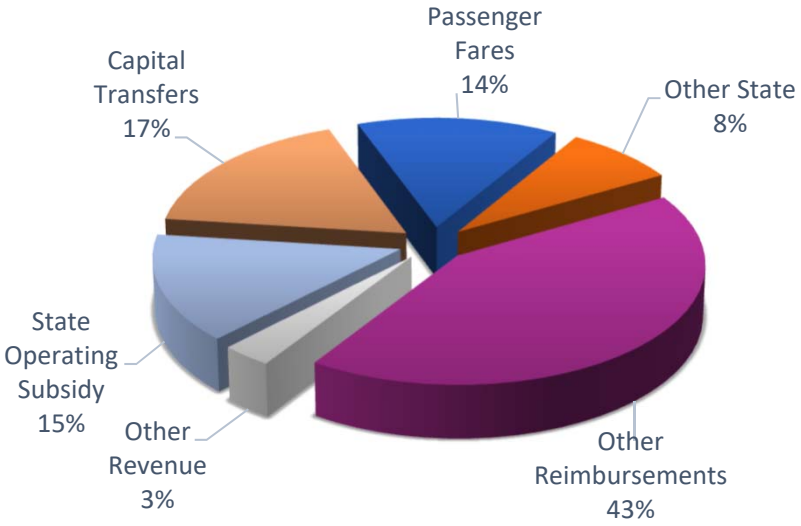
Funds potential COVID mitigations

Defers nearly all strategic plan investments to January 2021

- Exceptions include new LETP & ACTP classes

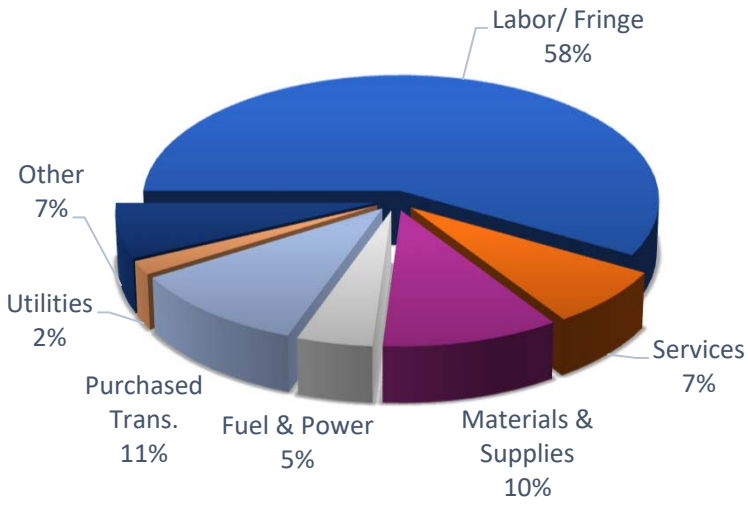
FY21 Operating Budget – Sources and Uses

Sources



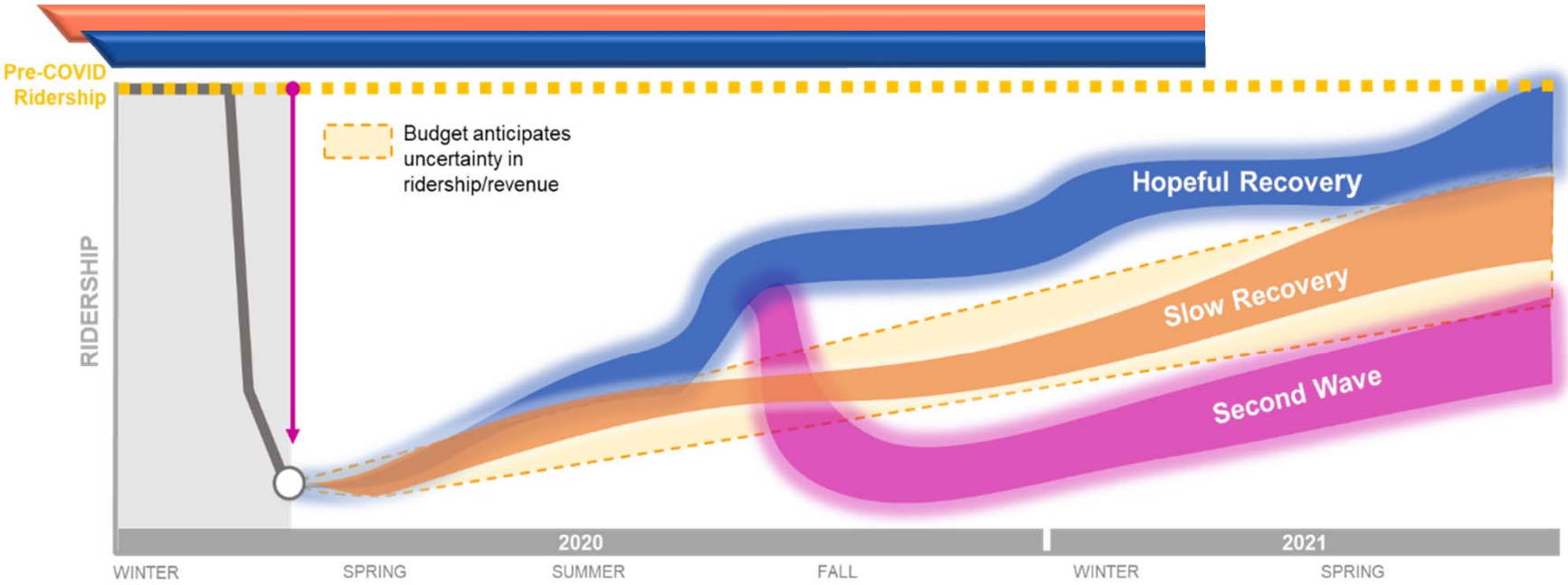
By Revenue Source ($ in millions)	
Passenger Fares	$374.6
Other Revenue	82.0
State Operating Subsidy	386.1
Other State	211.1
Other Reimbursements	1,122.4
Capital Transfers	460.8
Total	**$2,637.0**

Uses



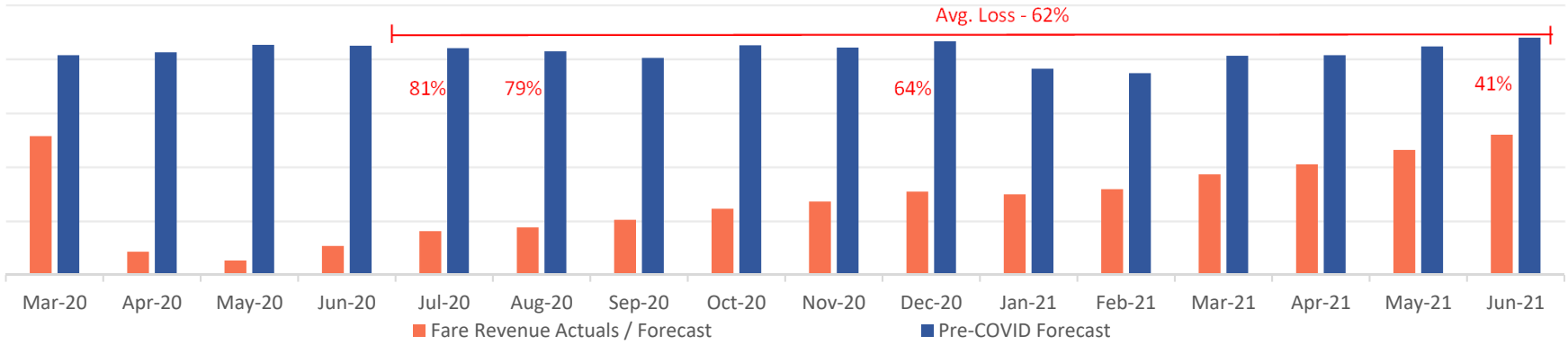
By Expense Category ($ in millions)	
Labor & Fringe	$1,538.0
Purchased Transportation	281.8
Materials & Supplies	273.0
Services	194.8
Fuel & Power	116.2
Utilities	47.0
All Other Expenses	186.2
Total	**$2,637.0**

FY21 Fare Revenue Scenarios



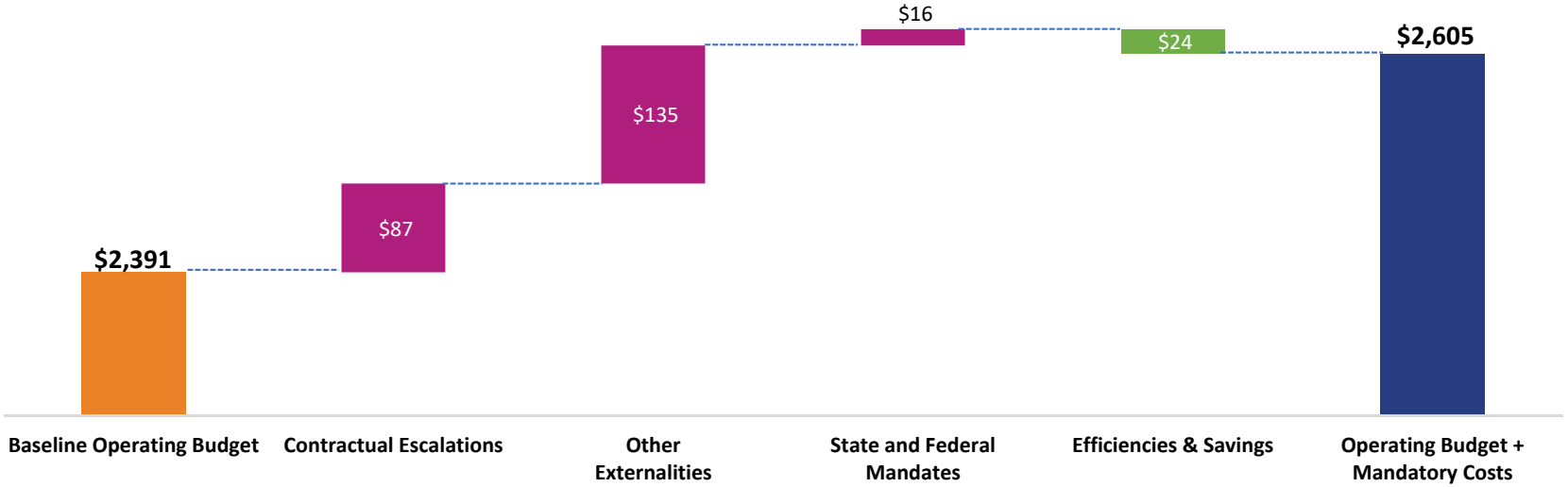
Source: NJ TRANSIT recovery task force, in conjunction with AECOM and VHB

Every 1% in ridership improvement translates to approximately $830K in additional fare revenue per month



Fare Revenue is currently consistent with the slow recovery scenario

FY21 Mandatory Costs



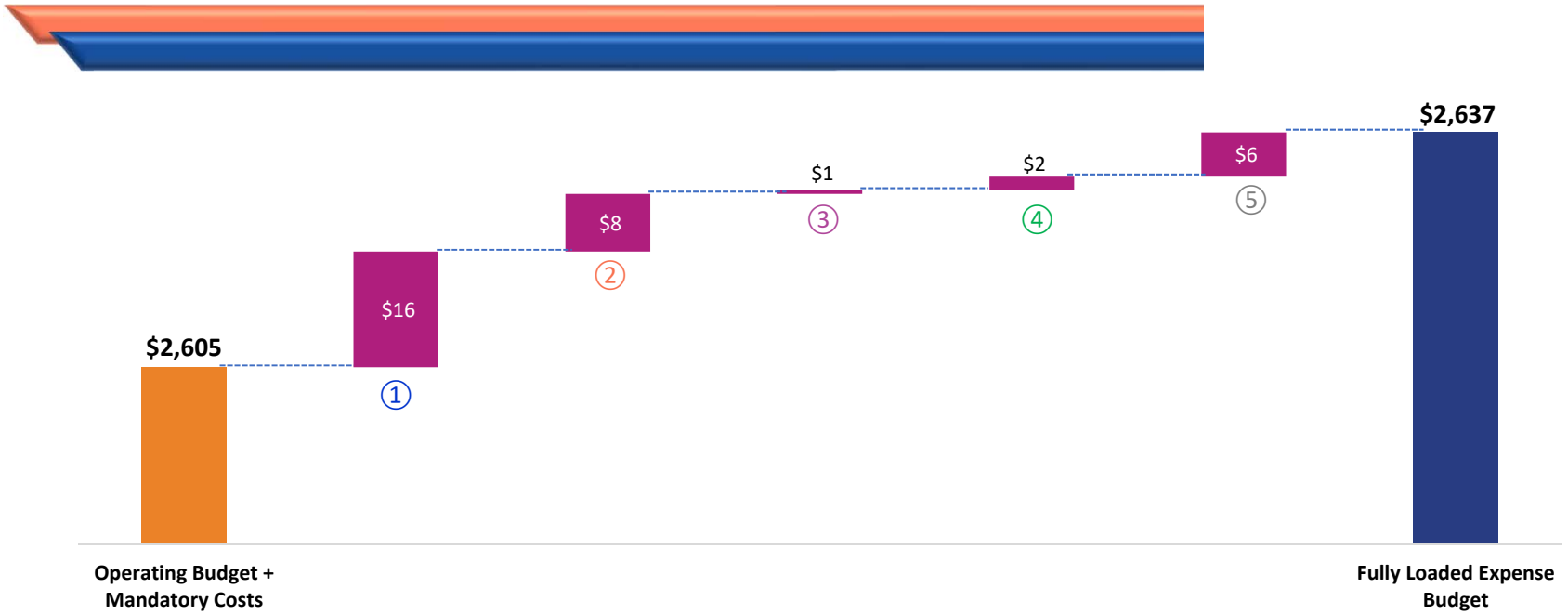
- **Contractual Escalations – $87M**
  1. Union labor contract increases
  2. Insurance premiums for annual renewal
  3. Purchased transportation escalations for our contracted service providers
  4. Other service contracts, vehicle parts and IT software maintenance

- **Other Externalities – $135M**
  1. COVID testing, materials and supplies
  2. Service cost of 25 new and additional articulated buses procured from a federal grant award
  3. Increased cost of diesel fuel hedges
     - Currently hedged through January 2022
  4. Bus impacts from Port Authority toll increases

- **State and Federal Mandates – $16M**
  1. Operationalization of PTC mandate
  2. 5311 Rural Assistance Program (CARES Act pass-through funding for counties)

- **Efficiencies & Savings – ($24M)**
  1. Health benefit reform savings
  2. Removal of non-recurring contract award funding
  3. Leap year savings
  4. Renegotiation and renewal of financial contracts related to the revolving line of credit
  5. Bus warranty parts savings from fleet modernization

FY21 Additional Discretionary Strategic Investments



① **Goal 1: Ensure the reliability and continued safety of our transit system: $16M**

② **Goal 2: Deliver a high-quality experience for all our customers, with their entire journey in mind: $8M**

③ **Goal 3: Power a stronger and fairer New Jersey for all communities: $0.5M**

④ **Goal 4: Promote a more sustainable future for our planet: $2M**

⑤ **Goal 5: Build an accountable, innovative and inclusive organization that delivers for New Jersey: $6M**

FY21 Additional Discretionary Strategic Investments

1	Ensure the reliability and continued safety of our transit system	• Targeted bus service enhancements • Additional LETP & ACTP training classes • Expand critical Rail operations and maintenance staff • Additional safety and field investigative staff	$16M
2	Deliver a high-quality experience for all our customers, with their entire journey in mind	• Enhanced customer engagement & feedback • Fare/zone structure rationalization, redesign and simplification • Expanded bus station upkeep • Begin bus ticket pre-validation pilot at PABT • PD expansion to improve presence along the transit network	$8M
3	Power a stronger and fairer New Jersey for all communities	• Improve small/disadvantaged business strategies and expand diversity inclusion • Feasibility study and pilot for Access Link same day service	$0.5M
4	Promote a more sustainable future for our planet	• Battery Electrification Bus Program • Dedicated transit-oriented development staff team	$2M
5	Build an accountable, innovative and inclusive organization that delivers for New Jersey	• Expanded recruitment via job board expansion • Additional staff development and training programs • Technology improvements to enhance data capabilities	$6M

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FY21 Summary by Department

$ in millions	FY21 Budget	Budget %	FTE	FTE %
Bus	$ 833.9	31.6%	5,790	47.2%
Rail	953.4	36.2%	4,562	37.2%
Light Rail and Contracted Services	271.6	10.3%	218	1.8%
Police	70.3	2.7%	383	3.1%
System Safety	7.3	0.3%	55	0.4%
Info & Digital Technology	96.7	3.7%	183	1.5%
Admin	403.8	15.3%	1,079	8.8%
NJT Total	**$ 2,637.0**	**100%**	**12,270**	**100%**

	Positions			
	FY20	**FY21**	**Growth (#)**	**Growth (%)**
Bus	5,536	5,790	254	5%
Rail	4,496	4,562	66	1%
Light Rail and Contracted Service	213	218	5	2%
Police	357	383	26	7%
System Safety	53	55	2	4%
Info & Digital Technology	163	183	20	12%
Admin	1,044	1,079	35	3%
NJT Total	**11,861**	**12,269**	**408**	**3%**

BUDGET

Operations, IT & Safety – 85% of Budget

- Bus – 32%
- Rail – 36%
- Light Rail – 10%
- Police & System Safety – 3%
- Info & Digital Technology – 4%

HEADCOUNT

Operations, IT & Safety – 92% of FTE

- Bus – 47%
- Rail – 37%
- Light Rail – 2%
- Police & System Safety – 4%
- Info & Digital Technology – 2%

Current Variables and Uncertainties

- Ridership & Revenue Returns
  - Potential second wave of COVID
  - Future of telecommuting and other travel patterns
- Future State Funding
  - Highly reliant on the State's fiscal condition
  - Future funding from the Transportation Trust Fund
- Currently, no Federal aid to replace the CARES Act
- Possible Efficiencies
- Other potential COVID-related costs

NJ TRANSIT
FY21 Operating Budget

OCTOBER 2020

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ITEM 2010-60: FISCAL YEAR 2021 OPERATING BUDGET

WHEREAS, Article II, Section 4(c) of the By-Laws requires the Board of Directors to adopt a final budget for NJ TRANSIT after the State of New Jersey has completed the process of appropriating funds for public transportation purposes; and

WHEREAS, the New Jersey Legislature has enacted a Fiscal Year 2021 State Budget which includes appropriations for public transportation purposes; and

WHEREAS, staff has recommended a Fiscal Year 2021 Operating Budget for NJ TRANSIT as detailed in this item and Exhibits A, B, and C attached hereto; and

WHEREAS, NJ TRANSIT's $2.637 billion Fiscal Year 2021 Operating Budget provides continued support and investment in the operations of NJ TRANSIT Bus, Rail, Light Rail, and Access Link services; and

WHEREAS, this budget recommendation continues NJ TRANSIT's commitment to provide safe, reliable and efficient transportation services for its customers; and

WHEREAS, the Fiscal Year 2021 Operating Budget recognizes a State operating subsidy of $386.1 million; and

WHEREAS, the Fiscal Year 2021 Operating Budget recognizes expenses of $925.1 million which are expected to be reimbursed through the CARES Act; and

WHEREAS, total resources of $2.637 billion are estimated to be available from various sources without a fare increase or service cuts, representing a $246 million increase from Fiscal Year 2020; and

WHEREAS, passenger and commercial revenue represent 17 percent of the total Fiscal Year 2021 budget and are estimated at $456.6 million; and

WHEREAS, when compared to Fiscal Year 2020, total State assistance decreases by $41.4 million to $627.2 million; and

WHEREAS, total State assistance is comprised of a $41.4 million net decrease, made up of a $71.4 million decrease in the State operating subsidy and a $30 million allocation from the State through the Coronavirus Relief Fund for eligible expenses; and

WHEREAS, it is also necessary for NJ TRANSIT to enter into numerous agreements in order to advance and continue transportation related programs and business operations; and

WHEREAS, the State's Fiscal Year 2021 Budget was signed by the Governor and adopted by the State on September 29, 2020, after the June 2020 NJ TRANSIT Board meeting, adoption of the annual budget was deferred until the next regular Board meeting subsequent to the final actions by the State; and

WHEREAS, if the State's Fiscal Year 2022 Budget is not finalized prior to the June 2021 NJ TRANSIT Board meeting, the Board may defer adoption of the annual budget until the next special or regular Board meeting subsequent to the final actions by the State; and

WHEREAS, if the Board is unable to approve a Fiscal Year 2022 budget prior to July 2021, it will be necessary to expend funds after July 1, 2021, prior to the final adoption of the Fiscal Year 2022 budget;

NOW, THEREFORE, BE IT RESOLVED that the NJ TRANSIT Board of Directors adopts the Fiscal Year 2021 Operating Budget in the amount of $2.637 billion; and

BE IT FURTHER RESOLVED that the Board of Directors acknowledges and accepts its responsibility to adopt a final operating budget; and

BE IT FURTHER RESOLVED that the Chair or President & CEO is hereby authorized to continue or enter into any agreements and expend funds in order to continue NJ TRANSIT's transportation related programs and business operations, subject to the availability of funds; and

BE IT FURTHER RESOLVED that the Chair or President & CEO is authorized to provide local share and other in-kind services or act as a pass-through agency for Federal or State capital or operating funds subject to the availability of funds; and

BE IT FURTHER RESOLVED that the Chair or President & CEO is authorized to expend, in the normal course of business, the funds necessary to meet NJ TRANSIT's obligations, essentially in accordance with this Fiscal Year 2021 Operating Budget item, resolution and attachments and until the adoption and approval of the Fiscal Year 2022 Operating Budget.

EXHIBIT A

FISCAL YEAR 2021 – OPERATING BUDGET
RESOURCES

Total Resources $2,637.0 million

NJ TRANSIT resources are budgeted at $2.637 billion, reflecting a net increase of $246 million or 10.3 percent compared to the FY20 Operating Budget.

Specific assumptions are described below:

Farebox Revenue $374.6 million

The FY21 Operating Budget includes passenger revenue of $374.6 million, down 62% from the FY20 Operating Budget. Farebox Revenue has declined dramatically due to COVID-19 and is expected to slowly recover over the course of FY21. NJ TRANSIT has teamed with external experts to develop potential revenue recovery rates. The budget assumes a slow and partial recovery in ridership and revenue throughout FY21.

Other Commercial Revenue $82.0 million

Other commercial revenues are budgeted at $82.0 million, down $35.5 million or 30% vs. the FY20 Operating Budget. This revenue includes advertising, parking and concessions, permit fees and other system generated revenue including transit-oriented development initiatives. The significant reduction in passengers due to COVID-19 has led to corresponding significant reductions in many of these commercial revenue streams.

State Operating Subsidy $386.1 million

The State's operating subsidy is budgeted at $386.1 million in FY21, a decrease of $71.4 million over FY20. This decrease is primarily due to the shortening of the State's fiscal year 2021 by 3 months.

Other Reimbursements $839.2 million

Other reimbursements are budgeted at $839.2 million in FY21. The largest component is comprised of $460.8 million in capital-to-operating transfer, which is flat to the FY20 amount. Capital maintenance supports major repair and rehabilitation projects, including axle replacements, pantograph conversions, traction motor repairs, repairing engines, transmissions and alternators. These non-routine maintenance projects not only extend the useful life of the asset being repaired, but also helps to keep those assets in a state of good repair.

Other sources of funding include $129.0 million from the NJ Turnpike Authority, which is flat to the amount provided in FY20, and an allocation from the State's Clean Energy Fund

of $82.1 million. The remaining $167.3 million includes other State, federal, and third-party funding primarily for planning and expense projects.

CARES ACT (5307 Operating Assistance) $911.8 million

NJ TRANSIT is using the funds allocated to it by the Federal Transit Administration (FTA) to support its eligible operating expenses. Some of these cost categories include, but are not limited to: labor and fringe benefits; professional services; electric propulsion power; fuel revenue vehicles; materials and supplies in response to and in mitigation of COVID-19; utilities; purchased transportation; tolls trackage and fees; and leases and rental. A total of $1.423 billion was allocated to NJ TRANSIT through the Section 5307 CARES Act grant. Of this amount, $360.8 million was drawn down in FY20.

CARES ACT (5311 Pass-Through) $13.3 million

NJ TRANSIT passes through a portion of its CARES allocation to local partners. These funds support eligible operating expenses of our local partners with cost categories similar to the 5307 line item, above. $13.3 million was allocated to NJ TRANSIT through the Section 5311 CARES Act grant with the full amount expected to be expended in FY21.

Coronavirus Relief Fund (CRF) $30.0 million

NJ TRANSIT has been allocated $30 million from the State of New Jersey's CARES Act funding and it will be used to support eligible expenses. Some of these cost categories include, but are not limited to: labor and fringe benefits, expenses for disinfection of public areas and other facilities; expenses to improve telework capabilities for public employees; costs of providing COVID-19 testing; and expenses for technical assistance.

EXHIBIT B

FISCAL YEAR 2021 – OPERATING BUDGET
EXPENSES

Total Expenses $2,637.0 million

NJ TRANSIT expenses are budgeted at $2.637 billion, an increase of $246 million or 10.3 percent compared to the FY20 Operating Budget.

Labor and Fringe Benefits $1,538.0 million

Labor and fringe benefits are budgeted to increase by $71.6 million to a total budgeted amount of $1.538 billion. Labor and fringe benefits represent approximately 58 percent of the total operating expenses. This increase includes incremental funding to support contractual labor costs, continuation of the locomotive engineer and assistant conductor training programs, and 408 new positions primarily for providing service enhancements that improve the customer experience.

The total labor and fringe benefits growth is slightly offset by approximately $10 million in health benefit reform savings, largely from continued savings due to new provider contracts, implementation of care management programs, and initiation of a prescription drug savings program.

Purchased Transportation $281.8 million

Purchased transportation expenses are budgeted at $281.8 million for existing Access Link, Light Rail, and Private Carrier Bus contracts. These costs represent 11 percent of the total operating expenses.

All Other Expenses $817.2 million

All other expenses, which are mostly comprised of materials and supplies, outside services, fuel and power, utilities and tolls/trackage, are budgeted at $817.2 million. These costs represent the remaining 31 percent of the total operating expenses. The breakout for these costs are: Services – $194.8 million, Materials & Supplies – $273.0 million, Fuel & Power – $116.2 million, Utilities – $47.0 million, Tolls & Trackage Fees – $91.1 million, Claims & Insurance – $42.4 million, and Other/Miscellaneous – $52.7 million. Consistent with FY20, NJT's fuel and utility costs continue to be partially funded with an $82.1 million reimbursement from the State's Clean Energy Fund.

EXHIBIT C

NEW JERSEY TRANSIT CONSOLIDATED OPERATIONS
FISCAL YEAR 2021 Proposed Operating Budget
($ in millions)

	FY 2020 Budget	FY 2021 Budget	Difference $	Difference %
Farebox Revenue	$ 985.8	$ 374.6	$(611.2)	(62.0%)
Other Commercial Revenue	117.5	82.0	(35.5)	(30.2%)
State Operating Subsidy	457.5	386.1	(71.4)	(15.6%)
Other Reimbursements	830.2	839.2	9.0	1.1%
CARES Act (5307 Operating Assistance)	-	911.8	911.8	0%
CARES Act (5311 Pass-Through)	-	13.3	13.3	0%
Coronavirus Relief Fund (CRF)	-	30.0	30.0	0%
TOTAL RESOURCES	**$ 2,391.0**	**$ 2,637.0**	**$246.0**	**10.3%**
Labor & Fringe Benefits	$ 1,466.4	$ 1,538.0	$71.6	4.9%
Purchased Transportation	252.2	281.8	29.6	11.7%
All Other Expenses	672.4	817.2	144.8	21.5%
TOTAL EXPENSES	**$ 2,391.0**	**$ 2,637.0**	**$246.0**	**10.3%**





FY 2021 – FY 2025 Capital Plan & FY 2021 Funding Appropriation

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ROADMAP FOR TODAY'S PRESENTATION

FY 2020
Progress in a Challenging Time

FY 2021 – FY 2025
Capital Plan

FY 2021
Capital Appropriation

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PROGRESS DURING A CHALLENGING TIME

During Covid-19, Transit Construction was designated as an essential service by Governor Murphy's executive order.

- **All Construction Activity**: *proceeded as scheduled*
- **All Design Activity**: *uninterrupted via use of Remote Workstations*
- **Funding**: *continued to operate with Transportation Trust Funds and Federal Transit Administration funding; used aggressive approach to securing discretionary grant awards*

MAJOR CONSTRUCTION MILESTONES COMPLETED

➢ Positive Train Control (PTC)

- Advanced PTC program into the Extended Revenue Service Demonstration (ERSD) phase
- Increased testing territory to approximately 100 miles (33%) of the total system mileage needed for full certification
- PTC Safety Plan submitted to FRA for final system certification
- Full certification by December 31, 2020

➢ Mason Substation

- Temporary Substation is in operation
  - Demolition of existing 230kV is complete
  - Construction of substation grade beams and equipment foundations was completed in March 2020
- Anticipated project completion in February 2022



MAJOR DELIVERIES OF ROLLING STOCK ON-GOING

Cruiser Bus Replacements



1,104 Cruiser Buses –
First bus delivered in February 2016.
Last bus expected in 2Q 2022.

Articulated Bus Replacements



110 Articulated Buses –
Approved in 2019 and 2020
First bus delivered in October 31, 2019.
Last bus is expected in 1Q 2021.

MAJOR PURCHASES OF ROLLING STOCK ON-GOING & PLANNED

Rail Fleet Replacements



113 Multilevel III Rail Vehicles – (58 Power Cars, 33 Cab Cars, 16 Trailer Cars, and 6 Restroom-Equipped Trailer Cars)
Approved in Dec 2018
Project is on schedule
First 6 Pilot Vehicles to arrive in 1Q 2023

Electric Bus Early Deployment



Battery-Electric Buses Camden – First bus projected to be delivered in the 3Q 2021.
Battery-Electric Buses Maplewood – First bus projected to be delivered in the 4Q 2022.

MAJOR CONSTRUCTION PROJECTS STARTED

Hoboken Long Slip Fill



Long Slip Fill and Rail Enhancement
Awarded in February 2020
Will protect Rail Fleet during severe weather and emergency flooding.

Raritan River Bridge Replacement



Raritan River Bridge – Phase I
Awarded in September 2020
Phase I will build Approach Spans for the Bridge.

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NEWARK PENN STATION IMPROVEMENTS MOVING AHEAD

Construction/Procurement Work in Progress

- Historic benches and bathroom restoration with new ‘no touch’ fixtures
- Improved lighting, repaint, and historic tile repairs under way
- Deep clean of exterior facade and interior floor improvements

Near Term Design Work in Progress

- Repaving and improved lighting in bus lane waiting areas
- Upgrades to heating and cooling in station
- Convert existing cargo elevators to ADA compliant passenger elevators

Future Work Moving to Design

- Platform D full restoration in design
- Upcoming RFP for restoration of train shed and all platforms, revamping of station interior layout, and exterior entry/exits

OTHER MAJOR CONSTRUCTION CONTRACTS – ACTIVE AND ON SCHEDULE

Elizabeth Station Rehabilitation



New station building with elevators and high-level platforms.

Construction Cost of $49.27 Million.

Other Construction Contracts

MMC Flood Walls– Cost of $18.34 Million

Hoboken Depot Substation – Cost of $19.90 M

Henderson St. Substation –Cost of $18.06 M

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MAJOR CONSTRUCTION PROJECTS UNDER DEVELOPMENT

NJ TRANSITGRID

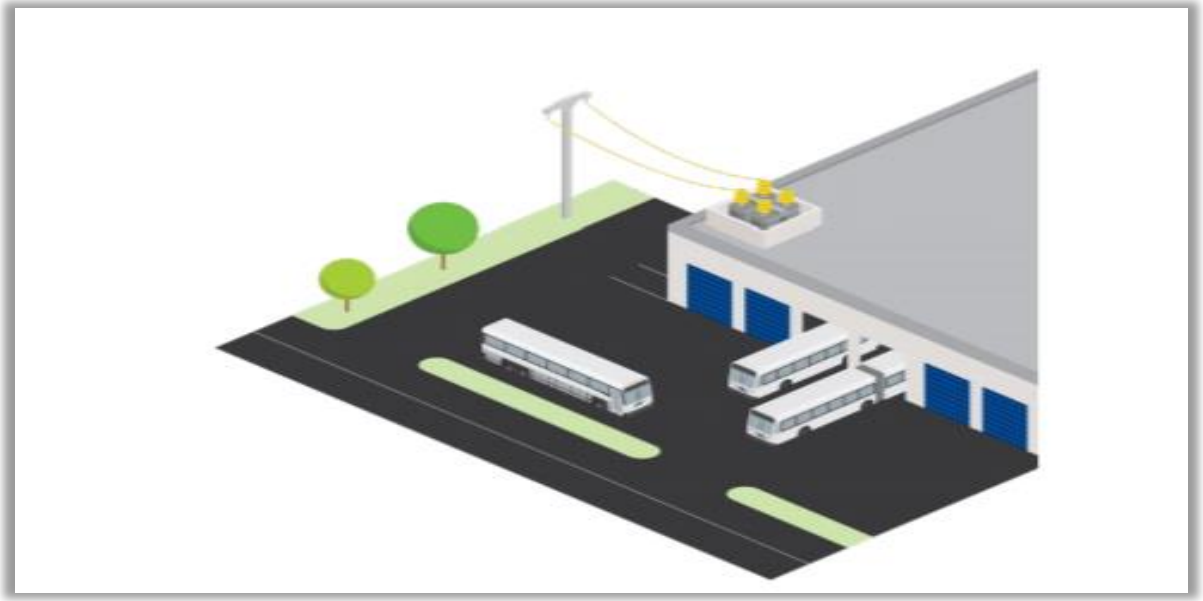


NJ TRANSITGRID

Supported the successful Record of Decision (ROD) issued by the FTA.

Conducted contractor outreach sessions.

Northern Bus Garage



Northern Bus Garage

Proceeding with the purchase of property.

Began environmental evaluations.

Evaluating alternative procurement strategies.

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MAJOR DESIGN ACTIVITY COMPLETED OR NEAR COMPLETION

Recently Completed

- Portal North Bridge Replacement
- Newark Penn Station – Historic Restoration
- Newton Bus Garage – Electric Bus Infrastructure

Near Completion

- Brick Church Station Interior Restoration
- Roselle Park Station Renewal/ADA Access Enhancement
- NY PENN Transit Waiting Area
- Perth Amboy Station
- Hoboken-Signal Power Repair
- Hoboken Wayside Power Repair
- West Summit Wall and Interlocking
- Lackawanna Cut Off

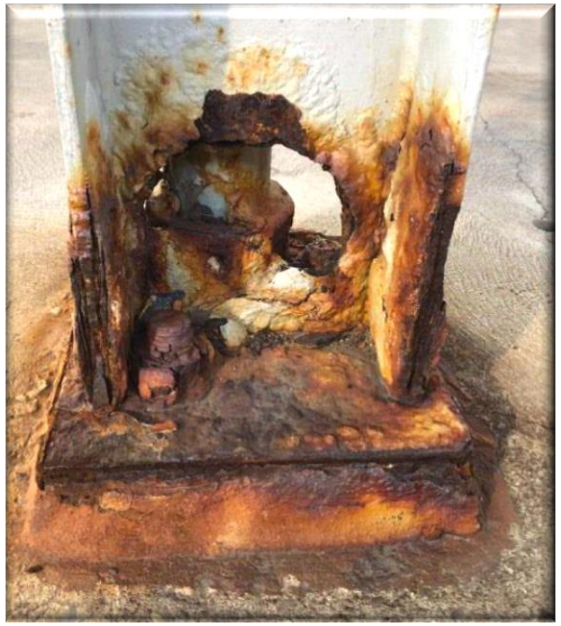
STATE OF GOOD REPAIR FACILTY DEFICIENCIES IDENTIFIED

State of Good Repair – Customer-Facing Facility Program

- Completed the first full cycle of FTA compliant facility inspections to identify critical facility repairs at our stations and facilities;
- Will use Job Order Contracting techniques to “quick-hit” a wide variety of items and range of locations throughout the State; and
- Developing individual location Work Plans.

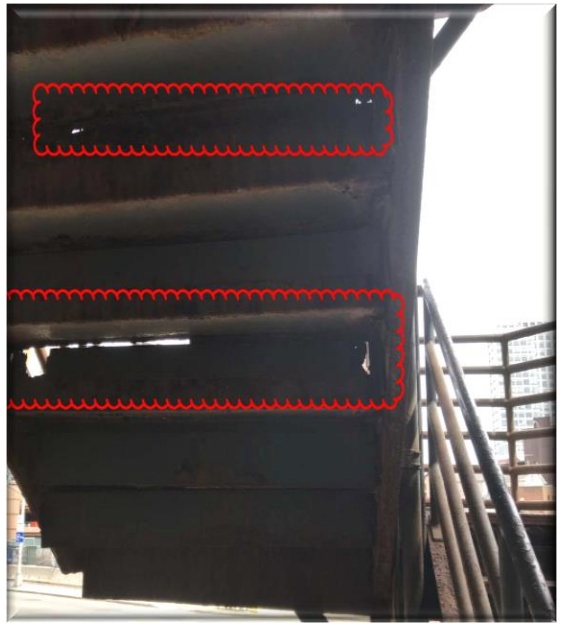
STATE OF GOOD REPAIR – CUSTOMER FACING FACILITY PROGRAM

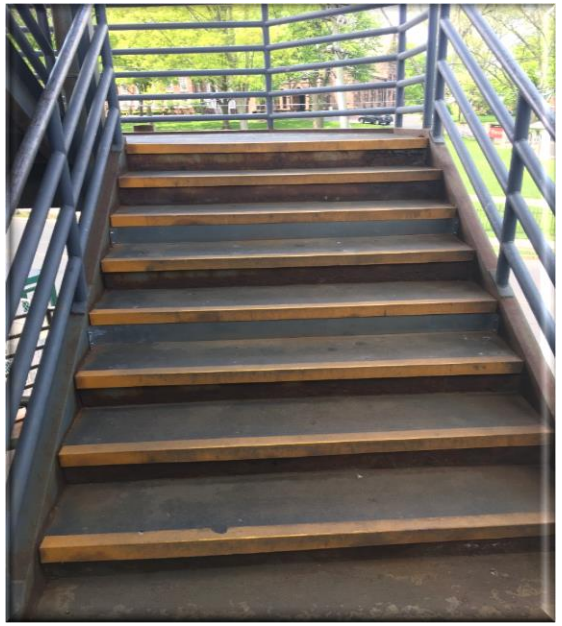
Trenton Station





New Brunswick Station





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ROADMAP OF TODAY'S PRESENTATION

FY 2021 – FY 2025
Capital Plan

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A Five-Year Capital Plan: FY 2021 - FY 2025

- Released publicly by Governor Murphy on June 8, 2020, after briefings to Board Members.

- Contains $11.21 Billion of projects funded by existing or expected resources. All of these projects are consistent with current and past Board approval actions.

- Identifies another $5.78 Billion of additional funding resources needed to achieve NJ TRANSIT's strategic vision of providing world class service which increases reliability by reducing equipment breakdowns, infrastructure failures and service interruptions. These projects are, as of now, NOT funded.

NJ TRANSIT A Five-Year Capital Plan

Released by Governor Murphy in June 2020 (available at njtplans.com)



A Five-Year Capital Plan contains:

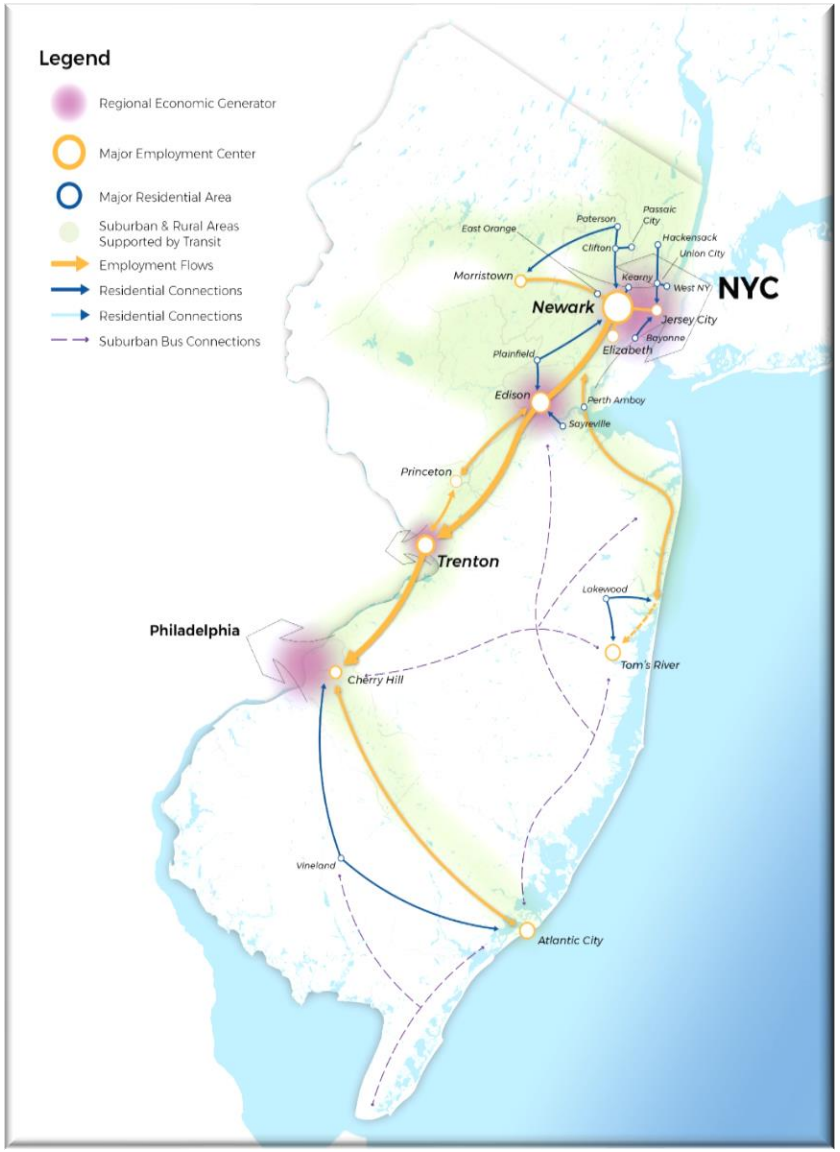
- **Executive Summary** - A narrative document that describes why and how the program was generated, graphically explains its value.

- **Capital Project Sheets** – a compendium of over 100 projects ranging from $1m to over $3B that are either already in progress or exist in conceptual phases.

- **Unconstrained Financial Summary** – An expenditure-based budget and forecast view of how the above projects would progress over a 5-Year and Multi-Year time frame. Color-coded to distinguish between funded and not funded.

The Vision

- “A World Class Transit Agency”
- Customer Needs to Come First
- Balance & Flexibility Essential
- Best Value for Whole State



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System Challenges That We Face:

- **Incredibly Old Infrastructure**
  Living off work of our great grandfathers.

- **Undersized Assets in Congested Region**
  Fragile balance makes it work every day with what we inherited.

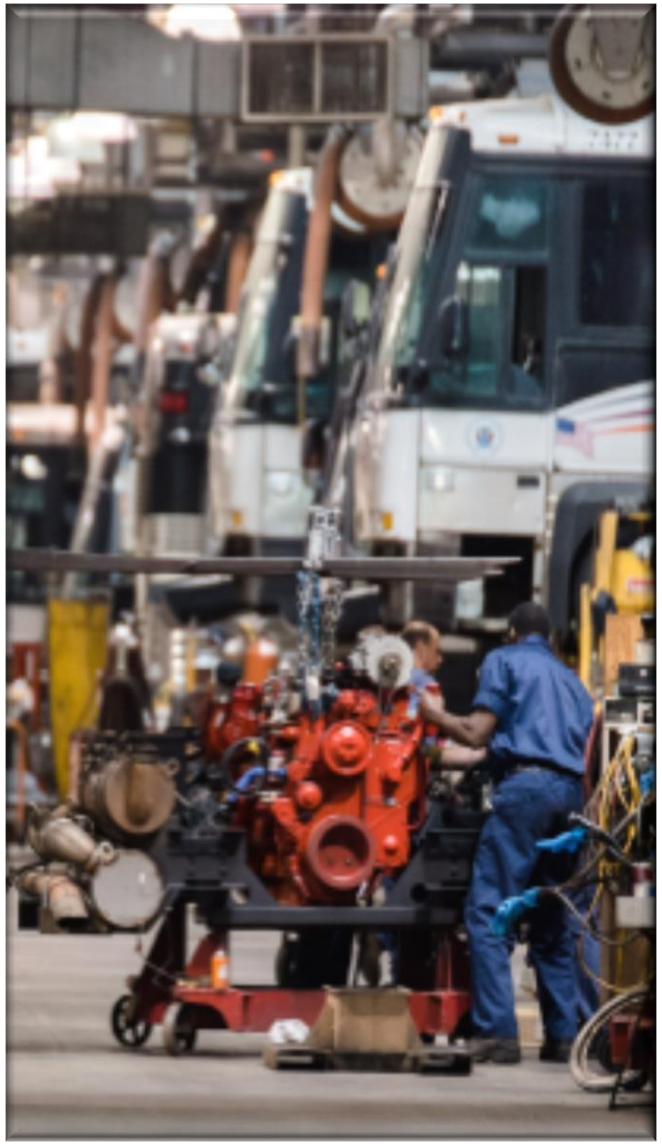
- **Lack of System Resiliency**
  Overburdened infrastructure with limited surplus capacity for disruption.

- **Understanding 'Hidden' Costs of Transit System**
  More than stations and rolling stock.

- **An Aging Fleet of Rolling Stock**

  Bus fleet anticipated service life of 12 years, current average 13, max 20

  Rail fleet – 5 different coach types dating back to 1977



Driving a New Capital Plan

- **Prior Versions Focused on ‘Limited Funding’**
  “What can we do with the limited funds for this year?”

- **New Version Focuses on ‘Needs Based’**
  “What is list of everything we need to do to be the best?”

- **Dedicated Process Promoting Value-Based Projects**

- **Dedicated Cross Functional Team Building Strategy**

- **What is right for the State? Not just what is easy**

Cultivating Project Concepts

- Review Capacity Constraints (Internal & External)
- Determine Constructability Challenges
- Create Itemized Cost Estimates & Schedules
- Encourage ‘Right’ Mix of Rapid Return Cost/Benefit Projects & Long-Term, Lasting Value System Improvement Programs
- Consider Crucial Lifecycle Cost (Bang for Buck)





Appendix A of *A Five-Year Capital Plan*

Appendix A Table 1: Capital Plan Financial Summary

($ in Millions)

CAPITAL PLAN FY2021-2025	FY2021	FY2022	FY2023	FY2024	FY2025	5 YEAR TOTAL
Major Projects and Programs Unconstrained Estimated Cash-flow (Portal Bridge Included)	1,238.02	2,046.70	2,139.17	2,342.13	2,753.54	10,519.57
Rehabilitation Projects and Programs Unconstrained Estimated Cash-flow	324.91	311.61	262.37	289.81	280.51	1469.21
Other Existing NJ TRANSIT Program Items Estimated Cash-flow Sheet	999.29	999.29	999.29	999.29	999.29	4,996.44
TOTAL CAPITAL PLAN	**2,562.22**	**3,357.60**	**3,400.83**	**3,631.23**	**4,033.34**	**16,985.22**
Existing Funding for Major Projects and Programs	593.81	879.21	871.10	933.52	969.41	4,247.06
Portal Bridge North Existing & Potential Future Funding	*181.96*	*511.40*	*586.50*	*190.20*	*145.60*	1615.66
Existing Funding for Rehabilitation Projects and Programs	66.14	70.34	70.57	70.57	71.13	348.75
Existing Funding for Other Existing NJ TRANSIT Program Items	999.29	999.29	999.29	999.29	999.29	4,996.44
TOTAL EXISTING AND POTENTIAL PORTAL NORTH FUNDING	**1,841.20**	**2,460.24**	**2,527.46**	**2,193.58**	**2,185.43**	**11,207.91**
FUNDING NEED FOR CAPITAL PLAN	**721.02**	**897.36**	**873.37**	**1,437.65**	**1,847.91**	**5,777.31**

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Appendix A of *A Five-Year Capital Plan*

More Than 1/3 of FY 2021 Capital Expenditures Are Applied to "Fixed Expenses"

PROJECT CATEGORY		FY 2021	PERCENTAGE
FIXED EXPENSES: CAP-OP TRANSFER, DEBT SERV, LOC PROG, PRIIA	**$**	**613.42**	**37%**
BUS FLEET & ACCESS LINK	$	225.81	14%
BUS INFRASTRUCTURE & LIGHT RAIL	$	118.48	7%
RAIL FLEET	$	145.51	9%
RAIL INFRASTRUCTURE	$	342.89	21%
SANDY & REGIONAL TRANSIT PROJECTS	$	119.16	7%
IT, INNOVATION AND TRANSPORT NETWORK	$	93.99	6%
TOTAL FY 2021 CAPITAL EXPENDITURES	**$**	**1,659.26**	**100%**
PORTAL BRIDGE EXPECTED	$	181.96	
FY 2021 CAPITAL EXPEDITURE WITH PORTAL BRIDGE	**$**	**1,841.22**	

Notable Expenditures in FY 2021 of *A Five-Year Capital Plan*

DESCRIPTION		FY 2021 COST (IN MILLIONS)
BUS FLEET		
Bus Fleet Replacement - Articulated Buses	$	29.50
Bus Fleet Replacement - Cruiser Buses	$	185.00
Electric Bus Fleet Early Deployment	$	6.79
BUS INFRASTRUCTURE		
North Bergen Park & Ride Parking Garage	$	10.53
Market Street Bus Garage Rehab	$	4.59
ACCESS LINK		
Access Link Fleet Modernization and Expansion	$	3.00
LIGHT RAIL		
River LINE Fleet Overhaul Overhaul Eng Repower	$	14.91
HBLR Westside Sewer Replacement	$	3.47
RAIL FLEET		
PL42 Diesel Locomotive Overhaul (10)	$	15.69
Rail Fleet Replacement - Phase II - New Car Purchases	$	109.25

Notable Expenditures in FY 2021 of *A Five-Year Capital Plan*

DESCRIPTION		FY 2021 COST (IN MILLIONS)
RAIL INFRASTRUCTURE		
County Yard Expansion	$	9.95
Delco Lead	$	13.85
Elizabeth Station Improvements	$	28.86
Track Undercutting: Ballast, Rails, Ties, Turnouts & Crossings	$	19.00
Undergrade Bridge Rehabilitation Program	$	12.43
SANDY - Signals and Communications Resilience	$	22.48
NJ TRANSITGRID	$	38.00
Raritan River Bridge Replacement	$	71.22
SANDY Hoboken Yard-Wayside Power-Repair	$	13.28
SANDY Replacement Mason/Building 9 Substation	$	11.45
HOBOKEN Long Slip	$	21.00
RAIL EXPANSIONS		
Lackawanna Cut-off - Port Morris-Andover	$	9.35

ROADMAP OF TODAY'S PRESENTATION

FY 2021
Capital Appropriation

NJTRANSIT
The Way To Go.

FY2021 Capital Appropriation

- Annually, NJ TRANSIT allocates approximately $1.4 Billion of federal, state and other funds to the Capital Program;

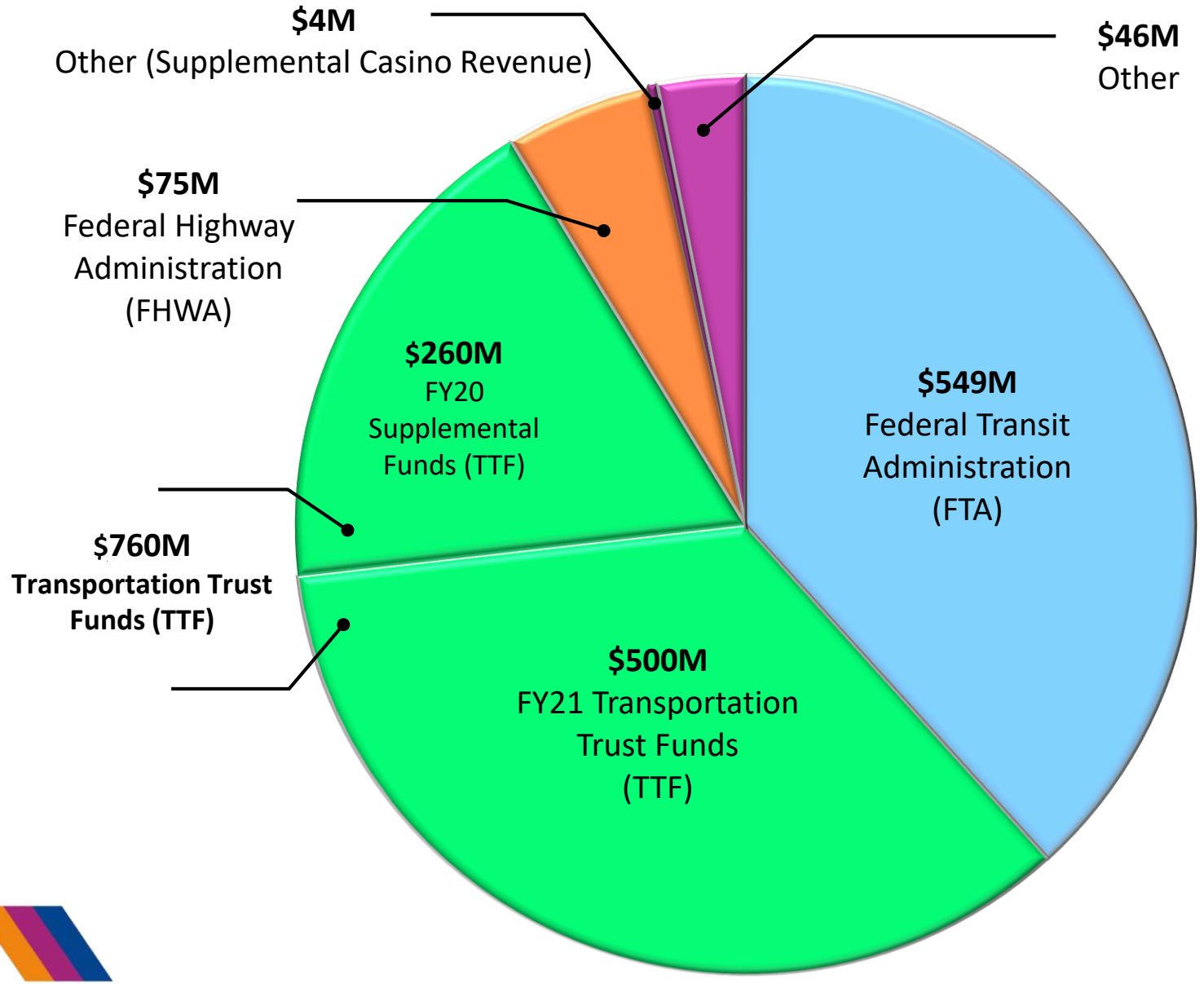
- In March 2020, as required by the NJT Reform Law, and as part of the NJ TRANSIT budget approval process, the Board of Directors approved a 2-year capital plan appropriation document for fiscal years 2021 and 2022. This Fiscal Year 2021 Appropriation represents the first year of that two-year appropriation.

- The Board of Directors annually authorizes the Chair or President & CEO to take whatever actions are necessary to seek and secure funds envisioned by this Program;

- This Fiscal Year 2021 Funding Appropriation allocates $1.4 Billion of resources only to those multi-year projects with funding already designated to them, most of which have already begun construction or are already under contract; and

- This Fiscal Year 2021 Funding Appropriation does not allocate any resources to the $5.78 billion portion of *A Five-Year Capital Plan* without designated funding.

FY2021 Capital Appropriation



Total
$1.434B

NJTRANSIT
The Way To Go.

NJ TRANSIT Stands Ready To:

- Continue Forward with Aggressive Improvements based on the $11.21 Billion **Funded** Portion of *A Five-Year Capital Plan.*
- Gear Up Support for Finding Ways to Source the $5.78 Billion **Unfunded** Portion of the *Plan*.
- Prove that NJ TRANSIT Can Execute Successfully All of these Exciting Projects.

ITEM 2010-61: NJ TRANSIT FY2021 – FY2025 CAPITAL PLAN ADOPTION AND FY2021 AUTHORIZATION TO SECURE CAPITAL FUNDING

WHEREAS, NJ TRANSIT's Five-Year Capital Plan addresses the needs of NJ TRANSIT customers by ensuring system safety and reliability through state-of-good-repair investments, addressing system capacity demands, and investing in planned system expansion; and

WHEREAS, NJ TRANSIT has formulated an unconstrained vision called *A Five-Year Capital Plan* (Exhibit A) – to demonstrate opportunities for safety, service reliability, resiliency, sustainability, and other improvements critical to NJ TRANSIT; and

WHEREAS, *A Five-Year Capital Plan* was the result of a rigorous process involving all agency planning, operating, safety, financial, police, customer service, environmental and engineering personnel; and

WHEREAS, working together, they established and prioritized a pool of projects, balancing corporate strategic objectives to ensure the highest and best use of limited capital funds; and

WHEREAS, this Plan calls for continued investment in the State's transit infrastructure to maintain a state of good repair and provide reliable transit service; and

WHEREAS, it includes comprehensive, sustainable, and measurable initiatives to ensure passenger and public safety for the system; and

WHEREAS, *A Five-Year Capital Plan* contains two sets of projects – the first set includes $11.21 billion worth of projects already funded from previous, current and/or future expected funding resources; and

WHEREAS, the second set identifies another $5.78 billion worth of projects without any source of past, current and/or future funding; and

WHEREAS, although there are no sources of funds for the second set of projects, NJ TRANSIT believes, nonetheless, that these additional projects are necessary to achieve its vision of providing world class service which increases reliability by reducing equipment breakdowns, infrastructure failures and service interruptions; and

WHEREAS, annually, NJ TRANSIT is appropriated approximately $1.4 billion of expected funding from a variety of Federal and State sources, which it then allocates to a number of multi-year projects in various stages of planning, design and construction; and

WHEREAS, this year's Fiscal Year 2021 Appropriation (Exhibit B) equals $1.434 billion and represents an expected funding source that will provide, along with other past and future annual appropriations, the funds needed to execute the $11.21 billion FUNDED portion of projects in the FY2021–2025 Capital Plan; and

WHEREAS, the Fiscal Year 2021 Capital Funding Appropriation allocates funds only to those existing projects and does not address any new UNFUNDED needs identified in *A Five-Year Capital Plan*; and

WHEREAS, in March 2020, as required by Public Law 2018, Chapter 162, and as part of the NJ TRANSIT budget approval process, NJ TRANSIT's Board of Directors approved a two-year capital plan appropriation document for Fiscal Years 2021 and 2022; and

WHEREAS, this Fiscal Year 2021 Appropriation of $1.434 billion consists of $624 million of Federal funds, $760 million of Transportation Trust Funds, and $50 million of Local Match, Casino Revenue and Turnpike Authority funds; and

WHEREAS, this $1.434 billion funding level includes $264 million from the State of New Jersey's three-month Fiscal Year 2020 supplemental appropriation; and

WHEREAS, each fiscal year, NJ TRANSIT's Board of Directors authorizes the Chair or President & CEO to take whatever actions are necessary to seek and secure the funds envisioned by the program with the understanding that the Board will approve individual fiscal year capital plans for the upcoming fiscal years;

NOW, THEREFORE, BE IT RESOLVED that the NJ TRANSIT Board of Directors adopts *A Five-Year Capital Plan* (Exhibit A) which is an unconstrained vision of projects to demonstrate opportunities for safety, service reliability, resiliency, sustainability, and other improvements critical to NJ TRANSIT; and

BE IT FURTHER RESOLVED that the Chair or President & CEO is authorized to take whatever actions are necessary to seek and secure the funds envisioned by this Program of Projects; and

BE IT FURTHER RESOLVED that the Chair or President & CEO is authorized to transfer funding sources and amounts among programmed projects as circumstances require, in compliance with the terms and conditions of the grants and other funding sources; and

BE IT FURTHER RESOLVED that the Chair or President & CEO is authorized to make application, execute contracts or agreements, and take whatever other actions are necessary to seek and secure funds, consistent with the basic intent of this program, which may become available subsequent to its adoption.



NJ TRANSIT

A 5-Year Capital Plan

June 2020 | An Unconstrained Vision for NJ TRANSIT

EXECUTIVE SUMMARY

NJ TRANSIT is the largest state-wide transit system in the country, providing mobility to the residents of the nation's most densely populated state. In addition to delivering affordable, efficient access to jobs, schools, health care, stores, entertainment and other destinations for our customers (see Figure I-1), NJ TRANSIT creates health and environmental benefits for the entire State by reducing vehicle miles traveled by automobiles and associated air pollution. The future of NJ TRANSIT has been laid out in our 10-Year Strategic Plan, NJT2030.

NJT2030 STRATEGIC GOALS

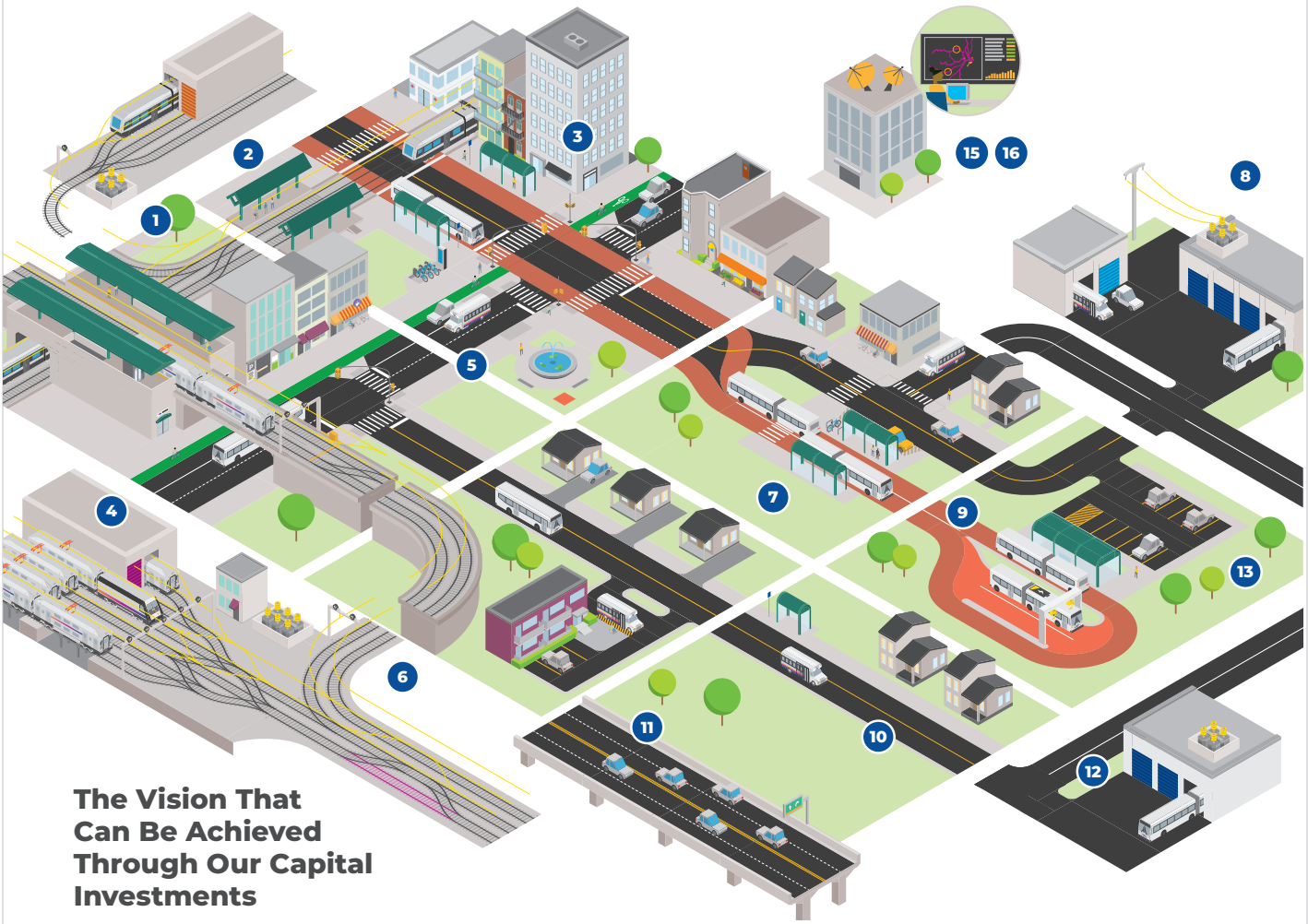
- **Goal 1**: Ensure the reliability and continued safety of our transit system
- **Goal 2**: Deliver a high-quality experience for all our customers, with their entire journey in mind
- **Goal 3**: Power a stronger and fairer New Jersey for all communities in the region
- **Goal 4**: Promote a more sustainable future for our planet
- **Goal 5**: Build an accountable, innovative and inclusive organization that delivers for New Jersey

The NJT2030 vision is dependent on infrastructure and equipment maintained to a state of good repair. If the transit system is not maintained in a state of good repair, the quality and reliability of service will suffer and directly impact our customers. With proper planning and investment, NJ TRANSIT's infrastructure and equipment can support improvements in operational business performance, enhance the customer experience, improve safety in operations, and make the system more resilient to extreme weather. Capital investment allows for a continuous state of good repair,and targeted expansion of the system and is essential for a safe and cost-effective transit system that performs to the level that our customers expect. Over a decade of disinvestment in these assets threatens current and future system reliability. Current capital funding levels leave NJ TRANSIT struggling to keep up with the growth of New Jersey, instead of leading the way as the engine of economic growth. Significant investment is required to restore the value of the capital assets, bring them back to a state of good repair, and advance initiatives that support the safety, customer experience, resilience, and sustainability goals of NJT2030.

FIGURE I-1: **REGIONAL ECONOMIC CLUSTERS AND SERVICE AREAS**

Source: American Community Survey
2017 5-year averages





The Vision That Can Be Achieved Through Our Capital Investments

1. Improve the transportation network's accessibility & usability for all.
2. A reliable light rail system improves local connectivity.
3. Less congested roadways in city centers facilitate pedestrian-focused communities that are healthier (less noise & air pollution), safer, and improve community development and economic competitiveness.
4. Expanded yard facilities allow for a larger, more modern fleet with higher carrying capacity to improve system reliability.
5. Integrated public transportation network reduces the need for additional parking and allows for mixed-use, pedestrian-friendly development.
6. The improved rail system is more flexible in responding to delays and system issues to provide a more reliable service.
7. Communities from the city to the suburbs to the rural regions are better connected and see improved travel times regardless if you drive, ride, bike, or walk.
8. Expanded bus garage facilities improves reliability, comfort, cleanliness, and reduce crowding of operations allowing for a more reliable and comfortable ride.
9. Explore opportunities for Bus priority and Bus Rapid Transit (BRT) to reduce congestion on local roads and improve on-time performance.
10. Suburban communities are strengthened by stronger transportation networks and are competitive in attracting new residents to drive the local economy.
11. Improved rail network alleviates congestion on critical highways reducing strain on these arteries.
12. Modernization of our bus fleet, including the transition to larger articulated buses, improves carrying capacity and system reliability.
13. Suburban and exurban communities are provided additional links to major centers of economic activity, improving community development.
14. Innovative IT investments include improved mobile Apps that provide you with access to timely information on a your mobile phone and allow you to purchase tickets, plan your trip, and interact with other transportation options without touching anything but your own device.
15. Upgrade asset management and business systems so that the agency can more efficiently address state of good repair concerns, reduce maintenance delays, expeditiously upgrade software systems, and increase resiliency by enabling staff to work remotely.
16. New IT systems that dispatch and monitor buses would allow for the deployment of emerging technologies that improve public health, such as zero-emission buses and contactless fare payment.



CAPITAL INVESTMENTS THAT ADVANCE NEW JERSEY

The Capital Plan is a comprehensive capital investment strategy that describes what NJ TRANSIT can achieve with sustained and dependable funding over an extended period. NJ TRANSIT embarked on the capital planning effort to identify, develop, and vet potential future capital projects targeted to achieve the vision and goals identified in NJT2030. By providing an unconstrained view of funding needs, the Capital Plan provides a path forward to a vastly improved customer experience and a future of healthy, inclusive, and sustainable communities throughout New Jersey.

As the State of New Jersey advances Governor Murphy's "Road Back" plan for recovery from the COVID-19 pandemic, investment in NJ TRANSIT's infrastructure will help power New Jersey's resurgence: creating new jobs and direct investment at a time when New Jersey needs it most.



IDENTIFYING, PRIORITIZING AND IMPLEMENTING A RANGE OF TRANSIT IMPROVEMENTS

NJ TRANSIT began the capital planning process by developing performance indicators that drive the evaluation and implementation of a package of infrastructure projects and programs supporting the NJT2030 strategic goals. The performance indicators translate the Strategic Plan's goals into metrics applicable to capital projects. The five performance indicators are:

State of Good Repair

Repair or rehabilitate facilities so that they can operate at a safe and efficient level of performance or modernize facilities to meet current industry standards.

Customer Experience

Provide customers with a positive transit experience by being responsive to their ever-changing needs and expectations.

Safety

Provide a safe environment for customers and employees by incorporating industry best practices for safety and security at transit facilities and on-board transit vehicles.

Resiliency

Ensure NJ TRANSIT is a dependable and resilient transportation network by investing in adaptable solutions for the evolving profile of natural and man-made risks and protecting existing infrastructure.

Business Performance

Ensure NJ TRANSIT's ability to provide service into the future by investing in opportunities to improve financial sustainability. These include real estate and value capture opportunities, reducing operating costs and increasing ridership revenue.

NJ TRANSIT marshalled its professional staff from all departments and transit modes to produce a needs assessment and a comprehensive list of projects and programs selected with the overall objective of enabling the transit system to meet the NJT2030 goals and deliver on these performance indicators. Each project and program was evaluated, and the results were summarized on project sheets that provide information for each project and program.

This Capital Plan is based not only on the specific merits of individual projects and programs, but on the: overall needs of the system, both existing and expanded; the value for the dollar invested in each project; how quickly projects can be delivered; and how the projects work together to produce the best value for the transit system, our customers, and the state as a whole.

With the understanding that it is not possible to construct all projects at once, NJ TRANSIT arrayed the projects and programs by expected expenditure per year. Projects that addressed the highest state-of-good-repair needs were given highest priority. More straightforward projects and those already in development, which could be enacted quickly and had demonstrated value in improving the performance and reliability of the transit system were identified and advanced in the plan.

This Capital Plan also describes a longer list of initiatives that NJ TRANSIT can deliver over the next 20 years if an appropriate level of capital funding can be sustained. Large-scale projects typically require more than five years to complete. The intent is to make this five-year plan the first of a series of regularly updated rolling five-year plans that build on the initial momentum and adapt over time to meet the evolving needs of New Jersey and to respond to changes in technology.

Long-term investment could enable NJ TRANSIT to stay ahead of the curve and meet future demand, as businesses and communities grow. This investment could allow NJ TRANSIT to deploy new technology to improve customer service, to operate more efficiently and to contribute to a more sustainable environment. The projects identified through this process are also critical to making the transit system resilient in the face of emerging threats, such as sea-level rise and climate change.

Bus

The Capital Plan calls for investments that would enable the bus network to meet the modern-day expectations of our customers. Bus riders would benefit from more reliable and cleaner rides due to new and modernized garages that can enable us to store and maintain enough buses to meet growing passenger demand. New buses, including zero-emission and articulated buses with more seats, would be cleaner, more energy efficient and accommodate more passengers. NJ TRANSIT will study new bus rapid transit systems that provide express service, using technology to minimize delays from congestion. New information technology could allow for more effective deployment of buses in response to real-time information on traffic congestion.

A signature project would be a major new bus garage and maintenance facility, which is critical to providing more reliable service, introducing zero-emission buses, and expanding capacity.

Rail

Rail improvements range from new multi-level rail cars accommodating more passengers per train, to rehabilitated stations providing universal access, and new and improved bridges, rail yards and interlockings, which are the invisible behind-the-scenes infrastructure critical to delivering on-time performance. Taken together, these improvements would remove bottlenecks and produce a more flexible rail network that is not vulnerable to disruptions in service.



A signature initiative of this Capital Plan is a comprehensive overhaul of Hoboken Terminal, including the supporting rail yard facilities and the lines servicing the station, to make the facility resilient in the face of storm surges and to enable the station to reach its full potential in relieving the crowding for commuters crossing the Hudson River to work.

Light Rail

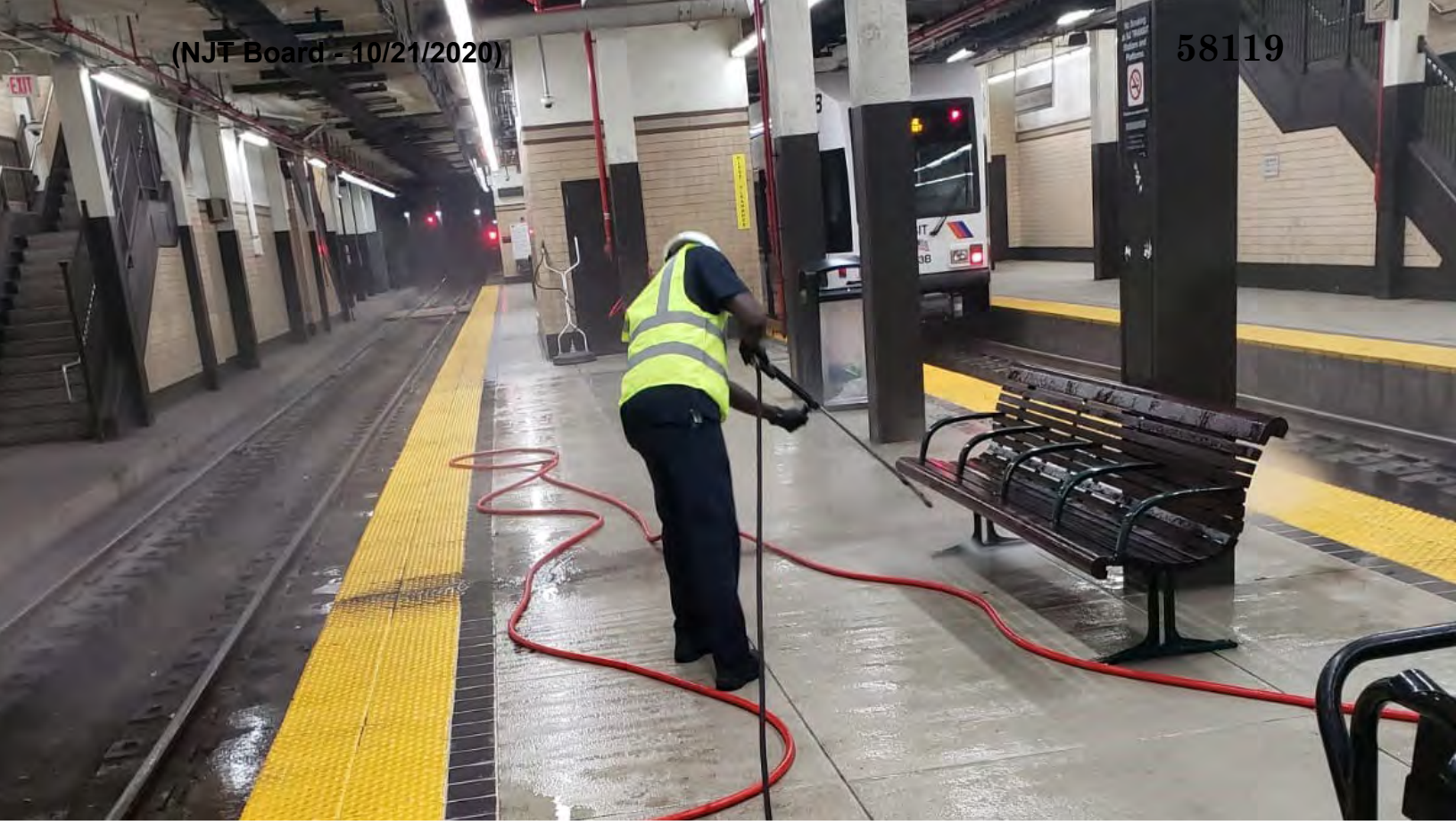
Light-rail systems would benefit from new vehicles, an overhaul of older vehicles, station improvements, and system expansion to provide service to areas with the potential for residential growth and job creation. There is emphasis on maintaining a clean reliable fleet.

Access Link

Access Link is our paratransit service for those with disabilities preventing them from accessing buses, trains and light-rail vehicles. In an effort to provide universal access to all State residents, the Capital Plan highlights opportunities to increase the size of the program to serve more customers by buying new vehicles, introducing new technology to better connect customers with rides, and acquiring new, larger facilities to house workers who dispatch the vehicles and to store and maintain the fleet.

Information Technology and Sustainability

Technology is the key to delivering more efficient and convenient transit service and moving the State forward. New technologies and innovations include zero-emission buses and the equipment to support them, software innovations that allow for the most efficient deployment of resources (such as bus dispatching, traffic signal timing controls, automation, remote diagnostics of mechanical issues, more frequent train service) and applications to directly address customer needs and provide more and better real-time information. These investments would focus on enhancing our systems' flexibility and adaptability



Partnerships

NJ TRANSIT is committed to working with all its stakeholders, customers, elected officials, and advocates, to coordinate transit improvements. These team efforts produce more attractive and sustainable transit-oriented developments that reduce costs, congestion and pollution, and use innovative methods of financing. NJ TRANSIT plans to pursue more public-private partnership and joint development opportunities, building on the success of transit-oriented development in Orange, Metuchen, Pleasantville and Rahway. The synergies resulting from these cooperative initiatives can generate sources of funding to sustain needed investment.

Pandemic Response

NJ TRANSIT is actively engaged in adapting its capital program to address the challenges posed by public health emergencies, such as the COVID-19 pandemic. These measures range from an evaluation of contactless fare payment to revisiting the way we design station interiors and vehicles to allow for passenger spacing and to facilitate more thorough cleaning of vehicles and other spaces.



THE CAPITAL PLAN BUILDS ON PROGRESS ALREADY IN MOTION

Since 2018, NJ TRANSIT has invested more in construction than it had in the preceding decade, creating thousands of construction jobs that reinvigorate communities, and building back up a system after over a decade of neglect.

Today, NJ TRANSIT is advancing over $2 billion in projects to prepare the agency to better withstand and recover from extreme weather events and to bring long neglected assets up to a state of good repair. Across the State, NJ TRANSIT is constructing new rail power substations, replacing power and signal cable, and rebuilding critical rail infrastructure. Superstorm Sandy resiliency work has quickly advanced and is drawing to a conclusion, including signal and power upgrades along the North Jersey Coast Line and at Hoboken Terminal. Construction work for the first contracts of both Long Slip Fill and Raritan River Bridge have been awarded. NJ TRANSIT has partnered with Public Service Electric & Gas to advance construction of a $232 million substation.

Development has already begun on the Innovation Challenge, which will leverage innovative technology and partnering approaches to deliver direct transit access from Secaucus Transfer to the Meadowlands sports, entertainment, and shopping complex.

Construction of the new ~$1.8 billion Portal North Bridge project is within reach, as NJ TRANSIT recently secured a medium-high rating from the Federal Transit Administration, moving the project closer to its next stage and a full funding grant agreement.

NJ TRANSIT is advancing Positive Train Control across its rail network. NJ TRANSIT reached a critical milestone in 2018, completing in a single year 88% of system-wide installations on vehicles and track. NJ TRANSIT entered the revenue service demonstration testing process this year and continues to move the project toward completion.

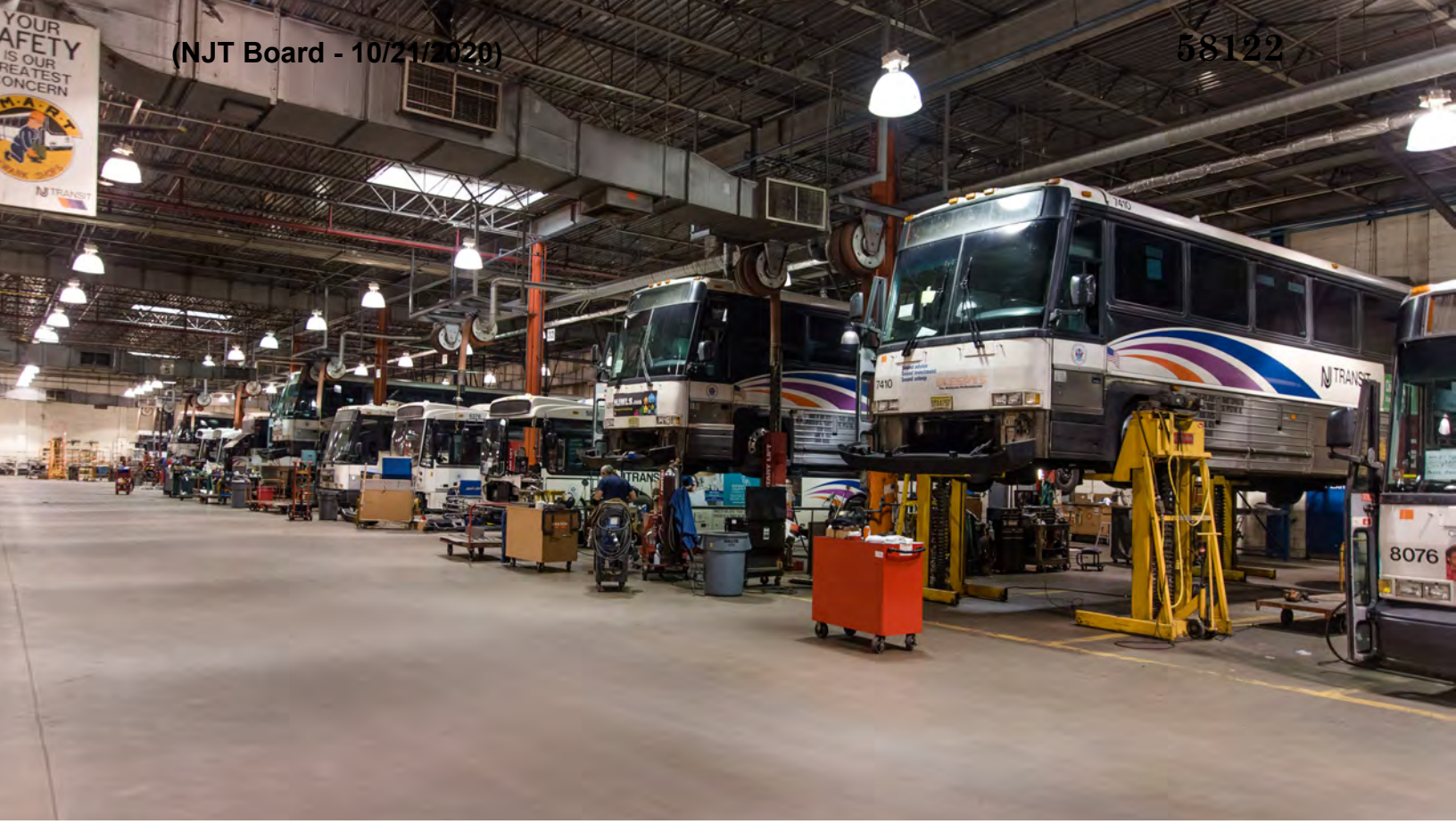


NJ TRANSIT is investing in equipment that will improve the customer experience. Some improvements are already visible. For example, NJ TRANSIT purchased 182 new cruiser buses last year, providing safer, quicker, and more comfortable rides to thousands of suburban commuters, and recently increased its fleet for the first time in more than a decade when it received delivery of new articulated buses, for use in primarily urban areas with dense populations and higher ridership. NJ TRANSIT is designing 113 next-generation multi-level rail cars. All of these fleet purchases will provide reliable, comfortable service with more customer amenities

Asset condition assessment and management are informing investment decisions. NJ TRANSIT is transitioning to a business model that uses transit asset condition to guide the optimal prioritization of funding, including:

- Completing condition assessments of all statewide, customer-facing stations and facilities;
- Preparing complete inventories and assessments of culverts, drainage structures, bridges, and other infrastructure;
- Creating and staffing an Enterprise Asset Management office to lead NJ TRANSIT's transition to a centralized, condition-focused system;
- Revising construction procurement terms to require that components are inventoried with useful life and other data when new projects are completed; and
- Launching a "State of Good Repair Program" to identify, track, and quickly respond to deteriorating conditions of our assets wherever they occur.

This Capital Plan is another step in NJ TRANSIT's transition away from addressing infrastructure needs on a reactive, ad hoc basis to a more comprehensive project identification and prioritization approach.



HIGHLIGHTS FROM THE CAPITAL PLAN - INVESTING IN OUR BUS NETWORK

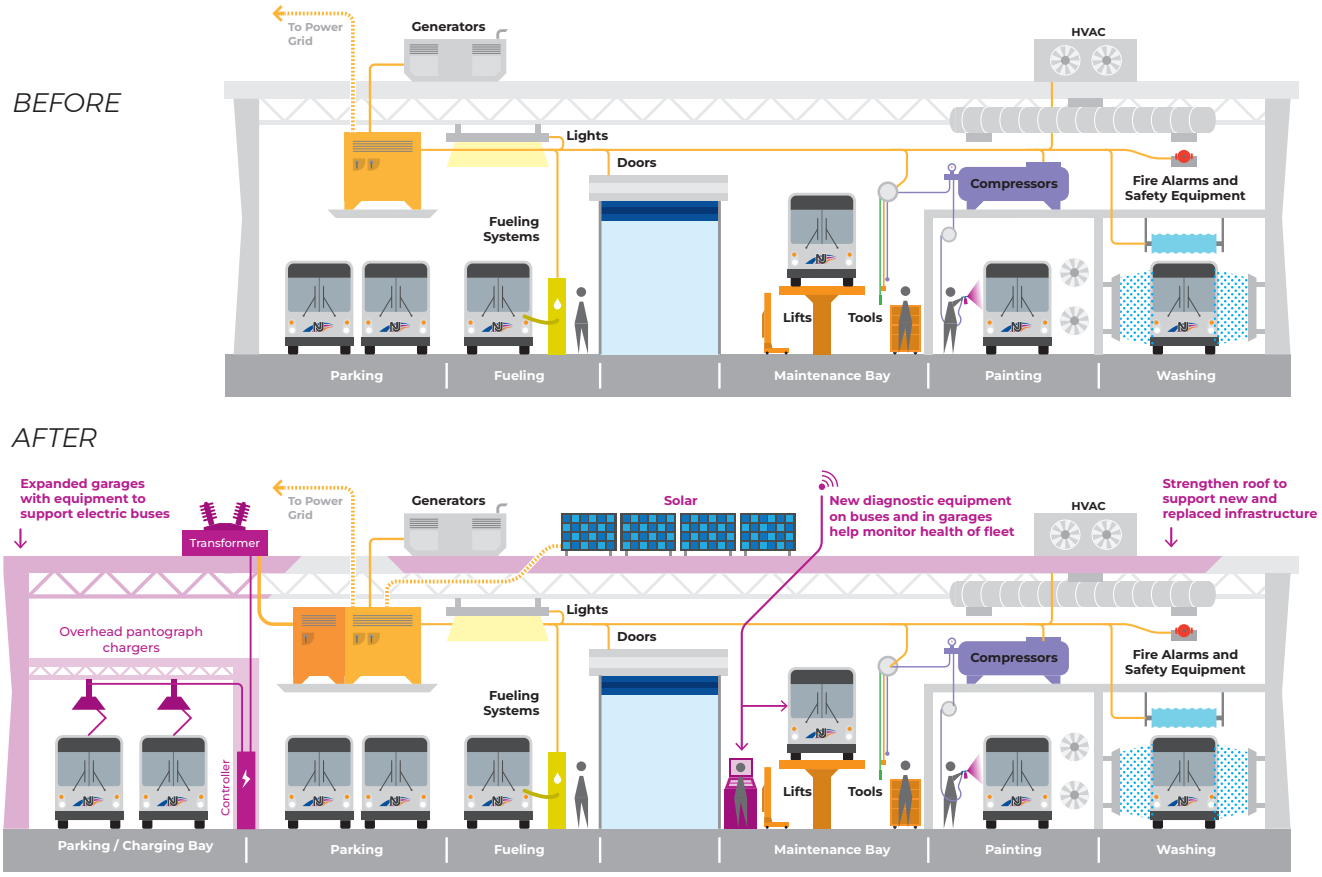
Buses are the most flexible and often the most cost-effective way to expand transit services. In New Jersey, they provide service over the largest geographic area because they are not limited by the extent of fixed tracks. Modifying or expanding bus service is often the most rapid way to support the economic growth of newly developed residential communities or commercial centers. This also assists in supporting demographic and economic growth in existing localities, building out new transportation corridors, and supporting state responses to natural disasters.

We are also looking to modernize our systems and facilities so that we can operate a modern fleet and public facilities that meet our customers' modern-day expectations. Most modernization involves investing in new technologies and infrastructure to prepare for electrification so that our fleet can become even more sustainable and lead in the fight against climate change.

As a part of this modernization effort, we would invest in the purchase of new buses that are easier to maintain and clean, a necessity that has been highlighted during the COVID-19 health crisis.

Improving and expanding bus service to meet demand and prepare for a zero-emission electrified fleet would involve more than simply buying more buses. Investments in bus service would focus on rehabilitating, expanding, and replacing critical system components to enable more reliable and efficient delivery of service to our customers. This would make for a safer, cleaner, faster, and more comfortable trip experience. To achieve this, investment would be required at all levels of the bus ecosystem.

FIGURE I-2: MODERNIZING THE BUS GARAGE ECOSYSTEM



MODERNIZING, ELECTRIFYING, AND EXPANDING OUR BUS GARAGES

NJ TRANSIT operates 16 bus garages, which house and maintain the 2,300+ bus fleet. Bus garages are the single most important component of the system to maintaining a healthy bus fleet. Garages are where buses are fueled (or, in the future, would be charged), and also where they are washed, cleaned, and repaired. They also serve as hubs for bus operations where functions such as dispatching, personnel management, and training occur (Figure i-2). Garages are never taken out of service for intensive building upgrades because of the critical role they play every day, and no new garage has been built since 2000, even as bus ridership has increased by approximately 20 percent.

Electrifying the next generation garage and fleet would improve air quality and health in neighboring communities by reducing bus emissions. A modernized garage would be a signal to industry and a model for how transit support facilities can fit in better with surrounding communities.

This would support the following goals:

Goal 1: Ensure the reliability and continued safety of our transit system

Goal 2: Deliver a high-quality experience for all our customers, with their entire journey in mind

Goal 4: Promote a more sustainable future for our planet

HIGHLIGHTS FROM THE CAPITAL PLAN - RAIL INFRASTRUCTURE CAPACITY ENHANCEMENTS AND REPLACEMENTS

Our rail system relies on many different infrastructure pieces to run effectively and smoothly. However, there are several key locations where specific pieces of infrastructure present operational challenges. These location-specific issues—which are present throughout the whole system—can lead to regular delays and inefficient service. Obsolete and now undersized river crossings negatively affect service throughout the rail system. Multiple bridges throughout the agency's system have long exceeded their useful lives. Problems on these bridges can, at times, lead to speed limit restrictions and subsequent delays. Drawbridges that remain stuck in the "up" position can also lead to service stoppages on lines throughout the system.

Significant investments need to be made to ensure these problems are fixed so the rail system could effectively serve customers. Without these investments, infrastructure issues throughout the system would only get worse. Delays would increase, and the system would not be able to accommodate needed service expansions to match our ridership increases. This means the system would never realize its full potential and would never be able to serve customers as reliably as it should.

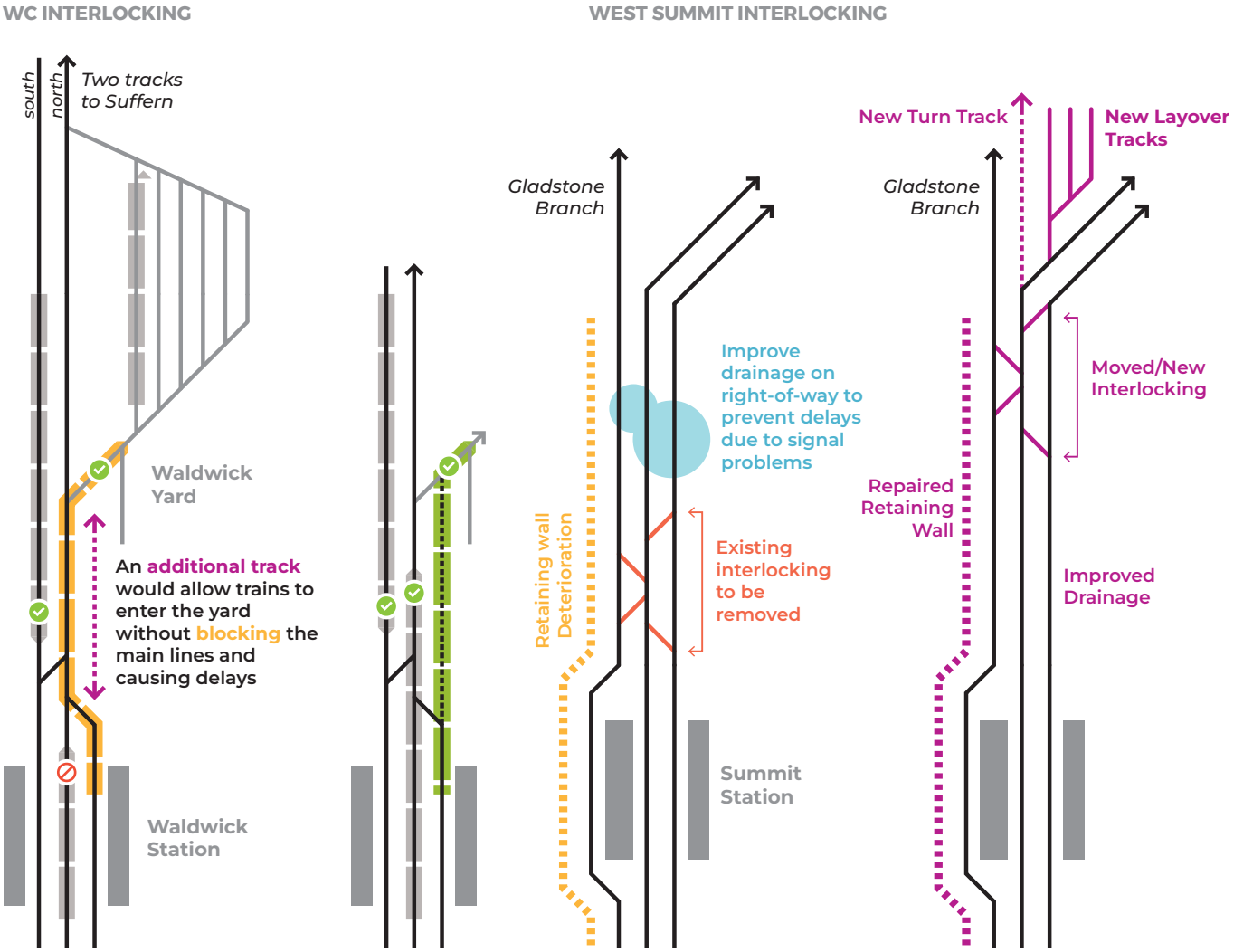
This Capital Plan has identified key areas where infrastructure upgrades would mitigate some of these pain points. Interlockings, retaining walls, bridges, signals, and other significant pieces of rail infrastructure would be upgraded and enhanced throughout the system. These capacity enhancements and replacements would help us provide more reliable service to customers—a critical piece of this Capital Plan's work.

A key piece of this work would involve prioritizing any upgrades to poorly configured interlockings that cause delays. Improvements to these problem interlockings would allow trains to better move unimpeded through the system, which would allow greater service flexibility and service enhancements throughout the system. A drainage improvement program would mitigate flooding issues at key locations and, thereby, improve service through these locations, as drainage issues often lead to false signal indications (and therefore lead to delays). Finally, flyover tracks would be installed at key locations to reduce current train conflicts and ease scheduling pressures. Trains that are forced to merge onto existing high-speed rail lines from yards or from other rail lines must often wait for trains traveling at high speeds to pass, which means they cannot travel freely and are often delayed. These flyovers would mitigate that problem.

Bridge improvements are also a significant part of our infrastructure improvement plan. New bridges would incorporate additional tracks where choke points currently inhibit ideal service. This would allow trains to move more efficiently through bridges where delays commonly occur. Rebuilt interlockings would reduce congestion and delays at locations where tracks cross or intersect.

Our train schedule currently is built around avoiding these existing infrastructure problems which severely limit the capacity of the system. This creates inefficiencies and prevents the system from meeting its full potential. This Capital Plan's recommended solutions would allow the rail system to grow in a logical way, would increase capacity, and would allow our rail system to provide more reliable and robust service.

FIGURE I-3: **INTERLOCKING IMPROVEMENTS CONCEPT DIAGRAMS**



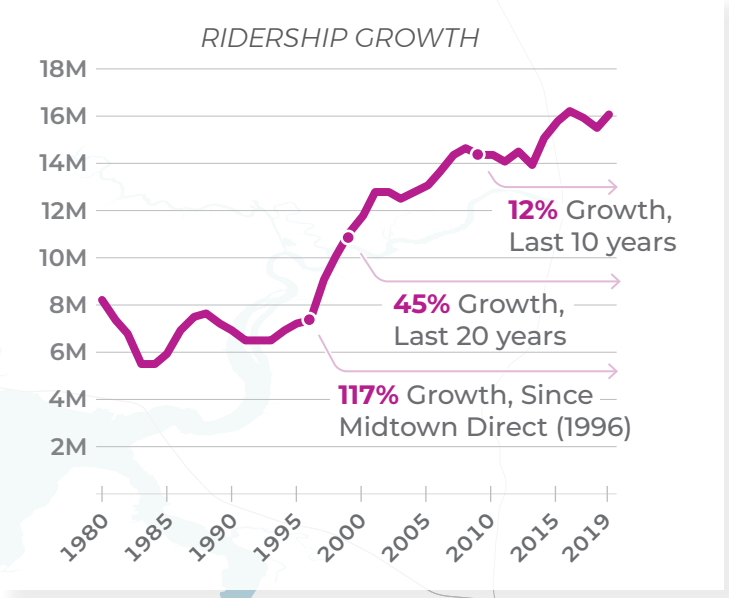
This would support the following goals:

Goal 1: Ensure the reliability and continued safety of our transit system

Goal 2: Deliver a high-quality experience for all our customers, with their entire journey in mind

Goal 3: Power a stronger and fairer New Jersey for all communities in the region

FIGURE I-5: **MORRIS & ESSEX LINE IMPROVEMENTS – HOLISTIC INVESTMENTS ACROSS ACROSS OUR FASTEST GROWING AND MOST CONGESTED LINE**



Berkeley Heights

Murray Hill

New Providence

Summit Interlocking

Millburn Interlocking

Maplewood

Newark Drawbridge
A new bridge would eliminate a bottleneck where the line is reduced from 3 to 2 tracks

Orange

Brick Church

Roseville Cut
A new fence and lighting here will improve safety and improved drainage will reduce delays due to signal problems.

Hoboken Terminal

Problems that need to be addressed along a single line compound to create bigger delays and become expensive to continually repair.

N

Yards

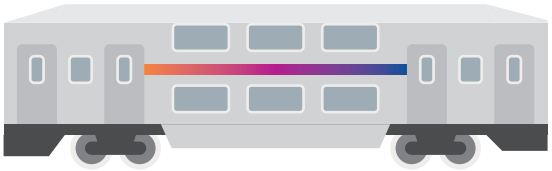
Yards updated with pedestal pit tracks for multilevel car maintenance.



Gladstone Yard

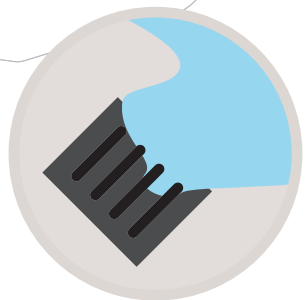
Port Morris Yard

Dover Yard and Interlocking



Multilevel Fleet (Systemwide)

Replacing the older passenger fleet with new Multilevel cars results in added comfort and reliability



Drainage

Improved drainage along track prevents signal problems that result in delays.

Station Accessibility Improvements

Add High Level Platforms (HLPs) along with access ramps and elevators. In addition to providing accessible boarding, high level platforms allow for safer and faster boarding for all customers.

Address any unsafe conditions or necessary repairs.

Additional accessible parking would be provided at stations.

Interlockings


ERIE
LACKAWANNA

HIGHLIGHTS FROM THE CAPITAL PLAN - HOBOKEN

Hoboken Terminal is a critical linchpin for NJ TRANSIT's system. The station's 17 tracks are the terminus for our Pascack Valley and Main/Bergen Lines, the Montclair Boonton Line, as well as many trains on the Morris & Essex Lines and select trains on the North Jersey Coast Line. A variety of rail infrastructure at or near the terminal site ensures our daily operations. A rail yard, a fueling facility, and other critical infrastructure pieces are nearby to help ensure service runs efficiently and smoothly. The station is also critical to our bus service; buses from Hoboken travel throughout Hudson County and into New York City. The Hudson-Bergen Light Rail stops at the terminal, and PATH service is also present there as well as ferry service.

Superstorm Sandy showed, in stark detail, the vulnerability the station faces. The storm surge associated with that storm flooded the station. The terminal was flooded with 5 feet of stormwater, and the station was closed for more than two months as repairs and restorations were made. The station remains vulnerable to similar threats in the future unless significant investments are made.

This Capital Plan would address this threat by making the station more resilient. We would elevate the station building to mitigate threats from potential storm surge, extreme weather events, and seasonal flooding. We would do this in a way that is sensitive to the existing historic character of the terminal building and to the surrounding area.

This would support the following goals:



Goal 1: Ensure the reliability and continued safety of our transit system



Goal 2: Deliver a high-quality experience for all our customers, with their entire journey in mind



Goal 3: Power a stronger and fairer New Jersey for all communities in the region

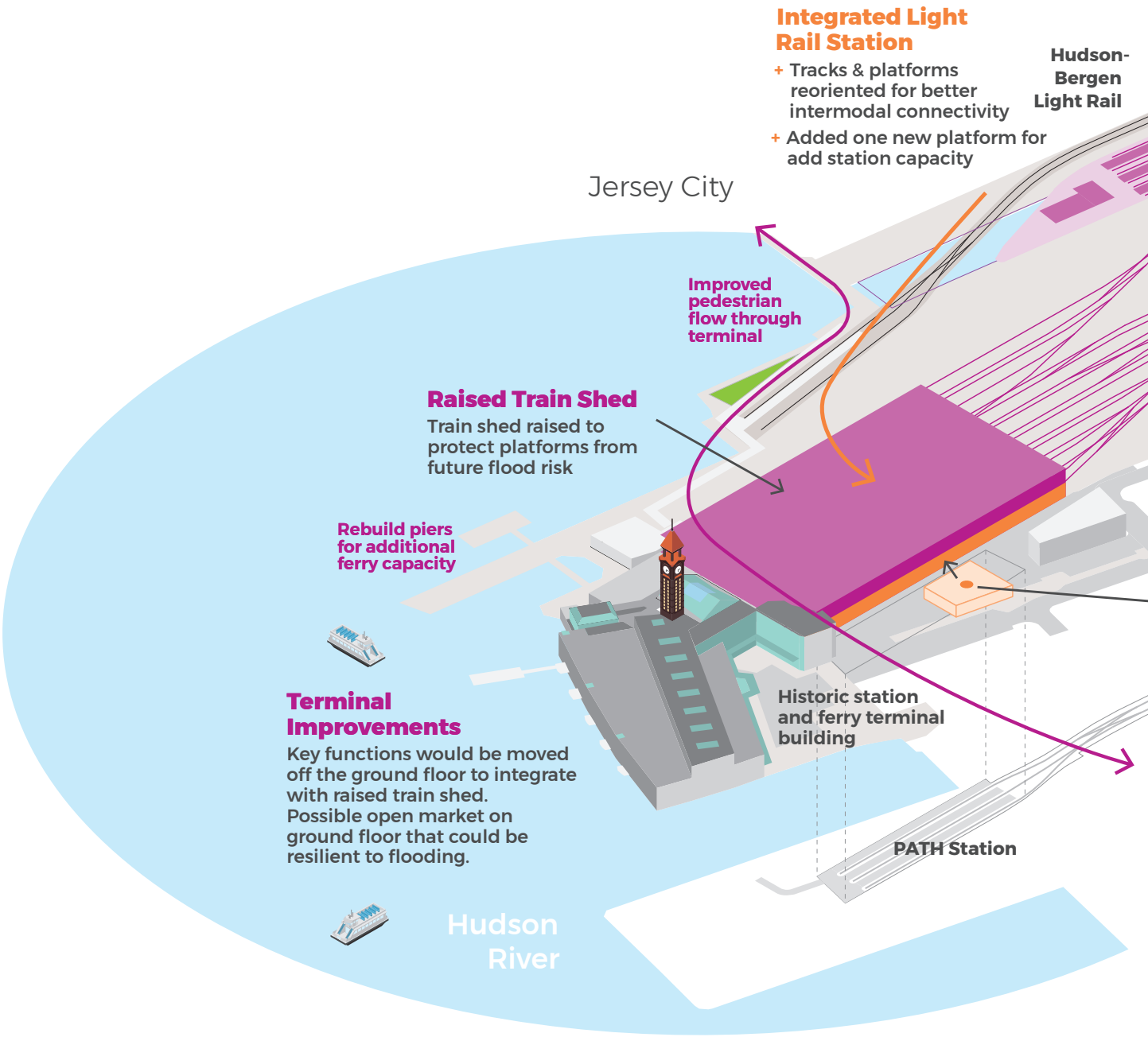


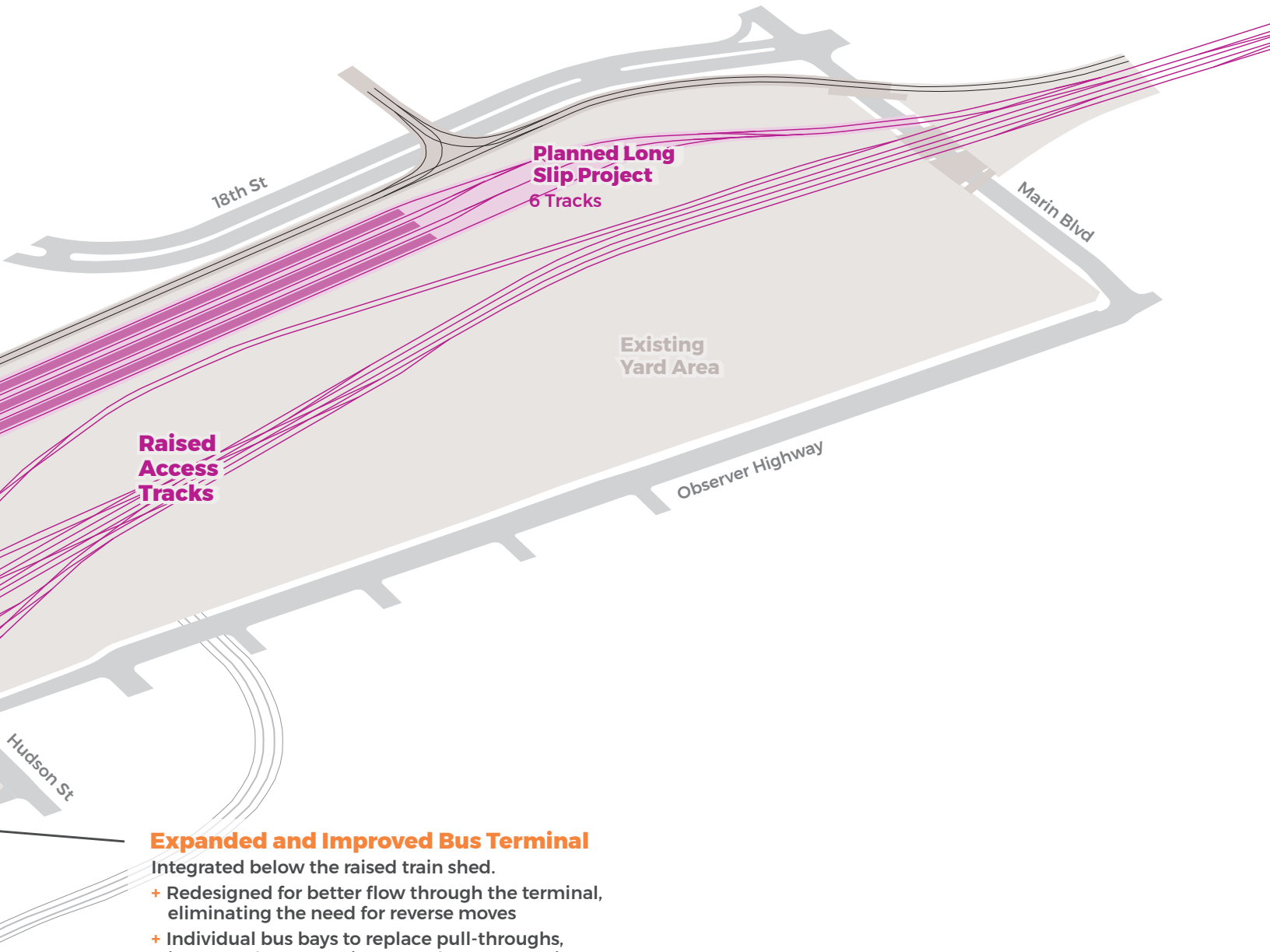
Goal 4: Promote a more sustainable future for our planet



Goal 5: Build an accountable, innovative and inclusive organization that delivers for New Jersey

FIGURE I-6: **THE VISION FOR AN IMPROVED HOBOKEN TERMINAL**





Expanded and Improved Bus Terminal

Integrated below the raised train shed.

+ Redesigned for better flow through the terminal, eliminating the need for reverse moves
+ Individual bus bays to replace pull-throughs, improves bus operations & makes gates easier to locate for customers

Hoboken


Time Destination Train Status Track
9:47 Port Jervis 45 Boarding 3
9:57 Spring Valley 1607 Pascack Valley 4
10:35 Ridgewood 1253 Bergen County 11
PLEASE NOTE TRACK CHANGE
10:36 Gladstone 415 Morris & Essex 16
10:38 Suffern 1111 Main 17
11:14 Spring Valley 1611 Pascack Valley 13
11:35 Ridgewood 1255 Bergen County 4
11:36 Gladstone 417 Morris & Essex 15
11:38 Suffern 1113 Main 9
WELCOME TO HOBOKEN TERMINAL. PLEA
"EWR" Indicates Train Service to Newark Int'l Airport Station
Time Destination
12:35 Ridgewood
12:36 Gladstone
12:38 Suffern
12:43 Spring Valley
1:13 Middletown NY
1:35 Waldwick
1:39 Gladstone
1:43 Suffern
1:50 Spring Valley
1:58 Dover
SE WATCH YOUR STEP .
"EWR" Indicates Train Service

Appendix A Unconstrained Financial Summary

A Five-Year Capital Plan is an unconstrained vision for NJ TRANSIT, identifying projects that are currently proceeding with funding already in place as well as projects that are not funded but vital to NJ TRANSIT's service delivery. This unconstrained plan will be used to help determine the priority of capital projects within any future constrained capital plan.

An amount of $5.78 billion in additional funding would be required over the next five years to implement the projects and other initiatives contemplated in this Plan. This funding need is above and beyond what NJ TRANSIT typically receives each year, and beyond the $811 million that NJ TRANSIT is requesting from the Federal Transit Administration for the Portal North Bridge Replacement Project.

A Five-Year Capital Plan is intended as a vision document – to demonstrate opportunities for service reliability, resiliency, sustainability, and other improvements critical to NJ TRANSIT. In this way, it does not serve as a budgeting document and NJ TRANSIT will separately present a constrained program as part of the annual appropriations process, which will be reflected in the Statewide Transportation Improvement Program and ultimately subject to the approval of the NJ State Legislature and NJ TRANSIT Board of Directors. Currently, NJ TRANSIT receives a funding appropriation of approximately $1.4 Billion per Fiscal Year. These appropriations are a combination of Federal, State and other sources.

In this way, *A Five-Year Capital Plan* represents an aspirational cash flow budget for both existing and proposed Capital Improvement Projects and Departmental Rehabilitation Projects, as expensed by Fiscal Year. As such, each project expense may be funded from a combination of previous, current and future capital funding appropriations in combination with federal grant opportunities. Undoubtedly, a Capital Plan of this magnitude will require a significant increase in funding resources. The appendix represents the magnitude of Capital Needs as well as the funding needs that will have to be generated to pay for this ambitious Plan.

This appendix is comprised of four summary tables:

Appendix A Table 1: Capital Plan Financial Summary – A summary sheet with aggregate values indicating existing funding versus the needed funding to implement this unconstrained capital plan.

Appendix A Table 2: Capital Plan: Major Projects and Programs Unconstrained Estimated Cash-flow Sheet – Features major capital improvements and plan highlights by mode and asset category.

Appendix A Table 3: Capital Plan: Rehabilitation Projects and Programs Unconstrained Estimated Cash-flow Sheet – Features State of Good Repair focused projects executed primarily by in-house forces.

Appendix A Table 4: Capital Plan: Other Existing NJ TRANSIT Program Items Estimated Cash-flow Sheet – Additional Capital Program items that reflect a variety of on-going commitments not reflected in the other summary sheets.

Appendix A: Unconstrained Financial Summary

Table 1 - Capital Plan Financial Summary

Appendix A Table 1: Capital Plan Financial Summary

($ in Millions)

CAPITAL PLAN FY2021-2025	FY2021	FY2022	FY2023	FY2024	FY2025	5 YEAR TOTAL
Major Projects and Programs Unconstrained Estimated Cash-flow (Portal Bridge Included)	1,238.02	2,046.70	2,139.17	2,342.13	2,753.54	10,519.57
Rehabilitation Projects and Programs Unconstrained Estimated Cash-flow	324.91	311.61	262.37	289.81	280.51	1469.21
Other Existing NJ TRANSIT Program Items Estimated Cash-flow Sheet	999.29	999.29	999.29	999.29	999.29	4,996.44
TOTAL CAPITAL PLAN	2,562.22	3,357.60	3,400.83	3,631.23	4,033.34	16,985.22
Existing Funding for Major Projects and Programs	593.81	879.21	871.10	933.52	969.41	4,247.06
Portal Bridge North Existing & Potential Future Funding	181.96	511.40	586.50	190.20	145.60	1615.66
Existing Funding for Rehabilitation Projects and Programs	66.14	70.34	70.57	70.57	71.13	348.75
Existing Funding for Other Existing NJ TRANSIT Program Items	999.29	999.29	999.29	999.29	999.29	4,996.44
TOTAL EXISTING AND POTENTIAL PORTAL NORTH FUNDING	1,841.20	2,460.24	2,527.46	2,193.58	2,185.43	11,207.91
FUNDING NEED FOR CAPITAL PLAN	721.02	897.36	873.37	1,437.65	1,847.91	5,777.31

Appendix A: Unconstrained Financial Summary

Table 2 - Capital Plan: Major Projects and Programs Unconstrained Estimated Cash-flow Sheet

Appendix A Table 2: Capital Plan:
Major Projects and Programs
Unconstrained Estimated Cash-flow Sheet

($ in Millions)

PROJECT CATEGORY	PROJECT NAME	TOTAL ESTIMATED PROJECT COSTS (2020 DOLLARS)	5-YEAR ESTIMATED TOTAL PROJECT COST	FY26-30 ESTIMATED TOTAL PROJECT COST	FY30+ ESTIMATED TOTAL PROJECT COST	PRIOR YEAR COMMITTED FUNDING (PRE FY21)	FY2021	FY2022	FY2023	FY2024	FY2025
BUS GARAGES		2,651.50	$1,005.00	$1,256.50	$390.00						
	Northern Bus Garage	536.00	536.00	0.00	0.00						
	Existing Funding	73.11	73.11	0.00	0.00		3.00	3.00	67.11		
	New Requested Funding	462.89	462.89	0.00	0.00				62.89	200.00	200.00
	Second Northern Bus Garage	392.00	19.00	373.00	0.00						
	New Requested Funding	392.00	19.00	373.00	0.00		2.00	1.00	1.00	1.00	14.00
	Bus Garage Modernization Program	1,115.00	443.00	574.00	98.00						
	New Requested Funding - Phase I	270.00	270.00	0.00	0.00		4.00	14.00	84.00	84.00	84.00
	New Requested Funding - Phase II	533.00	173.00	360.00	0.00			4.00	14.00	75.00	80.00
	New Requested Funding - Phase III	312.00	0.00	214.00	98.00						
	Bus Garage Replacement Program	608.50	7.00	309.50	292.00						
	New Requested Funding	608.50	7.00	309.50	292.00				3.00	2.00	2.00
BUS FLEET		7,000.33	$1,682.79	$1,206.00	$3,600.00						
	Bus Fleet Electrification Implementation Program	310.50	4.50	306.00	0.00						
	New Requested Funding	310.50	4.50	306.00	0.00			0.50	0.50	3.00	0.50
	Bus Fleet Replacement - Cruiser Buses*	897.00	386.00	0.00	0.00						
	Existing Funding: Cruiser Buses	897.00	386.00	0.00	0.00	511.00	185.00	195.00	6.00		
	Bus Fleet Replacement - Articulated Buses*	92.33	$91.79	$0.00	$0.00						
	Existing Funding	92.33	91.79	0.00	0.00	0.54	29.50	62.29			
	Bus Fleet Replacement Program	5,690.00	$1,190.00	$900.00	$3,600.00						
	Existing Funding: Annual Allocation	1,241.86	461.00	780.86	0.00				161.00	150.00	150.00
	New Requested Funding	4,448.14	729.00	119.14	3600.00		210.00	210.00	79.00	80.00	150.00
	Electric Bus Fleet Early Deployment	10.50	10.50	0.00	0.00						
	Existing Funding	10.50	10.50	0.00	0.00		6.79	3.71			
BUS INFRASTRUCTURE		1,347.05	$199.57	$1,039.00	$108.00						
	Walter Rand Transportation Center Redevelopment	274.97	14.47	260.50	0.00						
	Existing Funding	9.47	9.47	0.00	0.00		2.00	2.00	3.00	2.47	
	New Requested Funding	265.50	5.00	260.50	0.00		3.00	1.50	0.50		
	North Bergen Park & Ride Parking Garage	138.50	20.00	10.50	108.00						
	Existing Funding	10.53	10.53	0.00	0.00		10.53				
	New Requested Funding	127.97	9.47	10.50	108.00		8.47				1.00
	Old Bridge Park & Ride Enhancement	21.50	9.50	12.00	0.00						
	New Requested Funding	21.50	9.50	12.00	0.00		0.50	0.50	2.00	0.50	6.00
	Park & Ride Bus Shelter Modernization Program	75.00	40.00	35.00	0.00						
	New Requested Funding	75.00	40.00	35.00	0.00		1.00	4.00	1.00	16.00	18.00
	Local Bus Shelter Modernization Program	16.50	7.50	9.00	0.00						
	New Requested Funding	16.50	7.50	9.00	0.00		0.50	0.50	0.50	3.00	3.00
	Passaic Bus Terminal Redevelopment*	6.08	5.61	0.00	0.00						
	Existing Funding	5.61	5.61	0.00	0.00	0.47	0.50	2.00	3.11		
	Multimodal and Bus Terminal Facility Improvements	38.00	38.00	0.00	0.00						
	New Requested Funding	38.00	38.00	0.00	0.00		0.50	3.00	0.50	17.00	17.00
	New Brunswick Rapid Surface Transit Study	10.00	10.00	0.00	0.00						
	New Requested Funding	10.00	10.00	0.00	0.00			3.00	2.00	2.00	3.00
	Rapid Surface Transit System Development & Design Program	538.00	35.00	503.00	0.00						
	New Requested Funding	538.00	35.00	503.00	0.00		2.00	2.00	5.00	13.00	13.00
	Bergen County Bus Rapid Transit Network	168.00	14.00	154.00	0.00						
	New Requested Funding	168.00	14.00	154.00	0.00			2.00	2.00	5.00	5.00
	Princeton Transitway	60.50	5.50	55.00	0.00						
	New Requested Funding	60.50	5.50	55.00	0.00			0.50	1.00	2.00	2.00

PROJECT CATEGORY	PROJECT NAME	TOTAL ESTIMATED PROJECT COSTS (2020 DOLLARS)	5-YEAR ESTIMATED TOTAL PROJECT COST	FY26-30 ESTIMATED TOTAL PROJECT COST	FY30+ ESTIMATED TOTAL PROJECT COST	PRIOR YEAR COMMITTED FUNDING (PRE FY21)	FY2021	FY2022	FY2023	FY2024	FY2025
ACCESS LINK		109.50	$50.50	$6.00	$53.00						
	Access Link Fleet Modernization and Expansion	48.00	48.00	0.00	0.00						
	Existing Funding	42.00	42.00	0.00	0.00		3.00	11.00	12.00	11.00	5.00
	New Requested Funding	6.00	6.00	0.00	0.00						6.00
	Access Link Electric Vehicle (EV) Pilot Program	2.50	2.50	0.00	0.00						
	New Requested Funding	2.50	2.50	0.00	0.00		0.50	2.00			
	New Access Link Garage	59.00	0.00	6.00	53.00						
	New Requested Funding	59.00	0.00	6.00	53.00						
LIGHT RAIL		1,899.90	$322.50	$877.00	$690.00						
	RIVER LINE										
	River LINE Right-of-Way Flooding	1.00	1.00	0.00	0.00						
	New Requested Funding	1.00	1.00	0.00	0.00		0.50	0.50			
	River LINE Fleet Overhaul	85.00	85.00	0.00	0.00						
	Existing Funding - Overhaul Engine Repower	14.91	14.91	0.00	0.00		14.91				
	New Requested Funding	70.09	70.09	0.00	0.00		0.09	30.00	16.00	16.00	8.00
	NEWARK LIGHT RAIL										
	Newark Light Rail (NLR) Capacity Enhancement	32.50	32.50	0.00	0.00						
	New Requested Funding	32.50	32.50	0.00	0.00		0.50	2.00	15.00	15.00	
	NLR - Station Modernization & Access Program	130.00	93.00	37.00	0.00						
	Existing Funding	3.40	3.40	0.00	0.00		2.00	1.40			
	New Requested Funding	126.60	89.60	37.00	0.00			6.60	2.00	37.00	44.00
	HUDSON-BERGEN LIGHT RAIL										
	Hudson-Bergen Light Rail (HBLR) Hoboken WYE Bypass	89.00	8.00	81.00	0.00						
	New Requested Funding	89.00	8.00	81.00	0.00				2.00	3.00	3.00
	Hudson-Bergen Light Rail (HBLR) Northern Branch Corridor	1,178.00	20.00	468.00	690.00						
	Existing Funding	100.00	20.00	80.00	0.00				8.00	6.00	6.00
	New Requested Funding	1,078.00	0.00	388.00	690.00						
	Hudson-Bergen Light Rail (HBLR) Route 440 Extension*	248.40	70.00	168.00	0.00						
	Existing Funding	27.92	17.52	0.00	0.00	10.40	3.00	7.00	7.00	0.52	
	New Requested Funding	220.48	52.48	168.00	0.00					1.48	51.00
	Paterson Avenue Grade Crossing Elimination	136.00	13.00	123.00	0.00						
	New Requested Funding	136.00	13.00	123.00	0.00		1.00	1.00	1.00	5.00	5.00
RAIL FLEET		3,601.85	$2,048.95	$1,517.90	$35.00						
	Rail Fleet Replacement - Phase I - Overhaul	1,110.00	650.00	425.00	35.00						
	New Requested Funding	1,110.00	650.00	425.00	35.00			110.00	190.00	190.00	160.00
	Rail Fleet Replacement - Phase II - New Car Purchases	2,413.85	1320.95	1092.90	0.00						
	Existing Funding	2,274.25	1320.95	953.30	0.00		109.25	286.50	219.40	349.20	356.60
	New Requested Funding	139.60	0.00	139.60	0.00						
	Train Battery Pilot	46.00	46.00	0.00	0.00						
	New Requested Funding	46.00	46.00	0.00	0.00			9.00	1.00	18.00	18.00
	Machine Vision Implementation Program	32.00	32.00	0.00	0.00						
	New Requested Funding	32.00	32.00	0.00	0.00		0.50	1.00	0.50	15.00	15.00

PROJECT CATEGORY	PROJECT NAME	TOTAL ESTIMATED PROJECT COSTS (2020 DOLLARS)	5-YEAR ESTIMATED TOTAL PROJECT COST	FY26-30 ESTIMATED TOTAL PROJECT COST	FY30+ ESTIMATED TOTAL PROJECT COST	PRIOR YEAR COMMITTED FUNDING (PRE FY21)	FY2021	FY2022	FY2023	FY2024	FY2025
		10,205.21	$2,353.17	$4,471.98	$3,271.50						
	Bridges										
	Raritan River Bridge Replacement*	595.00	494.81	32.68	0.00						
	Existing Funding	595.00	494.81	32.68	0.00	67.51	71.22	114.18	110.02	106.29	93.10
	Overhead Bridge Replacement Program	845.50	85.50	200.00	560.00						
	New Requested Funding	845.50	85.50	200.00	560.00		0.50	1.00	4.00	40.00	40.00
	Newark Draw Bridge Replacement & Capacity Enhancement	676.00	47.00	544.00	85.00						
	New Requested Funding	676.00	47.00	544.00	85.00		3.00	3.00	3.00	19.00	19.00
	Undergrade Bridge Replacement Program	1,903.00	193.00	450.00	1260.00						
	New Requested Funding	1,903.00	193.00	450.00	1260.00		2.00	2.00	9.00	90.00	90.00
	South Laurel Ave Bridge Replacement & Clearance Improvement	46.50	18.50	28.00	0.00						
	New Requested Funding	46.50	18.50	28.00	0.00		0.50	2.00	2.00	1.00	13.00
	Brielle Draw Bridge Replacement & Capacity	204.00	15.00	189.00	0.00						
	Existing Funding	9.00	9.00	0.00	0.00		1.00	1.00	1.00	6.00	
	New Requested Funding	195.00	6.00	189.00	0.00						6.00
	HX Draw Bridge Replacement	269.00	4.00	18.00	247.00						
	New Requested Funding	269.00	4.00	18.00	247.00					2.00	2.00
	Upper Hack Lift Bridge Capacity Enhancement	267.00	4.00	94.00	169.00						
	New Requested Funding	267.00	4.00	94.00	169.00					2.00	2.00
	Shark River Draw Bridge Replacement	170.00	0.00	2.00	168.00						
	New Requested Funding	170.00	0.00	2.00	168.00						
	West Front Street Bridge Replacement Study	2.00	0.00	2.00	0.00						
	New Requested Funding	2.00	0.00	2.00	0.00						
	Morgan Draw Bridge Replacement	236.00	0.00	17.00	219.00						
	New Requested Funding	236.00	0.00	17.00	219.00						
	Signals & Interlockings										
	WC interlocking Reconfiguration	13.00	13.00	0.00	0.00						
	New Requested Funding	13.00	13.00	0.00	0.00		0.50	1.00	0.50	6.00	5.00
	West Summit Interlocking	96.50	56.50	40.00	0.00						
	Existing Funding: Phase I	52.00	52.00	0.00	0.00		1.00	29.00	22.00		
	Existing Funding: Phase II - Wall Repair & Drainage	16.00	4.50	11.50	0.00				1.00	3.00	0.50
	New Requested Funding	28.50	0.00	28.50	0.00						
	Millburn Interlocking Reconfiguration	111.00	3.00	82.00	26.00						
	New Requested Funding	111.00	3.00	82.00	26.00				1.00	1.00	1.00
	Dover Interlocking Reconfiguration Study	1.00	1.00	0.00	0.00						
	New Requested Funding	1.00	1.00	0.00	0.00		0.50	0.50			
	New Interlocking between Glen and Cedar Interlockings	13.50	2.00	11.50	0.00						
	New Requested Funding	13.50	2.00	11.50	0.00				0.50	0.50	1.00
	Newark Penn Station										
	Newark Penn Station Rehabilitation	454.00	9.00	305.00	140.00						
	New Requested Funding	454.00	9.00	305.00	140.00				3.00	3.00	3.00
	Stations										
	Newark Penn Station Platform D Improvements	26.30	5.60	20.70	0.00						
	Existing Funding	26.30	5.60	20.70	0.00		0.60	0.60	0.60	0.60	3.20
	Trenton Station Improvements	49.00	0.00	4.50	44.50						
	New Requested Funding	49.00	0.00	4.50	44.50						
	Regional Rail Station Modernization & Access Program	790.00	138.00	652.00	0.00						
	Existing Funding	48.09	48.09	0.00	0.00		4.00	4.00	19.00	19.00	2.09
	New Requested Funding	741.91	89.91	652.00	0.00						89.91
	Lyndhurst Station	28.00	28.00	0.00	0.00						
	Existing Funding	28.00	28.00	0.00	0.00		2.00	1.00	8.00	11.00	6.00
	Roselle Park Station Improvements	23.20	23.20	0.00	0.00						
	Existing Funding	23.20	23.20	0.00	0.00		0.60	0.60	5.80	9.60	6.60
	Edison Station Improvements	35.50	13.50	22.00	0.00						
	Existing Funding	13.50	13.50	0.00	0.00		0.50	1.00	1.00	1.00	10.00
	New Requested Funding	22.00	0.00	22.00	0.00						
	Elizabeth Station Improvements	53.69	53.69	0.00	0.00						
	Existing Funding	53.69	53.69	0.00	0.00		28.86	24.83			
	Jersey Avenue Station	238.00	2.00	116.00	120.00						
	New Requested Funding	238.00	2.00	116.00	120.00						2.00
	Metuchen Station Improvements	31.00	12.00	19.00	0.00						
	New Requested Funding	31.00	12.00	19.00	0.00		0.50	1.00	1.00	0.50	9.00
	New Brunswick Station Improvements	13.40	13.40	0.00	0.00						
	Existing Funding	13.40	13.40	0.00	0.00		0.50	2.00	2.00	1.00	7.90
	North Elizabeth Station Improvements	32.00	12.00	20.00	0.00						
	Existing Funding	2.08	2.08	0.00	0.00		0.50	1.00	0.58		
	New Requested Funding	29.92	9.92	20.00	0.00				0.42	0.50	9.00
	North Brunswick Station	160.00	118.00	42.00	0.00						
	Existing Funding	50.00	50.00	0.00	0.00		2.50	5.00	5.00	25.00	12.50
	New Requested Funding	110.00	68.00	42.00	0.00					20.00	48.00

RAIL INFRASTRUCTURE

PROJECT CATEGORY	PROJECT NAME	TOTAL ESTIMATED PROJECT COSTS (2020 DOLLARS)	5-YEAR ESTIMATED TOTAL PROJECT COST	FY26-30 ESTIMATED TOTAL PROJECT COST	FY30+ ESTIMATED TOTAL PROJECT COST	PRIOR YEAR COMMITTED FUNDING (PRE FY21)	FY2021	FY2022	FY2023	FY2024	FY2025
RAIL INFRASTRUCTURE	Track and Yards										
	Roseville Cut Improvements	111.00	33.00	78.00	0.00						
	New Requested Funding	111.00	33.00	78.00	0.00		2.00	4.00	4.00	1.00	22.00
	Morristown Yard and Pocket Track	148.00	10.00	138.00	0.00						
	New Requested Funding	148.00	10.00	138.00	0.00		2.00	1.00	1.00	1.00	5.00
	Delco Lead*	246.00	203.30	19.70	0.00						
	Existing Funding	246.00	203.30	19.70	0.00	23.00	13.85	51.25	50.60	49.85	37.75
	County Yard Expansion*	135.00	102.95	14.00	0.00						
	Existing Funding	135.00	102.95	14.00	0.00	18.05	9.95	13.40	28.60	28.00	23.00
	Small Yards Rehabilitation Program	449.00	46.00	203.00	200.00						
	Existing Funding	14.20	14.20	0.00	0.00		1.00	2.00	7.00	2.00	2.20
	New Requested Funding	434.80	31.80	203.00	200.00						31.80
	Modify Lyons Siding on Gladstone Line	11.00	0.00	2.00	9.00						
	New Requested Funding	11.00	0.00	2.00	9.00						
	New Boonton Yard	39.50	0.00	15.50	24.00						
	New Requested Funding	39.50	0.00	15.50	24.00						
	Midline Loop	306.00	22.00	284.00	0.00						
	Existing Funding	5.45	5.45	0.00	0.00		2.00	2.00	1.45		
	New Requested Funding	300.55	16.55	284.00	0.00				0.55	8.00	8.00
	Hunter Flyover	300.00	15.00	285.00	0.00						
	Existing Funding	0.50	0.50	0.00	0.00		0.50				
	New Requested Funding	299.50	14.50	285.00	0.00		0.50	1.00	1.00	6.00	6.00
	Distribution, Transmission, Power										
	Rail Electric Traction Substation Assessment	8.73	8.73	0.00	0.00						
	New Requested Funding	8.73	8.73	0.00	0.00		0.87	2.62	2.62	2.62	
	New Graw Signal Substation	20.00	0.50	19.50	0.00						
	New Requested Funding	20.00	0.50	19.50	0.00						0.50
	Suffern Substation and Crew Quarters	21.00	21.00	0.00	0.00						
	New Requested Funding	21.00	21.00	0.00	0.00		0.50	1.00	0.50	11.00	8.00
	Wood to Steel Pole Conversion on Gladstone Branch	81.00	56.00	25.00	0.00						
	New Requested Funding	81.00	56.00	25.00	0.00		1.00	3.00	2.00	25.00	25.00
	Electric Traction Storage Facility	25.50	14.50	11.00	0.00						
	New Requested Funding	25.50	14.50	11.00	0.00		0.50	0.50	2.00	0.50	11.00
	NJ TRANSITGRID	577.40	421.00	156.40	0.00						
	Existing Funding	577.40	421.00	156.40	0.00		38.00	15.00	58.00	104.00	206.00
	Crew Facilities										
	New Signal Crew Facilities	11.00	4.50	6.50	0.00						
	New Requested Funding: Phase I - Kingsland Rehab	2.50	2.50	0.00	0.00		0.50	0.50	0.50	0.50	0.50
	New Requested Funding: Phase II - New Essay Signal Facility	8.50	2.00	6.50	0.00			0.50	0.50	0.50	0.50
	Auxiliary Transit Operations Facility	130.50	10.50	120.00	0.00						
	New Requested Funding	130.50	10.50	120.00	0.00		1.00	0.50	0.50	0.50	8.00
	Red Bank Crew Quarters Replacement	7.00	2.00	5.00	0.00						
	New Requested Funding	7.00	2.00	5.00	0.00			0.50	0.50	0.50	0.50
	Northern MOW Facility	39.50	3.50	36.00	0.00						
	Existing Funding	10.00	3.50	6.50	0.00		0.50	0.50	1.00	1.00	0.50
	New Requested Funding	29.50	0.00	29.50	0.00						
	Tunnels										
	Bergen Tunnel South Tube Rehabilitation	155.00	13.00	142.00	0.00						
	New Requested Funding	155.00	13.00	142.00	0.00		1.00	2.00	4.00	4.00	2.00
RAIL EXPANSION		1,845.00	$0.00	$20.00	$1,825.00						
	Third Track Between Waldwick to Suffern	619.00	0.00	0.00	619.00						
	New Requested Funding	619.00	0.00	0.00	619.00						
	Lehigh Third and Fourth Tracks	752.00	0.00	0.00	752.00						
	New Requested Funding	752.00	0.00	0.00	752.00						
	Westbound Waterfront Connector	474.00	0.00	20.00	454.00						
	New Requested Funding	474.00	0.00	20.00	454.00						

PROJECT CATEGORY	PROJECT NAME	TOTAL ESTIMATED PROJECT COSTS (2020 DOLLARS)	5-YEAR ESTIMATED TOTAL PROJECT COST	FY26-30 ESTIMATED TOTAL PROJECT COST	FY30+ ESTIMATED TOTAL PROJECT COST	PRIOR YEAR COMMITTED FUNDING (PRE FY21)	FY2021	FY2022	FY2023	FY2024	FY2025
REGIONAL TRANSIT PROJECTS		8,806.02	$2,164.66	$4,515.46	$2,109.00						
	Northeast Corridor										
	Portal Bridge North	1,872.62	1615.66	256.96	0.00						
	Potential Future Funding (EDA, Amtrak, FTA CIG, CMAQ, TTF)	1,872.62	1615.66	256.96	0.00		181.96	511.40	586.50	190.20	145.60
	Portal Bridge South Capacity Enhancement	431.00	0.00	4.00	427.00						
	New Requested Funding	431.00	0.00	4.00	427.00						
	Penn Station New York										
	Penn Station New York – NJ TRANSIT Access Improvement	340.00	23.00	317.00	0.00						
	Existing Funding	6.23	6.23	0.00	0.00		3.00	2.00	1.23		
	New Requested Funding	333.77	16.77	317.00	0.00				0.77	8.00	8.00
	Hoboken Terminal And Yard Resilient Redevelopment Program										
	Hoboken Terminal And Yard Resilient Redevelopment Program - Phase I**	257.00	174.50	82.50	0.00						
	New Requested Funding	257.00	174.50	82.50	0.00		8.00	9.50	32.00	58.00	67.00
	Hoboken Terminal And Yard Resilient Redevelopment Program - Phase II	2,900.00	86.00	1714.00	1100.00						
	New Requested Funding	2,900.00	86.00	1714.00	1100.00		14.00	7.00	7.00	7.00	51.00
	Hoboken Long Slip*	195.40	176.50	2.00	0.00						
	Existing Funding	195.40	176.50	2.00	0.00	16.90	21.00	24.00	53.00	42.50	36.00
	Gateway										
	Gateway Storage Yard and Hudson Tunnel Design	2,396.00	72.00	1824.00	500.00						
	Existing Funding	13.44	13.44	0.00	0.00		12.00	1.44			
	New Requested Funding	2,382.56	58.56	1824.00	500.00			4.56	6.00	6.00	42.00
	New Jersey Ferry Fleet Improvements	414.00	17.00	315.00	82.00						
	New Requested Funding	414.00	17.00	315.00	82.00			3.00	2.00	2.00	10.00

PROJECT CATEGORY	PROJECT NAME	TOTAL ESTIMATED PROJECT COSTS (2020 DOLLARS)	5-YEAR ESTIMATED TOTAL PROJECT COST	FY26-30 ESTIMATED TOTAL PROJECT COST	FY30+ ESTIMATED TOTAL PROJECT COST	PRIOR YEAR COMMITTED FUNDING (PRE FY21)	FY2021	FY2022	FY2023	FY2024	FY2025
IT, INNOVATION, AND TRANSPORT NETWORK IMPROVEMENTS		700.43	$692.43	$8.00	$0.00						
	Public Transportation Health & Safety Improvement Program	156.00	156.00	0.00	0.00						
	New Requested Funding	156.00	156.00	0.00	0.00		39.00	38.00	35.00	22.00	22.00
	Information & Digital Technologies										
	Comprehensive Transit Trip Planner App	3.00	3.00	0.00	0.00						
	New Requested Funding	3.00	3.00	0.00	0.00		1.00	2.00			
	NJT Mobile App Development	10.00	10.00	0.00	0.00						
	New Requested Funding	10.00	10.00	0.00	0.00		2.00	2.00	2.00	2.00	2.00
	IT Business Unit Improvements	103.00	103.00	0.00	0.00						
	New Requested Funding	103.00	103.00	0.00	0.00		35.00	35.00	11.00	11.00	11.00
	IT HQ Improvements	65.00	65.00	0.00	0.00						
	New Requested Funding	65.00	65.00	0.00	0.00		22.00	22.00	7.00	7.00	7.00
	IT Surface Transit Improvements	148.00	148.00	0.00	0.00						
	New Requested Funding	148.00	148.00	0.00	0.00		41.00	52.00	20.00	20.00	15.00
	IT Rail Improvements	53.00	53.00	0.00	0.00						
	New Requested Funding	53.00	53.00	0.00	0.00		23.00	18.00	6.00	3.00	3.00
	Surface Transportation Technology Innovation Program	20.00	20.00	0.00	0.00						
	New Requested Funding	20.00	20.00	0.00	0.00		4.00	4.00	4.00	4.00	4.00
	Low Speed AV Pilot	8.00	8.00	0.00	0.00						
	New Requested Funding	8.00	8.00	0.00	0.00		3.00	5.00			
	Enterprise Asset Management & Planning										
	Enterprise Asset Management: Facility Inspections FY21 – FY23	8.73	8.73	0.00	0.00						
	Existing Funding	8.73	8.73	0.00	0.00		2.91	2.91	2.91		
	Enterprise Asset Management PMO	8.20	8.20	0.00	0.00						
	Existing Funding	8.20	8.20	0.00	0.00		2.67	2.91	1.02	0.81	0.80
	Updated Planning Studies	5.00	5.00	0.00	0.00						
	New Requested Funding	5.00	5.00	0.00	0.00		1.00	1.00	1.00	1.00	1.00
	Stations and Public Facility Priority Repairs										
	SoGR Program	100.00	100.00	0.00	0.00						
	Existing Funding	18.41	18.41	0.00	0.00		3.68	3.68	3.68	3.68	3.68
	New Requested Funding	81.59	81.59	0.00	0.00		16.32	16.32	16.32	16.32	16.32
	Local Police Shelter Implementation Program	12.50	$4.50	$8.00	$0.00						
	New Requested Funding	12.50	$4.50	$8.00	$0.00		0.50	0.50	1.00	0.50	2.00
	Total Estimated Project Costs		$10,519.57	$14,917.84	$12,081.50		$1,238.02	$2,046.70	$2,139.17	$2,342.13	$2,753.54
	Existing Funding & Potential Future Portal Bridge Funding		5,862.72	2,334.60	-		775.77	1,390.61	1,457.60	1,123.72	1,115.01
	FUNDING NEED FOR MAJOR PROJECTS AND PROGRAMS		4,656.85	12,583.24	12,081.50		462.25	656.09	681.57	1,218.41	1,638.53

*	Project Costs for Regional Transit Projects (include costs before 2020) 5-YEAR Estimated cost does not include Prior Year Comitted Funding (Pre FY21)

Appendix A Table 2: Capital Plan:
Major Projects and Programs
Unconstrained Estimated Cash-flow Sheet

($ in Millions)

PROJECT CATEGORY	PROJECT NAME	TOTAL ESTIMATED PROJECT COSTS (2020 DOLLARS)	5-YEAR ESTIMATED TOTAL PROJECT COST	FY26-30 ESTIMATED TOTAL PROJECT COST	FY30+ ESTIMATED TOTAL PROJECT COST	FY2026	FY2027	FY2028	FY2029	FY2030	Beyond 2030
BUS GARAGES		2,651.50	$1,005.00	$1,256.50	$390.00						
	Northern Bus Garage	536.00	536.00	0.00	0.00						
	Existing Funding	73.11	73.11	0.00	0.00						
	New Requested Funding	462.89	462.89	0.00	0.00						
	Second Northern Bus Garage	392.00	19.00	373.00	0.00						
	New Requested Funding	392.00	19.00	373.00	0.00	3.0	92.0	139.0	139.0		
	Bus Garage Modernization Program	1,115.00	443.00	574.00	98.00						
	New Requested Funding - Phase I	270.00	270.00	0.00	0.00						
	New Requested Funding - Phase II	533.00	173.00	360.00	0.00	120.0	120.0	120.0			
	New Requested Funding - Phase III	312.00	0.00	214.00	98.00		4.0	14.0	98.0	98.0	98.00
	Bus Garage Replacement Program	608.50	7.00	309.50	292.00						
	New Requested Funding	608.50	7.00	309.50	292.00	17	0.5	66	96	130	292.00
BUS FLEET		7,000.33	$1,682.79	$1,206.00	$3,600.00						
	Bus Fleet Electrification Implementation Program	310.50	4.50	306.00	0.00						
	New Requested Funding	310.50	4.50	306.00	0.00	93	120	93			
	Bus Fleet Replacement - Cruiser Buses*	897.00	386.00	0.00	0.00						
	Existing Funding: Cruiser Buses	897.00	386.00	0.00	0.00						
	Bus Fleet Replacement - Articulated Buses*	92.33	$91.79	$0.00	$0.00						
	Existing Funding	92.33	91.79	0.00	0.00						
	Bus Fleet Replacement Program	5,690.00	$1,190.00	$900.00	$3,600.00						
	Existing Funding: Annual Allocation	1,241.86	461.00	780.86	0.00	150.0	150.0	160.3	160.3	160.3	
	New Requested Funding	4,448.14	729.00	119.14	3600.00	0.0	0.0	39.7	39.7	39.7	3,600.00
	Electric Bus Fleet Early Deployment	10.50	10.50	0.00	0.00						
	Existing Funding	10.50	10.50	0.00	0.00						
BUS INFRASTRUCTURE		1,347.05	$199.57	$1,039.00	$108.00						
	Walter Rand Transportation Center Redevelopment	274.97	14.47	260.50	0.00						
	Existing Funding	9.47	9.47	0.00	0.00						
	New Requested Funding	265.50	5.00	260.50	0.00	17.5	3.0	100.0	100.0	40.0	
	North Bergen Park & Ride Parking Garage	138.50	20.00	10.50	108.00						
	Existing Funding	10.53	10.53	0.00	0.00						
	New Requested Funding	127.97	9.47	10.50	108.00	0.5	0.5	0.5	7.0	2.0	108.00
	Old Bridge Park & Ride Enhancement	21.50	9.50	12.00	0.00						
	New Requested Funding	21.50	9.50	12.00	0.00	7.0	5.0				
	Park & Ride Bus Shelter Modernization Program	75.00	40.00	35.00	0.00						
	New Requested Funding	75.00	40.00	35.00	0.00	17.0	18.0				
	Local Bus Shelter Modernization Program	16.50	7.50	9.00	0.00						
	New Requested Funding	16.50	7.50	9.00	0.00	3.0	3.0	3.0			
	Passaic Bus Terminal Redevelopment*	6.08	5.61	0.00	0.00						
	Existing Funding	5.61	5.61	0.00	0.00						
	Multimodal and Bus Terminal Facility Improvements	38.00	38.00	0.00	0.00						
	New Requested Funding	38.00	38.00	0.00	0.00						
	New Brunswick Rapid Surface Transit Study	10.00	10.00	0.00	0.00						
	New Requested Funding	10.00	10.00	0.00	0.00						
	Rapid Surface Transit System Development & Design Program	538.00	35.00	503.00	0.00						
	New Requested Funding	538.00	35.00	503.00	0.00	3.0	110.0	140.0	140.0	110.0	
	Bergen County Bus Rapid Transit Network	168.00	14.00	154.00	0.00						
	New Requested Funding	168.00	14.00	154.00	0.00	4.0	33.0	42.0	42.0	33.0	
	Princeton Transitway	60.50	5.50	55.00	0.00						
	New Requested Funding	60.50	5.50	55.00	0.00	1.0	30.0	24.0			

PROJECT CATEGORY	PROJECT NAME	TOTAL ESTIMATED PROJECT COSTS (2020 DOLLARS)	5-YEAR ESTIMATED TOTAL PROJECT COST	FY26-30 ESTIMATED TOTAL PROJECT COST	FY30+ ESTIMATED TOTAL PROJECT COST	FY2026	FY2027	FY2028	FY2029	FY2030	Beyond 2030
ACCESS LINK		109.50	$50.50	$6.00	$53.00						
	Access Link Fleet Modernization and Expansion	48.00	48.00	0.00	0.00						
	Existing Funding	42.00	42.00	0.00	0.00						
	New Requested Funding	6.00	6.00	0.00	0.00						
	Access Link Electric Vehicle (EV) Pilot Program	2.50	2.50	0.00	0.00						
	New Requested Funding	2.50	2.50	0.00	0.00						
	New Access Link Garage	59.00	0.00	6.00	53.00						
	New Requested Funding	59.00	0.00	6.00	53.00	0.5	0.5	0.5	4.0	0.5	53.00
LIGHT RAIL		1,899.90	$322.50	$877.00	$690.00						
	RIVER LINE										
	River LINE Right-of-Way Flooding	1.00	1.00	0.00	0.00						
	New Requested Funding	1.00	1.00	0.00	0.00						
	River LINE Fleet Overhaul	85.00	85.00	0.00	0.00						
	Existing Funding - Overhaul Engine Repower	14.91	14.91	0.00	0.00						
	New Requested Funding	70.09	70.09	0.00	0.00						
	NEWARK LIGHT RAIL										
	Newark Light Rail (NLR) Capacity Enhancement	32.50	32.50	0.00	0.00						
	New Requested Funding	32.50	32.50	0.00	0.00						
	NLR - Station Modernization & Access Program	130.00	93.00	37.00	0.00						
	Existing Funding	3.40	3.40	0.00	0.00						
	New Requested Funding	126.60	89.60	37.00	0.00	37.0					
	HUDSON-BERGEN LIGHT RAIL										
	Hudson-Bergen Light Rail (HBLR) Hoboken WYE Bypass	89.00	8.00	81.00	0.00						
	New Requested Funding	89.00	8.00	81.00	0.00	1.0	45.0	35.0			
	Hudson-Bergen Light Rail (HBLR) Northern Branch Corridor	1,178.00	20.00	468.00	690.00						
	Existing Funding	100.00	20.00	80.00	0.00	28	28	2	22		
	New Requested Funding	1,078.00	0.00	388.00	690.00				138	250	690.00
	Hudson-Bergen Light Rail (HBLR) Route 440 Extension*	248.40	70.00	168.00	0.00						
	Existing Funding	27.92	17.52	0.00	0.00						
	New Requested Funding	220.48	52.48	168.00	0.00	56	61	51			
	Paterson Avenue Grade Crossing Elimination	136.00	13.00	123.00	0.00						
	New Requested Funding	136.00	13.00	123.00	0.00	3.0	33.0	54.0	33.0		
RAIL FLEET		3,601.85	$2,048.95	$1,517.90	$35.00						
	Rail Fleet Replacement - Phase I - Overhaul	1,110.00	650.00	425.00	35.00						
	New Requested Funding	1,110.00	650.00	425.00	35.00	160.0	110.0	85.0	35	35	35.00
	Rail Fleet Replacement - Phase II - New Car Purchases	2,413.85	1320.95	1092.90	0.00						
	Existing Funding	2,274.25	1320.95	953.30	0.00	292.3	225.6	225.6	209.8		
	New Requested Funding	139.60	0.00	139.60	0.00			139.6			
	Train Battery Pilot	46.00	46.00	0.00	0.00						
	New Requested Funding	46.00	46.00	0.00	0.00						
	Machine Vision Implementation Program	32.00	32.00	0.00	0.00						
	New Requested Funding	32.00	32.00	0.00	0.00						

PROJECT CATEGORY	PROJECT NAME	TOTAL ESTIMATED PROJECT COSTS (2020 DOLLARS)	5-YEAR ESTIMATED TOTAL PROJECT COST	FY26-30 ESTIMATED TOTAL PROJECT COST	FY30+ ESTIMATED TOTAL PROJECT COST	FY2026	FY2027	FY2028	FY2029	FY2030	Beyond 2030
		10,205.21	$2,353.17	$4,471.98	$3,271.50						
	Bridges										
	Raritan River Bridge Replacement*	595.00	494.81	32.68	0.00						
	Existing Funding	595.00	494.81	32.68	0.00	27.5	5.2				
	Overhead Bridge Replacement Program	845.50	85.50	200.00	560.00						
	New Requested Funding	845.50	85.50	200.00	560.00	40.0	40.0	40.0	40.0	40.0	560.00
	Newark Draw Bridge Replacement & Capacity Enhancement	676.00	47.00	544.00	85.00						
	New Requested Funding	676.00	47.00	544.00	85.00	4	110	140	180	110	85.00
	Undergrade Bridge Replacement Program	1,903.00	193.00	450.00	1260.00						
	New Requested Funding	1,903.00	193.00	450.00	1260.00	90	90	90	90	90	1,260.00
	South Laurel Ave Bridge Replacement & Clearance Improvement	46.50	18.50	28.00	0.00						
	New Requested Funding	46.50	18.50	28.00	0.00	17.0	11.0				
	Brielle Draw Bridge Replacement & Capacity	204.00	15.00	189.00	0.00						
	Existing Funding	9.00	9.00	0.00	0.00						
	New Requested Funding	195.00	6.00	189.00	0.00	2	70	70	47		
	HX Draw Bridge Replacement	269.00	4.00	18.00	247.00						
	New Requested Funding	269.00	4.00	18.00	247.00	2.0	8.0	8.0			247.00
	Upper Hack Lift Bridge Capacity Enhancement	267.00	4.00	94.00	169.00						
	New Requested Funding	267.00	4.00	94.00	169.00	2.0	8.0	8.0	2	74	169.00
	Shark River Draw Bridge Replacement	170.00	0.00	2.00	168.00						
	New Requested Funding	170.00	0.00	2.00	168.00				1	1	168.00
	West Front Street Bridge Replacement Study	2.00	0.00	2.00	0.00						
	New Requested Funding	2.00	0.00	2.00	0.00		1	1			
	Morgan Draw Bridge Replacement	236.00	0.00	17.00	219.00						
	New Requested Funding	236.00	0.00	17.00	219.00	1.0	1.0	1.0	7.0	7.0	219.00
	Signals & Interlockings										
	WC interlocking Reconfiguration	13.00	13.00	0.00	0.00						
	New Requested Funding	13.00	13.00	0.00	0.00						
	West Summit Interlocking	96.50	56.50	40.00	0.00						
	Existing Funding: Phase I	52.00	52.00	0.00	0.00						
	Existing Funding: Phase II - Wall Repair & Drainage	16.00	4.50	11.50	0.00	11.5					
	New Requested Funding	28.50	0.00	28.50	0.00	1.5	17	10			
	Millburn Interlocking Reconfiguration	111.00	3.00	82.00	26.00						
	New Requested Funding	111.00	3.00	82.00	26.00	4.0	4.0	1.0	31.0	42.0	26.00
RAIL INFRASTRUCTURE	Dover Interlocking Reconfiguration Study	1.00	1.00	0.00	0.00						
	New Requested Funding	1.00	1.00	0.00	0.00						
	New Interlocking between Glen and Cedar Interlockings	13.50	2.00	11.50	0.00						
	New Requested Funding	13.50	2.00	11.50	0.00			0.5	6.0	5.0	
	Newark Penn Station										
	Newark Penn Station Rehabilitation	454.00	9.00	305.00	140.00						
	New Requested Funding	454.00	9.00	305.00	140.00	11.0	11.0	3.0	140.0	140.0	140.00
	Stations										
	Newark Penn Station Platform D Improvements	26.30	5.60	20.70	0.00						
	Existing Funding	26.30	5.60	20.70	0.00	6.6	7.4	6.4	0.3		
	Trenton Station Improvements	49.00	0.00	4.50	44.50						
	New Requested Funding	49.00	0.00	4.50	44.50			0.5	2.0	2.0	44.50
	Regional Rail Station Modernization & Access Program	790.00	138.00	652.00	0.00						
	Existing Funding	48.09	48.09	0.00	0.00						
	New Requested Funding	741.91	89.91	652.00	0.00	120	160	160	120	92	
	Lyndhurst Station	28.00	28.00	0.00	0.00						
	Existing Funding	28.00	28.00	0.00	0.00						
	Roselle Park Station Improvements	23.20	23.20	0.00	0.00						
	Existing Funding	23.20	23.20	0.00	0.00						
	Edison Station Improvements	35.50	13.50	22.00	0.00						
	Existing Funding	13.50	13.50	0.00	0.00						
	New Requested Funding	22.00	0.00	22.00	0.00	13.0	9.0				
	Elizabeth Station Improvements	53.69	53.69	0.00	0.00						
	Existing Funding	53.69	53.69	0.00	0.00						
	Jersey Avenue Station	238.00	2.00	116.00	120.00						
	New Requested Funding	238.00	2.00	116.00	120.00	5	5	2	44	60	120.00
	Metuchen Station Improvements	31.00	12.00	19.00	0.00						
	New Requested Funding	31.00	12.00	19.00	0.00	11.0	8.0				
	New Brunswick Station Improvements	13.40	13.40	0.00	0.00						
	Existing Funding	13.40	13.40	0.00	0.00						
	North Elizabeth Station Improvements	32.00	12.00	20.00	0.00						
	Existing Funding	2.08	2.08	0.00	0.00						
	New Requested Funding	29.92	9.92	20.00	0.00	12	8				
	North Brunswick Station	160.00	118.00	42.00	0.00						
	Existing Funding	50.00	50.00	0.00	0.00						
	New Requested Funding	110.00	68.00	42.00	0.00	42					

PROJECT CATEGORY	PROJECT NAME	TOTAL ESTIMATED PROJECT COSTS (2020 DOLLARS)	5-YEAR ESTIMATED TOTAL PROJECT COST	FY26-30 ESTIMATED TOTAL PROJECT COST	FY30+ ESTIMATED TOTAL PROJECT COST	FY2026	FY2027	FY2028	FY2029	FY2030	Beyond 2030
RAIL INFRASTRUCTURE	Track and Yards										
	Roseville Cut Improvements	111.00	33.00	78.00	0.00						
	New Requested Funding	111.00	33.00	78.00	0.00	28	28	22			
	Morristown Yard and Pocket Track	148.00	10.00	138.00	0.00						
	New Requested Funding	148.00	10.00	138.00	0.00	5.0	2.0	41.0	56.0	34.0	
	Delco Lead*	246.00	203.30	19.70	0.00						
	Existing Funding	246.00	203.30	19.70	0.00	19.7					
	County Yard Expansion*	135.00	102.95	14.00	0.00						
	Existing Funding	135.00	102.95	14.00	0.00	14.0					
	Small Yards Rehabilitation Program	449.00	46.00	203.00	200.00						
	Existing Funding	14.20	14.20	0.00	0.00						
	New Requested Funding	434.80	31.80	203.00	200.00	50	29	37	53	34	200.00
	Modify Lyons Siding on Gladstone Line	11.00	0.00	2.00	9.00						
	New Requested Funding	11.00	0.00	2.00	9.00		0.5	0.5	0.5	0.5	9.00
	New Boonton Yard	39.50	0.00	15.50	24.00						
	New Requested Funding	39.50	0.00	15.50	24.00	0.5	0.5	3	0.5	11	24.00
	Midline Loop	306.00	22.00	284.00	0.00						
	Existing Funding	5.45	5.45	0.00	0.00						
	New Requested Funding	300.55	16.55	284.00	0.00	2.0	62.0	79.0	79.0	62.0	
	Hunter Flyover	300.00	15.00	285.00	0.00						
	Existing Funding	0.50	0.50	0.00	0.00						
	New Requested Funding	299.50	14.50	285.00	0.00	60.0	80.0	89.0	56.0		
	Distribution, Transmission, Power										
	Rail Electric Traction Substation Assessment	8.73	8.73	0.00	0.00						
	New Requested Funding	8.73	8.73	0.00	0.00						
	New Graw Signal Substation	20.00	0.50	19.50	0.00						
	New Requested Funding	20.00	0.50	19.50	0.00	1	0.5	10	8		
	Suffern Substation and Crew Quarters	21.00	21.00	0.00	0.00						
	New Requested Funding	21.00	21.00	0.00	0.00						
	Wood to Steel Pole Conversion on Gladstone Branch	81.00	56.00	25.00	0.00						
	New Requested Funding	81.00	56.00	25.00	0.00	25.0					
	Electric Traction Storage Facility	25.50	14.50	11.00	0.00						
	New Requested Funding	25.50	14.50	11.00	0.00	11					
	NJ TRANSITGRID	577.40	421.00	156.40	0.00						
	Existing Funding	577.40	421.00	156.40	0.00	156.4					
	Crew Facilities										
	New Signal Crew Facilities	11.00	4.50	6.50	0.00						
	New Requested Funding: Phase I - Kingsland Rehab	2.50	2.50	0.00	0.00						
	New Requested Funding: Phase II - New Essay Signal Facility	8.50	2.00	6.50	0.00	0.5	3.0	3.0			
	Auxiliary Transit Operations Facility	130.50	10.50	120.00	0.00						
	New Requested Funding	130.50	10.50	120.00	0.00	2.0	37.0	51.0	30.0		
	Red Bank Crew Quarters Replacement	7.00	2.00	5.00	0.00						
	New Requested Funding	7.00	2.00	5.00	0.00	0.5	0.5	4			
	Northern MOW Facility	39.50	3.50	36.00	0.00						
	Existing Funding	10.00	3.50	6.50	0.00	6.5					
	New Requested Funding	29.50	0.00	29.50	0.00	4.5	16.0	9.0			
	Tunnels										
	Bergen Tunnel South Tube Rehabilitation	155.00	13.00	142.00	0.00						
	New Requested Funding	155.00	13.00	142.00	0.00	44	63	35			
RAIL EXPANSION		1,845.00	$0.00	$20.00	$1,825.00						
	Third Track Between Waldwick to Suffern	619.00	0.00	0.00	619.00						
	New Requested Funding	619.00	0.00	0.00	619.00						619.00
	Lehigh Third and Fourth Tracks	752.00	0.00	0.00	752.00						
	New Requested Funding	752.00	0.00	0.00	752.00						752.00
	Westbound Waterfront Connector	474.00	0.00	20.00	454.00						
	New Requested Funding	474.00	0.00	20.00	454.00	3	2	2	2	11	454.00

PROJECT CATEGORY	PROJECT NAME	TOTAL ESTIMATED PROJECT COSTS (2020 DOLLARS)	5-YEAR ESTIMATED TOTAL PROJECT COST	FY26-30 ESTIMATED TOTAL PROJECT COST	FY30+ ESTIMATED TOTAL PROJECT COST	FY2026	FY2027	FY2028	FY2029	FY2030	Beyond 2030
		8,806.02	$2,164.66	$4,515.46	$2,109.00						
	Northeast Corridor										
	Portal Bridge North	1,872.62	1615.66	256.96	0.00						
	Potential Future Funding (EDA, Amtrak, FTA CIG, CMAQ, TTF)	1,872.62	1615.66	256.96	0.00	84.7	76.3	41.9	23.0	31.1	
	Portal Bridge South Capacity Enhancement	431.00	0.00	4.00	427.00						
	New Requested Funding	431.00	0.00	4.00	427.00					4.0	427.00
	Penn Station New York										
	Penn Station New York – NJ TRANSIT Access Improvement	340.00	23.00	317.00	0.00						
	Existing Funding	6.23	6.23	0.00	0.00						
	New Requested Funding	333.77	16.77	317.00	0.00	3	97	120	97		
	Hoboken Terminal And Yard Resilient Redevelopment Program										
REGIONAL TRANSIT PROJECTS	Hoboken Terminal And Yard Resilient Redevelopment Program - Phase I**	257.00	174.50	82.50	0.00						
	New Requested Funding	257.00	174.50	82.50	0.00	54.5	28.0				
	Hoboken Terminal And Yard Resilient Redevelopment Program - Phase II	2,900.00	86.00	1714.00	1100.00						
	New Requested Funding	2,900.00	86.00	1714.00	1100.00	51.0	3.0	470.0	640.0	550.0	1,100.00
	Hoboken Long Slip*	195.40	176.50	2.00	0.00						
	Existing Funding	195.40	176.50	2.00	0.00	2.0					
	Gateway										
	Gateway Storage Yard and Hudson Tunnel Design	2,396.00	72.00	1824.00	500.00						
	Existing Funding	13.44	13.44	0.00	0.00						
	New Requested Funding	2,382.56	58.56	1824.00	500.00	42.0	2.0	500.0	640.0	640.0	500.00
	New Jersey Ferry Fleet Improvements	414.00	17.00	315.00	82.00						
	New Requested Funding	414.00	17.00	315.00	82.00	10.0	3.0	82.0	110.0	110.0	82.00

PROJECT CATEGORY	PROJECT NAME	TOTAL ESTIMATED PROJECT COSTS (2020 DOLLARS)	5-YEAR ESTIMATED TOTAL PROJECT COST	FY26-30 ESTIMATED TOTAL PROJECT COST	FY30+ ESTIMATED TOTAL PROJECT COST	FY2026	FY2027	FY2028	FY2029	FY2030	Beyond 2030
IT, INNOVATION, AND TRANSPORT NETWORK IMPROVEMENTS		700.43	$692.43	$8.00	$0.00						
	Public Transportation Health & Safety Improvement Program	156.00	156.00	0.00	0.00						
	New Requested Funding	156.00	156.00	0.00	0.00						
	Information & Digital Technologies										
	Comprehensive Transit Trip Planner App	3.00	3.00	0.00	0.00						
	New Requested Funding	3.00	3.00	0.00	0.00						
	NJT Mobile App Development	10.00	10.00	0.00	0.00						
	New Requested Funding	10.00	10.00	0.00	0.00						
	IT Business Unit Improvements	103.00	103.00	0.00	0.00						
	New Requested Funding	103.00	103.00	0.00	0.00						
	IT HQ Improvements	65.00	65.00	0.00	0.00						
	New Requested Funding	65.00	65.00	0.00	0.00						
	IT Surface Transit Improvements	148.00	148.00	0.00	0.00						
	New Requested Funding	148.00	148.00	0.00	0.00						
	IT Rail Improvements	53.00	53.00	0.00	0.00						
	New Requested Funding	53.00	53.00	0.00	0.00						
	Surface Transportation Technology Innovation Program	20.00	20.00	0.00	0.00						
	New Requested Funding	20.00	20.00	0.00	0.00						
	Low Speed AV Pilot	8.00	8.00	0.00	0.00						
	New Requested Funding	8.00	8.00	0.00	0.00						
	Enterprise Asset Management & Planning										
	Enterprise Asset Management: Facility Inspections FY21 – FY23	8.73	8.73	0.00	0.00						
	Existing Funding	8.73	8.73	0.00	0.00						
	Enterprise Asset Management PMO	8.20	8.20	0.00	0.00						
	Existing Funding	8.20	8.20	0.00	0.00						
	Updated Planning Studies	5.00	5.00	0.00	0.00						
	New Requested Funding	5.00	5.00	0.00	0.00						
	Stations and Public Facility Priority Repairs										
	SoGR Program	100.00	100.00	0.00	0.00						
	Existing Funding	18.41	18.41	0.00	0.00						
	New Requested Funding	81.59	81.59	0.00	0.00						
	Local Police Shelter Implementation Program	12.50	$4.50	$8.00	$0.00						
	New Requested Funding	12.50	$4.50	$8.00	$0.00	3	3	2			
	Total Estimated Project Costs		$10,519.57	$14,917.84	$12,081.50	$2,120.67	$2,302.01	$3,677.00	$3,769.06	$3,049.10	12,081.50
	Existing Funding & Potential Future Portal Bridge Funding		5,862.72	2,334.60	-	799.17	492.51	436.19	415.35	191.39	-
	FUNDING NEED FOR MAJOR PROJECTS AND PROGRAMS		4,656.85	12,583.24	12,081.50	1,321.50	1,809.50	3,240.81	3,353.71	2,857.71	12,081.50

*	Project Costs for Regional Transit Projects (include costs before 2020) 5-YEAR Estimated cost does not include Prior Year Comitted Funding (Pre FY21)

Appendix A: Unconstrained Financial Summary

Table 3 - Capital Plan: Rehabilitation and Programs Unconstrained Estimated Cash-flow Sheet

Appendix A Table 3: Capital Plan: Rehabilitation Projects and Programs Unconstrained Estimated Cash-flow Sheet

$ in Millions

	FY2021	FY2022	FY2023	FY2024	FY2025	5 YEAR TOTAL
Total for Departmental Rehabilitation Projects	324.91	311.61	262.37	289.81	280.51	1469.21
Existing Funding for Departmental Rehabilitation Projects	66.14	70.34	70.57	70.57	71.13	348.75
FUNDING NEED FOR DEPARTMENTAL REHABILITATION PROJECTS	258.77	241.27	191.80	219.24	209.38	1120.46

Project Category	PROJECT	FY2021	FY2022	FY2023	FY2024	FY2025	5 YEAR TOTAL
RAIL FLEET	Rail Fleet Reliability Program	21.3	25.3	16.7	14.0	14.0	91.4
	FRA APTA Mandated Standards - Modernize fleet to meet FRA cabin standards	1.0	1.0	1.0	1.0	1.0	5.0
	Locomotive/Passenger Battery Replacement and Car Glazing Replacement	5.0	5.0	5.0	5.0	5.0	25.2
	Comet & MLV HVAC Overhaul	9.5					9.5
	Multilevel II Truck Overhaul		11.3	2.6			13.9
	Comet II Seat Replacement	5.8					5.8
	ALP45 Engine Overhaul		8.0	8.0	8.0	8.0	32.0

Project Category	PROJECT	FY2021	FY2022	FY2023	FY2024	FY2025	5 YEAR TOTAL
	MMC SOGR Program	12.4	15.4	7.8	4.3	2.3	42.0
	SoGR Passarelle Overhaul			0.3	2.3	2.3	4.8
	New Fire Alarm/Sprinkler System	2.0	4.0	4.0			10.0
	Replace Underground Water Line	0.5	1.5	1.0			3.0
	MMC / ROC Bird Prevention	0.4	0.4				0.8
	MMC Wheel Press Replacement	1.7	0.7				2.4
	MMC Air Room Secondary Work Tier Expansion	0.3	0.3				0.5
	MMC Catenary Trolley Cage Control Improvements	0.3	0.3	0.3			0.8
	MMC Facility Oil/Water Separator	1.5	1.5				3.0
	MMC Facility Pre-Treatment Facility Controls Upgrade or Overhaul	0.5	0.5				1.0
	Yardmaster tower rebuild/improvement		2.0	2.0	2.0		6.0
	MMC Toilet Tank Facility	0.8	0.8	0.3			1.8
	MMC/ROC snow melter system	0.4	0.4				0.8
RAIL FLEET	MMC 100 ton gantry	0.3	0.3				0.6
	MMC DEF Distribution and Containment Area for ALP 45's	0.3	0.3				0.5
	MMC Multi-Tier Storage area for Wheels	0.2					0.2
	MMC Shop Air Compressor Replacements	0.4	0.4				0.7
	MMC Perimeter Control Rehabilitation	0.1					0.1
	MMC Secondary access for vehicles	0.3	0.3				0.5
	MMC Sand Tower Distribution overhaul at locomotives 5 & 6	0.3					0.3
	MMC Fuel Pad Fire Suppression System	0.2					0.2
	MMC Building 12 Upgrades for Occupancy	0.3	0.3				0.5
	MMC/ROC Main Gate Flooding Resolution	0.3	0.3				0.5
	MMC Facility Drawing Survey/updates for all as-builts	0.2					0.2
	MMC East End Catenary extension track 10, 11, & 12 east	0.5	0.5				1.0
	MMC Facility/Yard High Bay Light Pole Replacements	0.8	0.8				1.5
	MMC Increased Camera/Quality View Locations	0.3	0.3				0.5

Project Category	PROJECT	FY2021	FY2022	FY2023	FY2024	FY2025	5 YEAR TOTAL
RAIL INFRASTRUCTURE	Switch Snow Melter Program	1.5	1.5	1.5	1.5	1.5	7.4
	Switch Heater Repair	0.7	0.7	0.7	0.7	0.7	3.3
	New Switch Snow Blowers	0.4	0.4	0.4	0.4	0.4	1.9
	Replace Snow Melter Control Panels	0.5	0.5	0.5	0.5	0.5	2.3
	Electrical Infrastructure Enhancement Program	0.6	0.9	0.9	0.3	0.3	2.8
	ET TMAC	0.3	0.3	0.3	0.3	0.3	1.3
	Electrical Systems Missing Line Diagrams	0.3	0.6	0.6			1.5
	IT Infrastructure Enhancement Program	2.0	1.0	1.0	1.0	0.5	5.4
	Signal System SoGR Program	14.0	14.8	10.8	39.1	42.8	121.3
	ET Reliability Program	6.5	11.8	12.7	21.8	14.9	67.7
	Rail Operations Work Equipment Upgrades	12.2	11.1	6.8	2.7	2.0	34.8
	MOW Work Equipment - Existing	1.7	2.0	2.0	2.0	1.7	9.4
	Track Rehabilitation Program	33.8	34.8	35.8	36.8	38.0	179.0
	Track Undercutting and Ballast Cleaning; Rails, Ties, Turnouts & Road Crossings - Existing	19.0	19.0	20.6	20.6	19.0	98.2
	MEP SoGR Program	0.9	0.9	0.9	0.9	0.5	3.9
	Vertical Transportation Renewal Program	5.0	9.5	9.5	9.5	9.5	43.0

Project Category	PROJECT	FY2021	FY2022	FY2023	FY2024	FY2025	5 YEAR TOTAL
RAIL INFRASTRUCTURE	Morrisville SOGR Program	1.0	0.0	0.0	0.0	0.0	1.1
	Bridge Protection SOGR Program	0.6	0.6	0.6	0.6	2.0	4.4
	Undergrade Bridge Rehabilitation Program	15.0	15.0	15.0	15.0	15.0	75.0
	Undergrade Bridge Rehabilitation Program - Existing	12.4	12.4	12.4	12.4	12.4	62.2
	Overhead Bridge Rehabilitation Program	5.0	5.0	5.0	5.0	5.0	25.0
	Overhead Bridge Rehabilitation Program - Existing	1.3	1.3	1.3	1.3	1.3	6.3
	Tie Deck Program	3.5	3.5	3.5	3.8	3.8	18.0
	Tie Deck Program - Existing	2.0	0.6	0.6	0.6	2.0	5.8
	Bridge Inspection Program	4.8	4.8	4.8	5.0	5.0	24.3
	Bridge Inspection Program - Existing	3.8	2.8	2.8	2.8	3.8	16.0
	Culvert Inspection Program	1.7	1.5	1.5	1.5	1.5	7.7
	Retaining Wall Inspection Program	0.3	0.1	0.1	0.1	0.1	0.7
	Bridge Painting Program	4.5	4.5	4.5	4.8	4.8	23.0
	Bridge Painting Program - Existing	2.0	2.0	2.0	2.0	2.0	10.0
	ROW Reliability and Improvement Program	7.5	7.8	8.0	8.3	8.5	40.0
	ROW Reliability and Improvement Program - Existing	1.0	1.0	1.0	1.0	1.0	5.0

Project Category	PROJECT	FY2021	FY2022	FY2023	FY2024	FY2025	5 YEAR TOTAL
LIGHT RAIL	Hudson-Bergen Light Rail SOGR and Rehab Program	46.4	26.7	17.7	18.3	13.3	122.4
	HBLR Capital Asset Replacement - Existing	7.0	7.0	12.0	12.0	12.0	50.0
	Newark Light Rail SOGR and Rehab Program	28.1	28.8	14.2	12.2	12.2	95.4
	NLR Facilities - Existing	0.7	4.3	0.7	0.7	0.7	7.1
	NLR Infrastructure (FY 13 and Beyond) - Existing	1.0	2.2	1.0	1.0	1.0	6.2
	NLR Vehicles - Existing	0.6	2.1	0.6	0.6	0.6	4.5
	NLR State of Good Repair Phase II - Existing	2.0	2.0	2.0	2.0	2.0	10.2
	River LINE SOGR and Rehab Program	18.5	8.3	4.8	4.9	4.9	41.4
	River LINE Capital Asset Replacement - Existing	2.0	2.0	2.0	2.0	2.0	10.0
BUS INFRASTRUCTURE	BUS SOGR & Rehab Program	17.3	17.3	17.3	17.3	17.3	86.5
	Bus Garage SOGR Program - Existing	2.2	2.2	2.2	2.2	2.2	11.0
	Bus Portable Assets - Existing	0.8	1.0	1.0	1.0	0.8	4.6
PLANNING	TRANSIT Planning, Design & Development Program	52.5	52.5	52.5	52.5	52.5	262.5
	Planning - Existing	6.6	6.4	6.4	6.4	6.6	32.3
INFORMATION AND DIGITAL TECHNOLOGY	IT Upgrade Program	7.3	7.6	7.8	8.1	7.8	38.5
ECMS	ECMS	1.0	1.0	1.0	1.0	1.0	5.0

Appendix A: Unconstrained Financial Summary

Table 4 - Capital Plan: Other Existing NJ TRANSIT Program Items Estimated Cash-flow Sheet

Appendix A Table 4: Capital Plan: Other Existing NJ TRANSIT Program Items Estimated Cash-flow Sheet

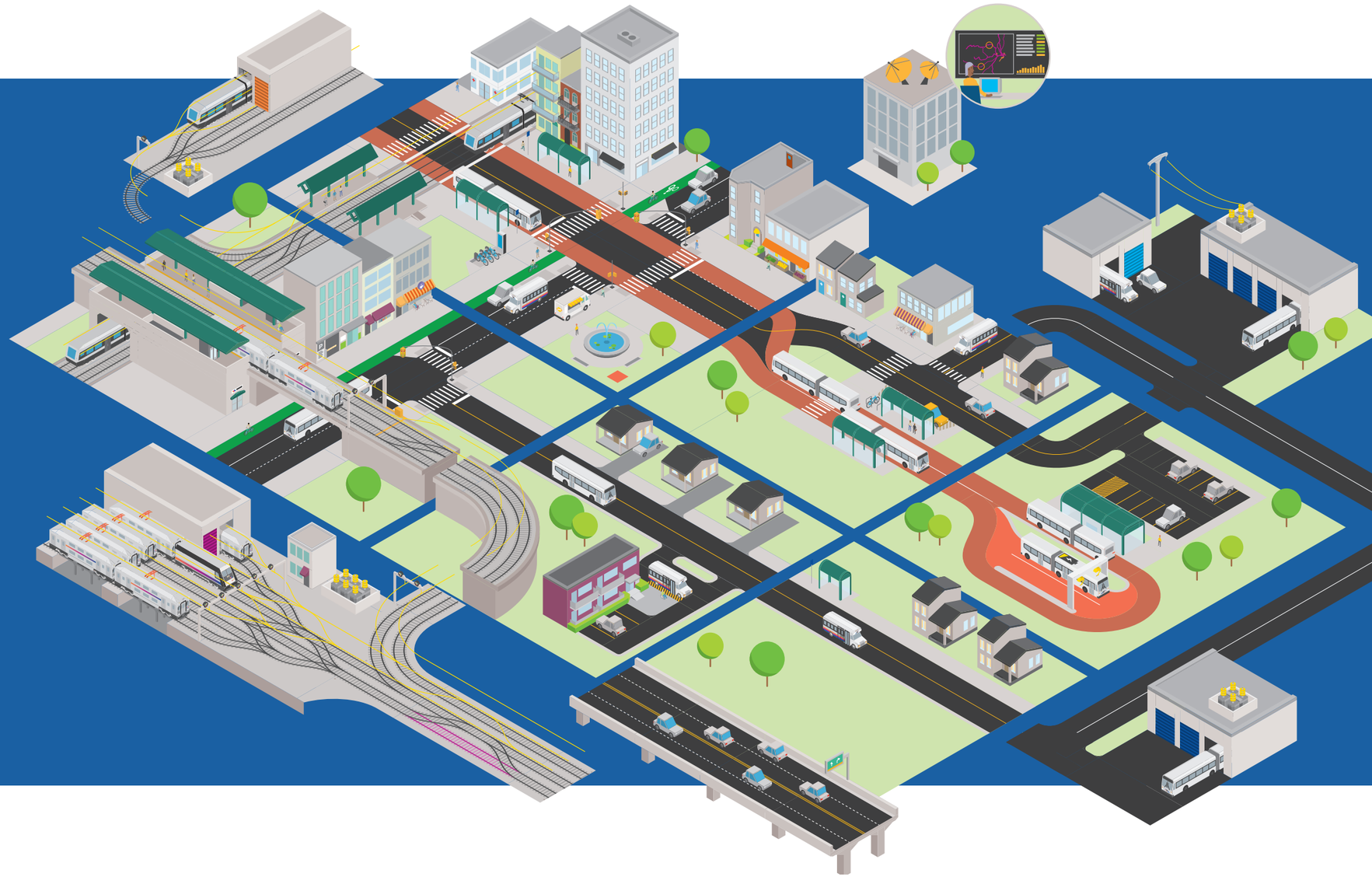
($ in Millions)

	FY2021	FY2022	FY2023	FY2024	FY2025	5 Year Total
Total of Ongoing Capital Projects (FUNDED PROGRAM)	999.29	999.29	999.29	999.29	999.29	4996.44

	FY2021	FY2022	FY2023	FY2024	FY2025	5 Year Total
BUS INFRASTRUCTURE - Total	47.8	47.8	47.8	47.8	47.8	239.25
BUS FLEET - Total	1.5	1.5	1.5	1.5	1.5	7.60
CAPITAL LEASE - Total	107.1	107.1	107.1	107.1	107.1	535.45
FIXED EXPENSES - Total	506.3	506.3	506.3	506.3	506.3	2531.63
LIGHT RAIL - Total	18.4	18.4	18.4	18.4	18.4	91.75
SUPPORT PROJECTS - Total	78.1	78.1	78.1	78.1	78.1	390.73
RAIL EXPANSIONS - Total	10.1	10.1	10.1	10.1	10.1	50.58
RAIL INFRASTRUCTURE - Total	120.6	120.6	120.6	120.6	120.6	602.96
RAIL ROLLING STOCK - Total	36.3	36.3	36.3	36.3	36.3	181.29
SANDY/PORTAL BRIDGE PROJECTS	73.0	73.0	73.0	73.0	73.0	365.20

Appendix B

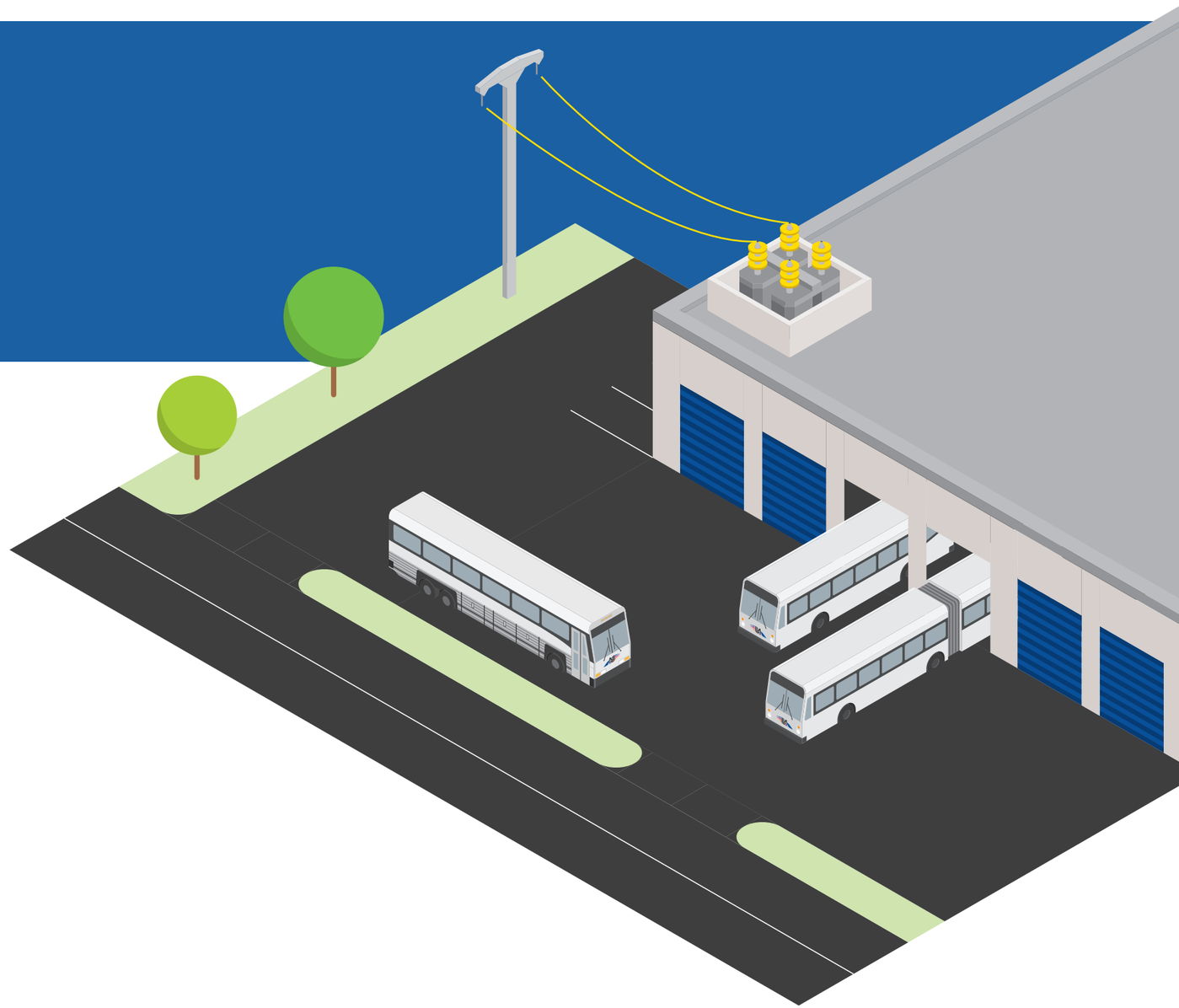
Capital Plan Project Sheets



NJTRANSIT
The Way To Go.

Appendix B Capital Plan Project Sheets

Bus Garages



NJ TRANSIT
The Way To Go.

Description

NJ TRANSIT operates 16 bus garages throughout the state which range in age from 22 to 120-years old. No major rehabilitation work has been performed at the garages since 1998. The existing garages are currently operating at or above their capacities. Rehabilitation of major garage systems, modernization of existing garages, or replacement of aging facilities is challenging since these activities would potentially result in the loss of capacity on bus lines while each garage is taken out of service for improvements.

The existing NJ TRANSIT bus garages are currently operating 28% over capacity. The Northern Bus Garage project would construct a new 400 to 500 bus garage which would increase the bus storage and maintenance capacity of the NJ TRANSIT Bus Network to match the current bus fleet size and allow for future service expansion. This increase in capacity would help NJ TRANSIT keep pace with anticipated bus ridership growth and provide additional capacity to absorb buses from other garages while they are rehabilitated, upgraded, or replaced. The new Northern Bus Garage could be LEED certified and constructed with solar panels on the roof, feature modern fleet diagnostics and maintenance equipment, and be 100% Zero Emission Bus ready. A new parking garage could be included at the site to provide access to a new bus park & ride facility.

***ESTIMATED PROJECT COSTS (2020 Dollars):**

$536 Million

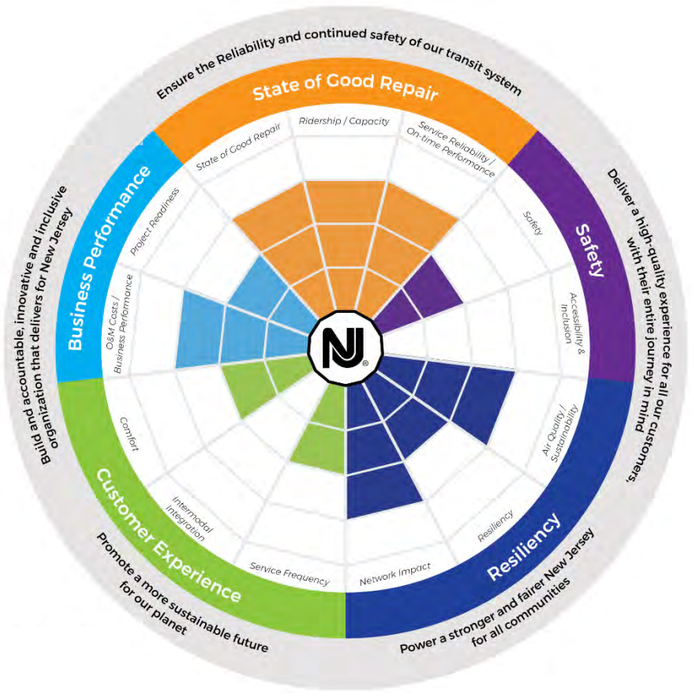
**Excludes property acquisition costs (land secured by NJT)*

Existing:
Overcrowded Bus Garages (Oradell lot shown)



Proposed:
New Garage Facility





Value to Customers

- Expands bus fleet, increases bus availability, reduces depot delays

Value to State

- Increases return on investment (ROI) for revenue vehicles owned by NJ TRANSIT
- New sustainable facilities reduce lifecycle maintenance costs and enable more efficient use of taxpayer funds

PROJECT SHEET NORTHERN BUS GARAGE (ZERO EMISSION BUS FLEET READY)

ESTIMATED TOTAL PROJECT COSTS

$536M

Network Impact
The new facility would relieve congestion on the garage system and enable additional fleet capacity to support expanded service

Service Reliability/On-Time Performance
Bus deployment across the system would be improved, reducing congestion on existing lines

Ridership/Capacity
Additional garage capacity would allow NJ TRANSIT to keep pace with current and future ridership growth

State of Good Repair
A modern garage with solar panels and new maintenance equipment would reduce average age of bus fleet to industry norms

STRATEGIC GOALS MET

Deliver a high-quality experience for all our customers, with their entire journey in mind

Ensure the reliability and continued safety of our transit system

*The new garage would **increase bus storage, maintenance capacity,** and **meet current and future ridership** of the NJ TRANSIT bus network.*

Description

NJ TRANSIT operates 16 bus garages throughout the state which range in age from 20 to 120-years old. No major rehabilitation work has been performed at the garages since 1998. The existing garages are currently operating at or above their capacities. Rehabilitation of major garage systems, modernization of existing garages, or replacement of aging facilities is challenging since these activities would potentially result in the loss of capacity on bus lines while each garage is taken out of service for improvements.

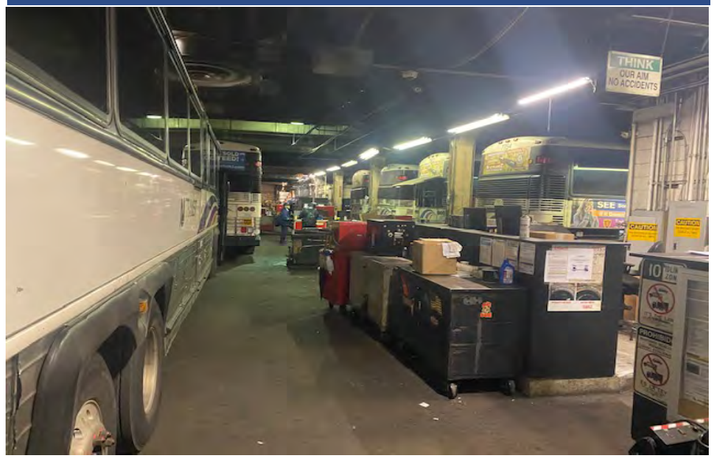
The existing NJ TRANSIT bus garages are currently operating 28% over capacity. If funded, the addition of a Second New Northern Bus Garage would augment the existing new North Garage Project to further increase the bus storage and maintenance capacity of the NJ TRANSIT bus network. This would enable NJ TRANSIT to better accommodate the current bus fleet size, allow for future service expansion, and accommodate a potentially larger zero emission fleet. This increase in capacity would help NJ TRANSIT keep pace with anticipated bus ridership growth and provide additional capacity to absorb buses from other garages while they are rehabilitated, upgraded, or replaced. The Second New Northern Bus Garage could be LEED certified and constructed with solar panels on the roof, feature modern fleet diagnostics and maintenance equipment, and be 100% Zero Emission Vehicle (ZEV) ready.

***ESTIMATED PROJECT COSTS (2020 Dollars):**

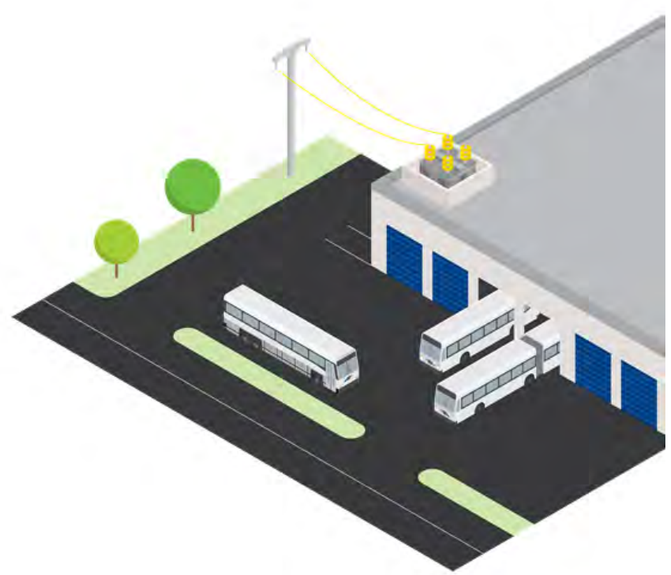
***$392 Million**

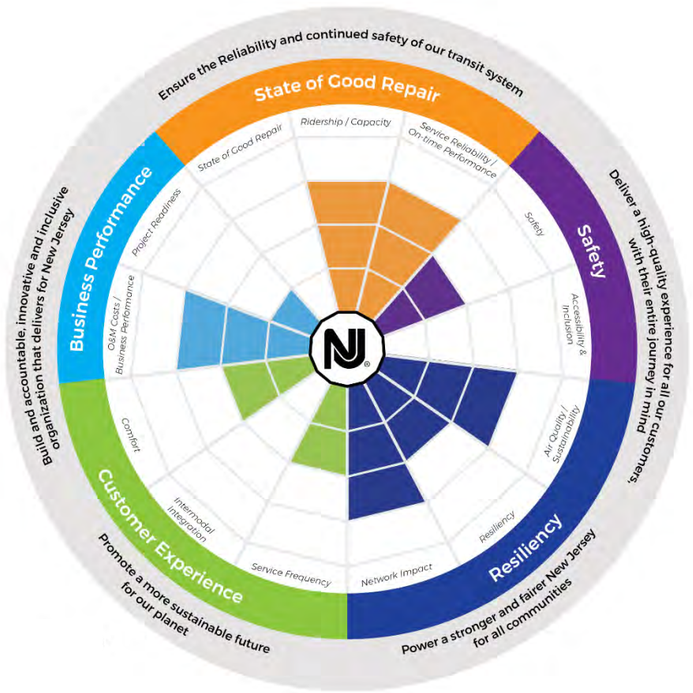
**Estimates are based upon concept for design*

Existing:
Overcrowded Bus Garages (Oradell lot shown)



Proposed:
New Garage Facility





Value to Customers

- Expands bus fleet, increases bus availability, reduces depot delays

Value to State

- Increases return on investment (ROI) for revenue vehicles owned by NJ TRANSIT
- New sustainable facilities reduce lifecycle maintenance costs and enable more efficient use of taxpayer funds

PROJECT SHEET SECOND NORTHERN BUS GARAGE (ZERO EMISSION BUS FLEET READY)

ESTIMATED TOTAL PROJECT COSTS

$392M

O&M Costs/Business Performance
The garage would shift the number of buses serviced at existing garages to a normal capacity rate reducing operating costs and increasing business performance

Service Reliability/On-Time Performance
Reducing the overflow of buses being serviced at other garages would increase on-time performance and reduce delays due to vehicle maintenance issues

Ridership/Capacity
Increased capacity to service more buses would accommodate projected future ridership growth

Network Impact
A new garage would keep pace with growing ridership demand without overwhelming operations and maintenance at existing garages

STRATEGIC GOALS MET

Deliver a high-quality experience for all our customers, with their entire journey in mind

Ensure the reliability and continued safety of our transit system

*The addition of a new garage would **increase bus maintenance and storage capacity** to match current bus fleet size and **allow for future service expansion**.*

Description

NJ TRANSIT operates 16 bus garages throughout the state with a fleet of over 2,300 buses. NJ TRANSIT is embarking on an ambitious Modernization Program to provide a world class electric bus fleet that would increase efficiency, improve reliability, reduce the environmental footprint, and cut operating costs throughout the fleet.

To provide customer focused operations that are reliable, safe, sustainable, and cost-effective, modern and state-of-the-art bus garage infrastructure is needed to support the electric bus fleet rollout. Four of the 16 bus garages are planned for a full replacement with new construction. To be functionally equivalent to the new garages, the remaining 12 garages require a significant modernization to advance NJ TRANSIT into the future for Zero Emission Bus (ZEB) program implementation to comply with state legislative mandate.



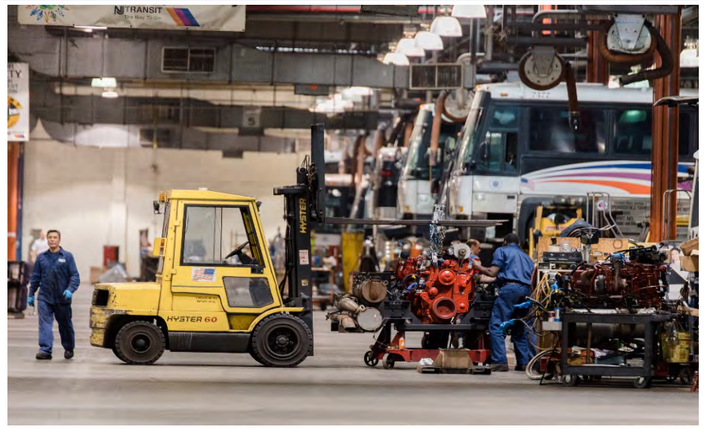
Sustainability

The Bus Garage Modernization program will coincide with the State of New Jersey's sustainability vision supporting the reduction of greenhouse gasses, contributing to the reduction of air pollutants from diesel emissions.

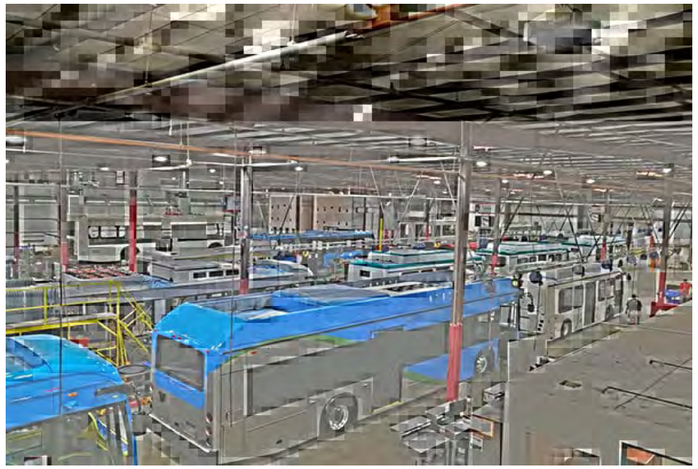
ESTIMATED PROJECT COSTS (2020 Dollars):

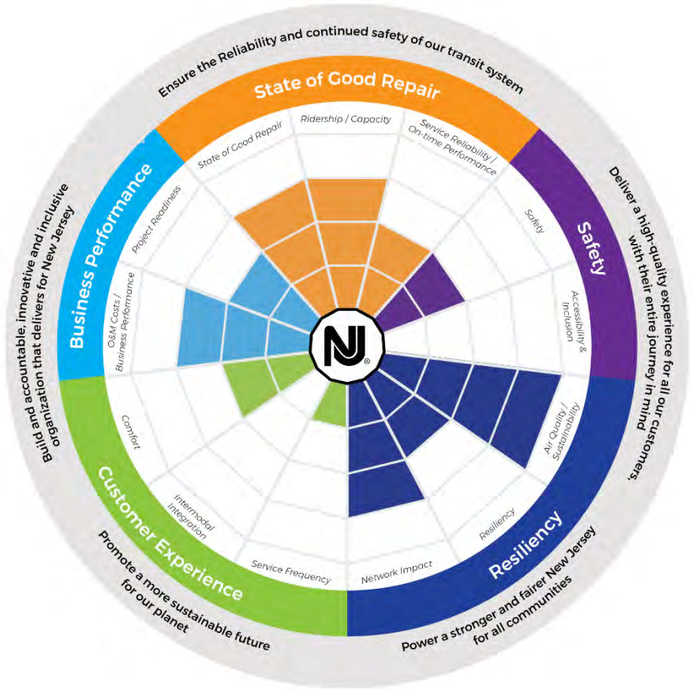
$1.115 Billion

Existing:
Garage Equipment in Use Beyond Service Life



Proposed:
Modernized Garage Facilities





Value to Customers

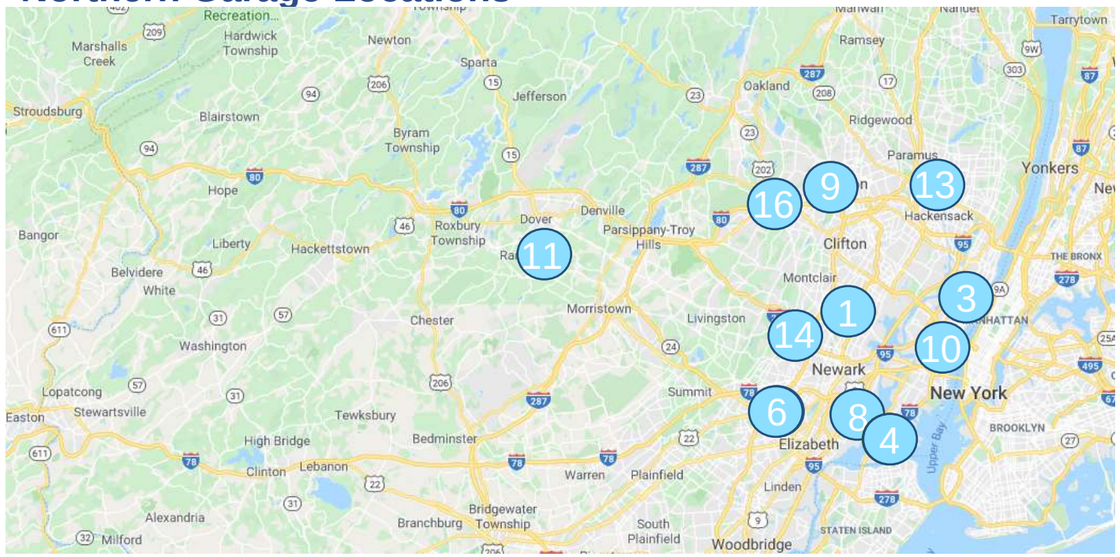
- Increases reliability in bus schedule
- Increases safety through modernized communication

Value to State

- Lowers operating costs hence more efficient use of public funds
- Reduces injuries from component replacement work
- Increases ROI for revenue vehicles owned by NJTRANSIT

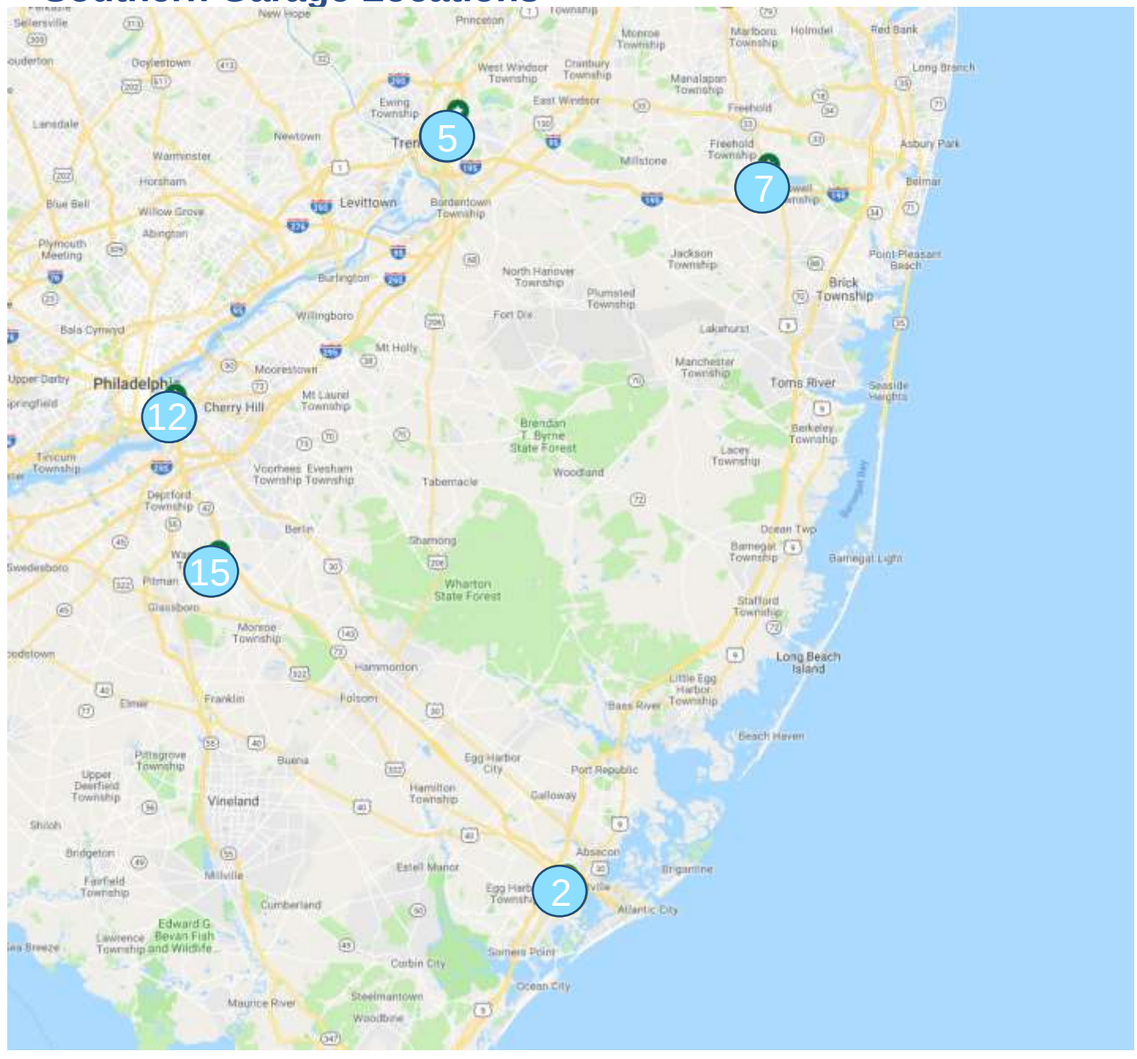
Project Sheet | Bus Garage Modernization Program (Zero Emission Bus Fleet Ready)

Northern Garage Locations



Garage		Age	SF	Annual Ridership
1	Big Tree	111	50,000	9.9 Million
2	Egg Harbor	23	210,000	6.4 Million
3	Fairview	74	42,000	9.7 Million
4	Greenville	22	80,000	10.4 Million
5	Hamilton	21	135,000	3.0 Million
6	Hilton	30	180,000	22.6 Million
7	Howell	32	255,000	7.7 Million
8	Ironbound	24	700,000	15.0 Million
9	Market Street	116	100,000	9.9 Million
10	Meadowlands	26	270,000	24.5 Million
	Morris	NA	10,500	0.3 Million
12	Newton	28	135,000	3.5 Million
13	Oradell	59	82,000	16.2 Million
14	Orange	31	150,000	18.1 Million
15	Washington	31	230,000	5.2 Million
	Wayne	21	200,000	10.1 Million

Southern Garage Locations



PROJECT SHEET BUS GARAGE MODERNIZATION PROGRAM (ZERO EMISSION BUS FLEET READY)

ESTIMATED TOTAL PROJECT COSTS

$1.115B

O&M Costs/Business Performance
Servicing a zero emission fleet with new equipment would minimize operations and maintenance costs and increase efficiency

Network Impact
Modernizing all sixteen garages would positively impact the entire NJ TRANSIT bus fleet and system operations

Air Quality
Servicing a zero emission bus fleet would significantly reduce emissions and improve air quality across the state

State of Good Repair
Four garages would be planned for full re-construction and the other twelve garages would be planned for a full modernization

STRATEGIC GOALS MET

Promote a more sustainable future for our planet

Ensure the reliability and continued safety of our transit system

A cost-effective, modern, and state-of-the-art bus garage infrastructure *would support zero emission bus fleet rollout.*

Description

NJ TRANSIT operates 16 bus garages throughout the state. The four oldest (Big Tree, Fairview, Market Street, and Oradell) range from 60 to 120 years old. No major rehabilitation work has been performed at the garages since 1998. Market Street is currently slated to receive basic work to maintain its serviceability, but its configuration and size prevent it from accommodating new, larger buses and electric bus fleet upgrades. Each of these garages is located within urban areas which makes expansion challenging. Currently, these garages are operating at or above existing storage and maintenance capacity and will not be able to cope with anticipated ridership growth and anticipated bus fleet changes such as an increased number of articulated buses and the implementation of zero emission fleet.

If funded, the Bus Garage Replacement Program would replace the four oldest bus garages with state-of-the-art facilities that are zero emission ready, capable of storing and maintaining existing buses, new 45-foot buses, 60-foot articulated buses, and new electric buses. The new garages could be constructed with solar panels on the roofs, modern fleet diagnostics, and maintenance equipment. The size of these new facilities could accommodate anticipated ridership growth. Where feasible, new garages could be constructed within the footprint of existing facilities to reduce property acquisition costs. The new garages could be zero emission fleet ready and LEED certified.

***ESTIMATED PROJECT COSTS (2020 Dollars):**

$609 Million

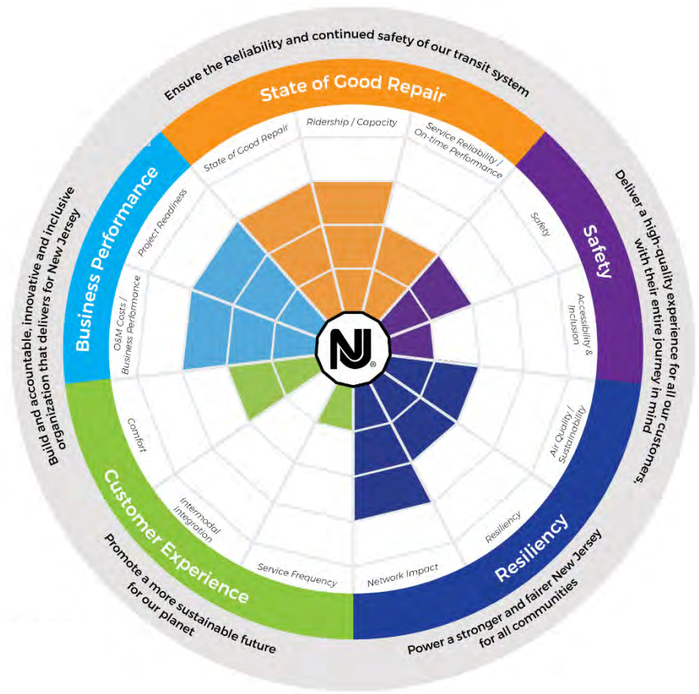
**Estimates are based upon concept for design*

Existing:
Market Street Garage (Built in 1903)



Proposed:
Newer Bus Garage Facility





Value to Customers

- Increases bus availability and reduces depot delays providing more frequent and reliable service to customers
- Improves bus on-time performance (OTP)
- Improves state of good repair of bus fleet
- Improves cleanliness and hygiene of bus fleet

Value to State

- Increases return on investment (ROI) for revenue vehicles owned by NJ TRANSIT
- Reduces lifecycle maintenance costs and results in more efficient use of taxpayer funds through implementation of new sustainable facilities

Project Sheet | Bus Garage Replacement Program (Zero Emission Bus Fleet Ready)

Market Street Garage (Built 1903)



Oradell Garage (Built 1960)



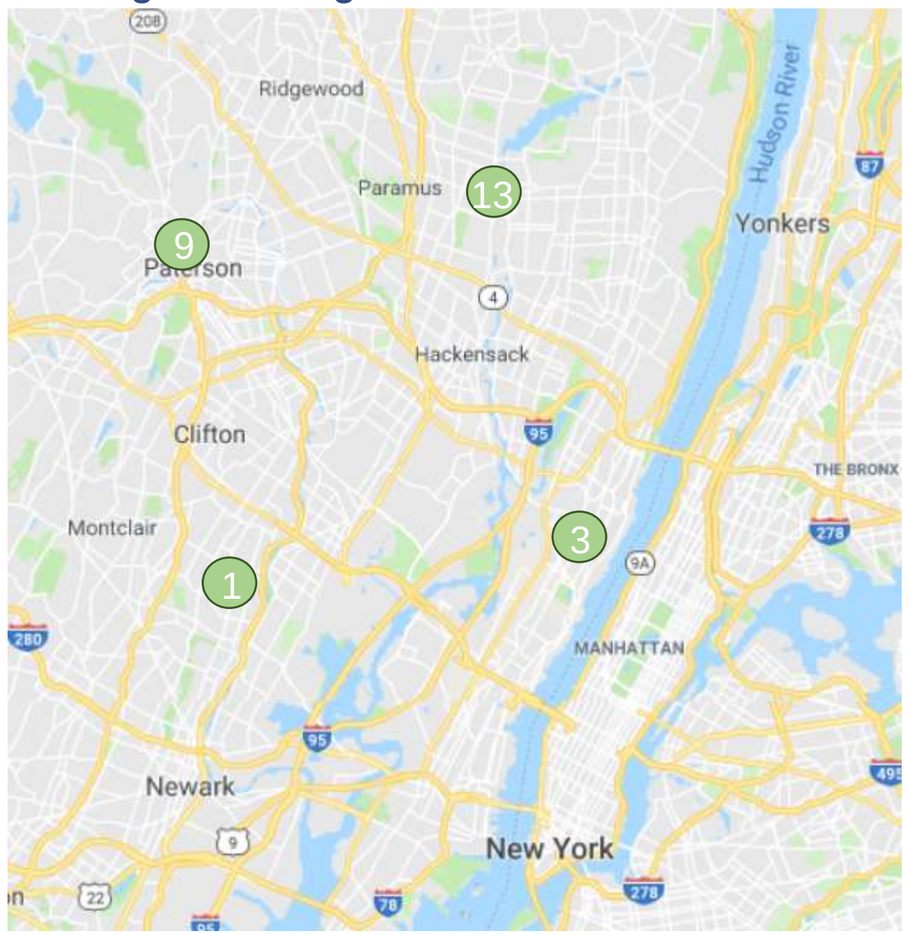
Big Tree Garage (Built 1916)



Fairview Garage (Built 1945)



Existing Bus Garage Locations



No.	Garage Name	Age	New Building SF	New Parking SF	% Larger	Weekly Revenue Trips	Existing Annual Ridership	Existing Buses / Capacity
	Big Tree	111	57,000	73,000	20%	1,185	9.9 Million	80 / 74
3	Fairview	74	95,000	75,000	126%	960	9.7 Million	116 / 116
9	Market Street	116	120,000	55,000	14%	1,795	9.9 Million	150 / 150
	Oradell	59	150,000	120,000	83%	1,965	16.2 Million	208 / 215

PROJECT SHEET BUS GARAGE REPLACEMENT PROGRAM (ZERO EMISSION BUS FLEET READY)

ESTIMATED TOTAL PROJECT COSTS

$609M

Ridership/Capacity
The new garages would be zero emission fleet ready and would be sized to service new 45-foot buses and 60-foot articulated buses to accommodate expected ridership growth

Network Impact
New garages would reduce delays throughout NJ TRANSIT's bus network

STRATEGIC GOALS MET

Deliver a high-quality experience for all our customers, with their entire journey in mind

Ensure the reliability and continued safety of our transit system

State of Good Repair
Replacing the oldest garage would improve state of good repair, improve cleaning capacity, and reduce equipment failure rates

O&M Costs/Business Performance
Reduced garage congestion, energy consumption, and maintenance outages would support expanded bus fleet and increased revenue trips

*The new garages would **reduce depot delays** and **accommodate an expanded bus fleet** to **better meet the needs of customers**.*

Bus Fleet



NJTRANSIT
The Way To Go.

Description

The NJ TRANSIT bus system provides state-wide mass transit accessibility from many locations throughout the state. The existing bus fleet consists of various bus types that all run on diesel fuel. When funded, replacement of NJ TRANSIT bus fleet with new zero emission technology would reduce the carbon footprint of NJ TRANSIT, reduce emissions in urban areas, while providing the same high-level service to New Jersey communities.

NJ TRANSIT has a goal of converting the entire bus fleet to Zero Emission Vehicles (ZEV) by 2040 to comply with state legislative mandate. In the first phase of this conversion, NJ TRANSIT is proposing to convert 2 to 3% of the NJ TRANSIT bus fleet to ZEV. A successful ZEV implementation requires infrastructure upgrades at each garage where ZEVs will be operated. These upgrades include charging stations, electrical service upgrades, and other related equipment. This project aims to convert four NJ TRANSIT bus garages for ZEV operations. These four garages (Hilton, Greenville, Hamilton, and Newton Avenue) have been selected for the first phase of electrification due to their limited range routes, level of service provided, and greatest impact to ridership capacity. Hilton and Greenville garages service the Jersey City and Newark areas, the Hamilton garage provides service to the Trenton area, and the Newton garage services the greater Camden area.

If funded, the Phase 1 conversions would accommodate the conversion of 68 diesel transit buses (40-foot buses) with 40-foot ZEVs and add 11 articulated buses (60-foot ZEVs). An additional 21 articulated transit buses (60-foot ZEVs) would be distributed at a new northern garage location.

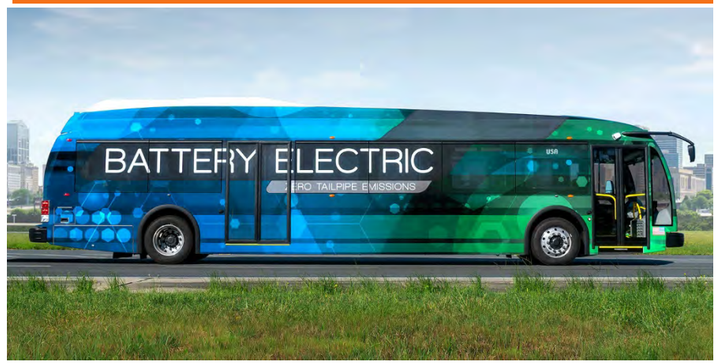
ESTIMATED PROJECT COSTS (2020 Dollars):

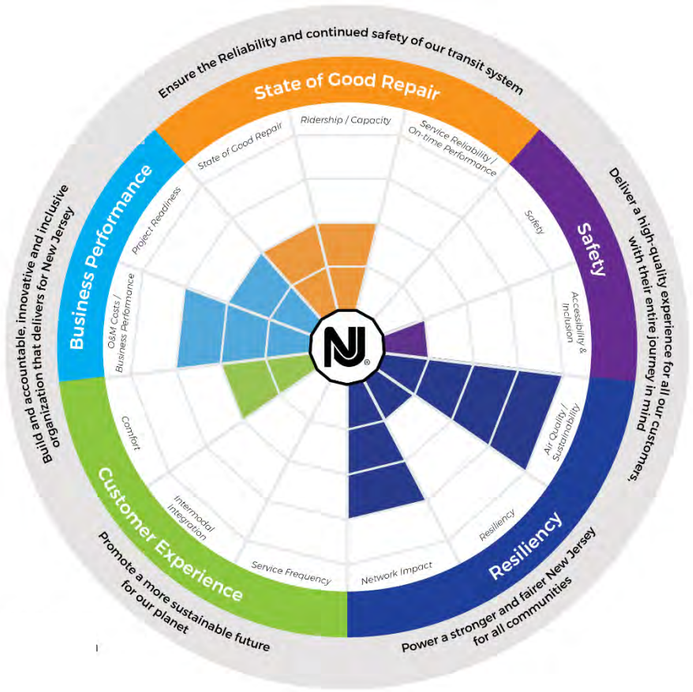
$311 Million

Existing:
Diesel Bus Fleet



Proposed:
Zero Emission Bus Fleet





Value to Customers

- Improves riding conditions by providing a quieter ride
- Reduces personal carbon footprint for passengers

Value to State

- Creates a more efficient and environmentally sustainable transit network
- Lowers operating costs and stability due to decoupling from diesel fuel price fluctuations

PROJECT SHEET BUS FLEET ELECTRFICATION IMPLEMENTATION PROGRAM

ESTIMATED TOTAL PROJECT COSTS

$311M

Network Impact
Converting four garages to zero emission bus operations would positively impact bus operations in the Jersey City, Newark, Camden, and Trenton areas

Comfort
The new zero emission buses would offer customers a more comfortable and quieter riding experience

Air Quality/Sustainability
Zero emissions buses would reduce NJ TRANSIT's overall carbon footprint and reduce emission in urban areas

O&M Costs/Business Performance
Converting to zero emission buses and upgrading garages to facilitate their operation would reduce energy and maintenance costs

STRATEGIC GOALS MET

Deliver a high-quality experience for all our customers, with their entire journey in mind

Promote a more sustainable future for our planet

Implementing a zero emission bus fleet would ***reduce emissions and reliance on diesel fuel*** *as well as* ***positively impact customer comfort***.

Description

The NJ TRANSIT bus fleet consists of over 2,300 buses which are distributed amongst 16 NJ TRANSIT bus garages across the state. The average age of buses in the NJ TRANSIT bus fleet is 13-years, while the anticipated service life for a typical bus is 12-years. As the buses have advanced in age, maintenance expenses have begun to escalate due to the increased frequency of component failure. These maintenance challenges result in significant depot delays which in turn adversely effect on-time performance (OTP). Customer experience is also affected by the age of the buses. Since the same buses typically follow the same route every day, some customers only interface with buses approaching 20-years in age.

If funded, the goal of the bus fleet replacement program would be to replace buses, scheduled in order of age, until all buses within the NJ TRANSIT fleet are operating within their anticipated service life and the average age of the fleet has decreased significantly. Most existing 40-foot NABI buses in the north and central operating regions would be replaced with new 60-foot articulating buses to help keep pace with ridership growth. This would be the last in a series of procurements of diesel buses until garages are ready for battery electric buses.

***ESTIMATED 5-YEAR PROJECT COSTS (2020 DOLLARS):**

$1.19 Billion

**Cost to reduce fleet age and increase onboard capacity by 2026*

Value to Customers

- Increases OTP, safety, and service reliability

Value to State

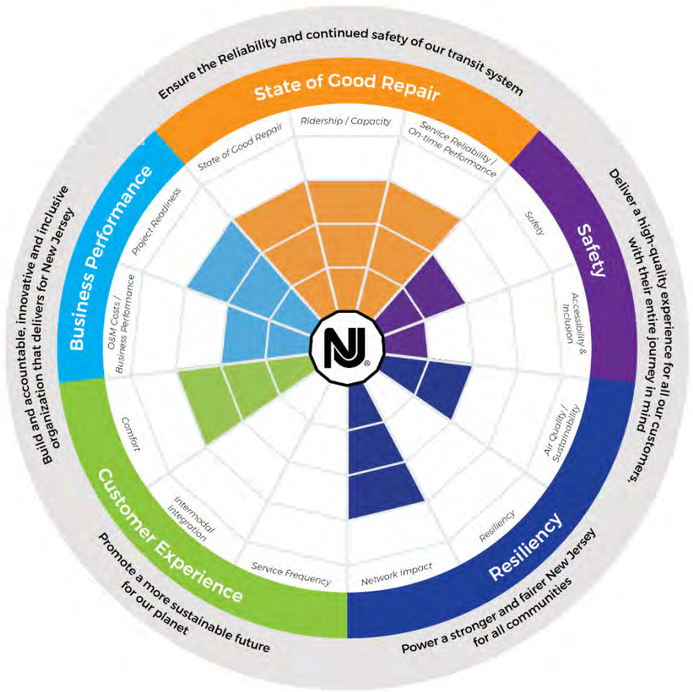
- Lowers operating expenses to enable more efficient use of public funds
- Reduces potential injuries associated with increased on-site maintenance work
- Increases return on investment (ROI) from increased ridership

Existing: Existing NJ TRANSIT Bus



Proposed: New Updated Fleet





PROJECT SHEET BUS FLEET REPLACEMENT

ESTIMATED TOTAL PROJECT COSTS

***$5.7B**

**COST TO REDUCE FLEET AGE AND INCREASE ON-BOARD CAPACITY; COSTS TO FULLY ELECTRIFY FLEET BY 2040*

Comfort
New buses would be more comfortable and equipped with modern amenities to enhance customer comfort

Service Reliability/On-Time Performance
New buses would experience fewer service failures and disruptions leading to improved reliability and on-time performance

Network Impact
Addition of new buses would keep the bus network operating smoothly and on-time

State of Good Repair
Adding new buses to the fleet would reduce the overall average age of the fleet

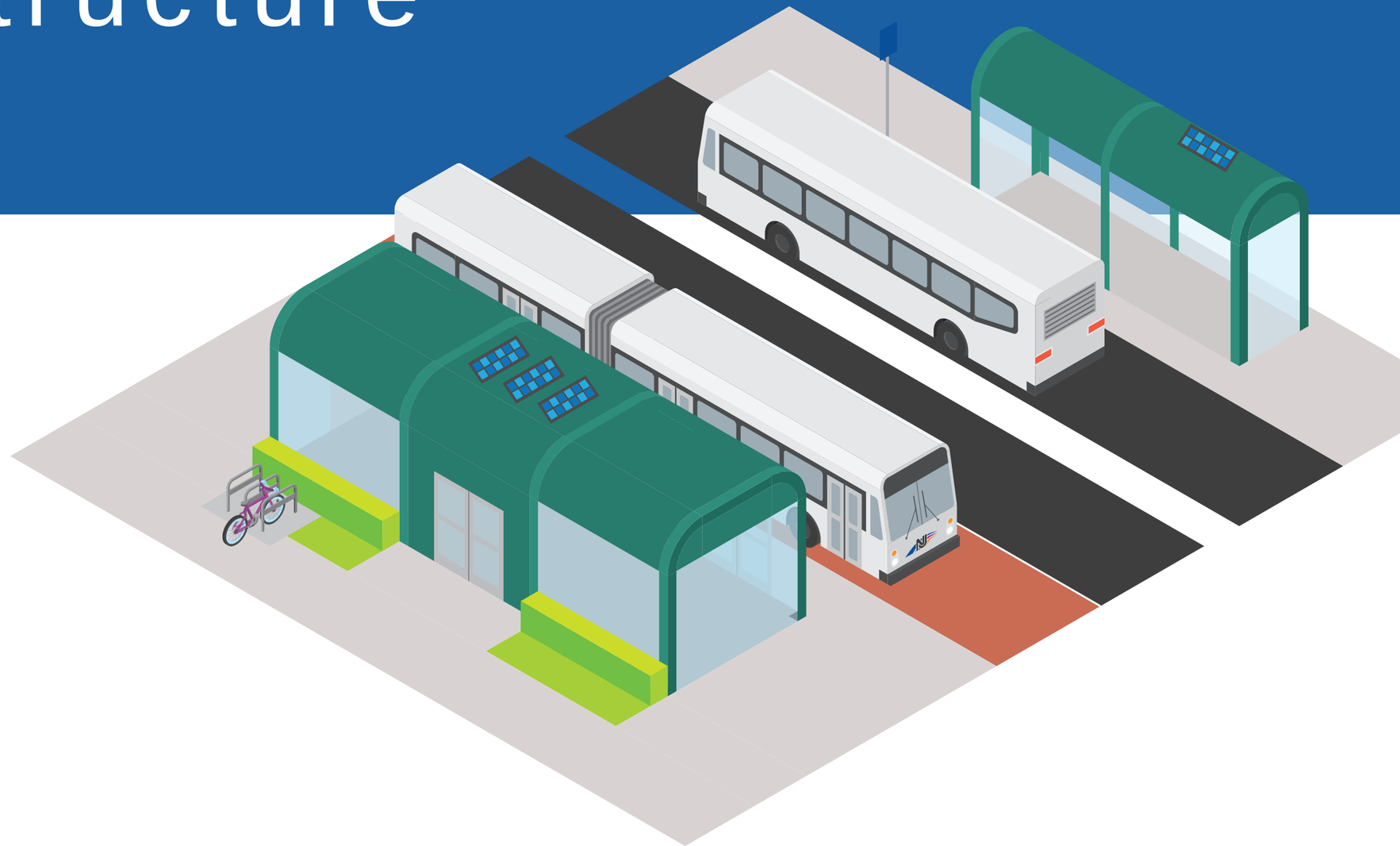
STRATEGIC GOALS MET

Deliver a high-quality experience for all our customers, with their entire journey in mind

Ensure the reliability and continued safety of our transit system

*Adding new buses to the fleet would **impact the entire network** and **greatly enhance customer experience**, **reliability** and **on-time performance**.*

Bus Infrastructure



NJTRANSIT
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Description

The Walter Rand Transportation Center (WRTC), the main intermodal transportation facility for Camden, is envisioned to be replaced and expanded to accommodate growth throughout Camden County.

If funded, this project would go through a design process to ultimately replace the existing facility with an expanded multi-purpose transit center that will provide an improved link in South Jersey Transportation. The new center would better accommodate the 26 bus lines that service the facility; provide improved intermodal connectivity with the PATCO Speedline subway and the River LINE light rail; support intercity independent bus services; and provide additional parking, administrative offices, and value capture retail opportunities to the adjacent growing educational and healthcare corridor. It would also provide an opportunity for integration with battery electric buses.

***ESTIMATED PROJECT COSTS (2020 DOLLARS):**

$275 Million

**Estimates are based upon concept for design*

Value to Customers

- Improves intermodal connections in Camden resulting from a rebuilt and expanded bus facility
- Enhances experience for transit riders

Value to State

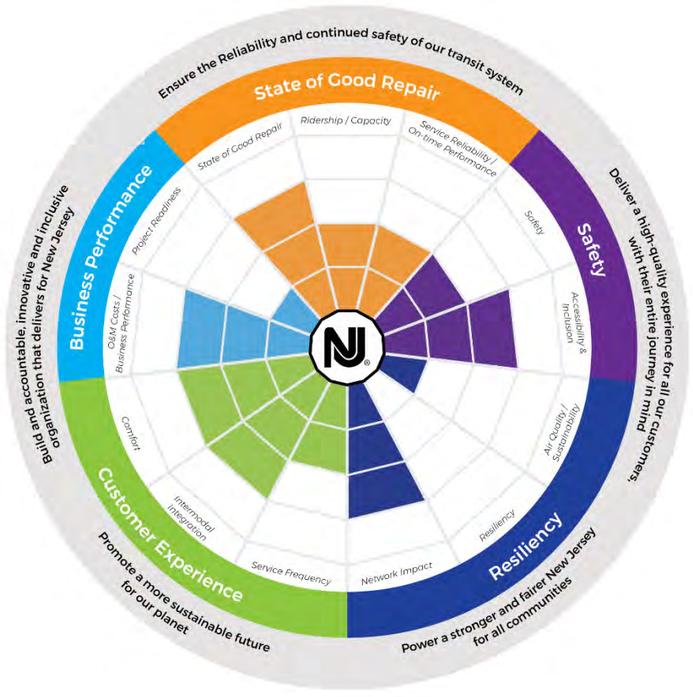
- Supports transit-oriented development in Camden with a rebuilt and expanded transit facility
- Increases efficiency with a state-of-the-art facility
- Provides connectivity to Camden's medical, educational and industrial development areas.

Existing:
Walter Rand Transportation Center



Proposed:
Upgraded and Rehabilitated Building





PROJECT SHEET WALTER RAND TRANSPORTATION CENTER REDEVELOPMENT

ESTIMATED TOTAL PROJECT COSTS

$275M

O&M Costs/Business Performance
New terminal would serve as an anchor for transit-oriented development or facilitate value capture opportunities

Network Impact
New terminal would improve connections across modes and enhance connectivity to local institutions and destinations

Intermodal Integration
The expanded terminal would better connect South Jersey rail and bus service, eliminating a missing link

State of Good Repair
A completely rebuilt and state-of-the-art facility would replace an aged, undersized, and maintenance intensive facility

STRATEGIC GOALS MET

Deliver a high-quality experience for all our customers, with their entire journey in mind

Power a stronger and fairer New Jersey for all communities in the region

*A new **expanded, multi-purpose transit center** would **improve connectivity** and **create better linkages for** South Jersey Transit.*

Description

NJ TRANSIT operates 14 park & ride facilities throughout the state providing parking for approximately 8,800 vehicles access to 25 NJ TRANSIT bus lines. The North Bergen Park & Ride is the largest park & ride facility in the NJ TRANSIT bus system providing 1,500 parking spaces for the NJ TRANSIT bus line that connects North Bergen Park and Ride directly to the Port Authority Bus Terminal in New York City. The parking lots at North Bergen Park & Ride typically reach capacity by the mid-morning travel peak, which inhibits additional customers from utilizing the bus line.

If funded, this project would feature construction of a new parking garage on an existing portion of the park & ride property, potentially creating an additional 2,000-spaces at the facility. The new parking garage could more than double the operational capacity of the existing facility while also generating parking revenue and could be constructed with solar panels on the roof to offset maintenance costs at the site.

***ESTIMATED PROJECT COSTS (2020 Dollars):**

$139 Million

**Estimates are based upon concept for design*

Value to Customers

- Allows additional customers to access the NJ TRANSIT 320 bus line due to additional parking spaces

Value to State

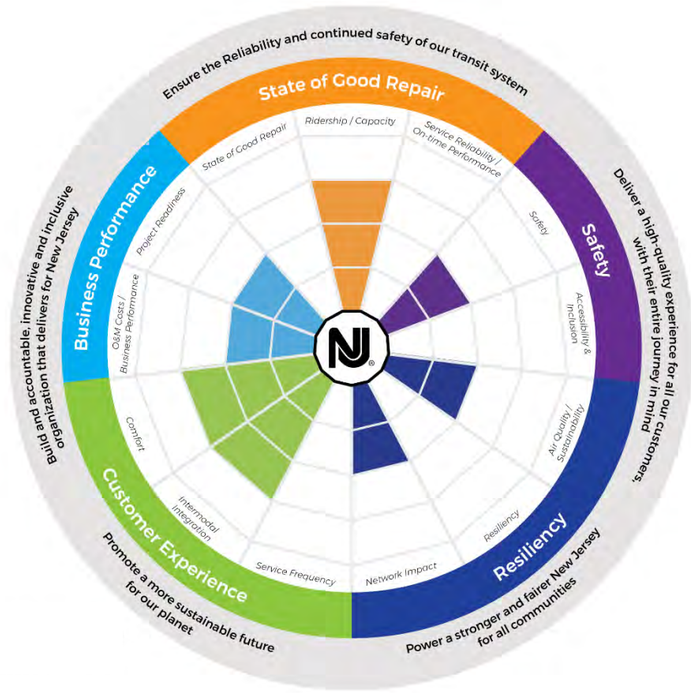
- Increases return on investment (ROI) due to increased ridership on 320 Bus Line.
- New sustainable facility reduces lifecycle maintenance costs and results in more efficient use of taxpayer funds.

Existing:
North Bergen Park & Ride Lots



Proposed:
New Parking Garage





PROJECT SHEET NORTH BERGEN PARK & RIDE PARKING GARAGE

ESTIMATED TOTAL PROJECT COSTS

$139M

Intermodal Integration
A new parking garage would allow for better integration with the 320 Bus Line

Safety
The new parking garage would be gated, sheltered from the elements, and well-lit with video surveillance to enhance safety

Ridership/Capacity
Two thousand additional parking spaces would accommodate existing and growing ridership to Port Authority Bus Terminal

Comfort
A new, indoor climate controlled facility would improve customer experience as they wait for their bus

STRATEGIC GOALS MET

Deliver a high-quality experience for all our customers, with their entire journey in mind

Ensure the reliability and continued safety of our transit system

Two thousand additional parking spaces would ***accommodate peak ridership*** *and* ***generate parking revenue****.*

Description

NJ TRANSIT operates 14 park & ride facilities throughout the state which provide parking for 8,800 vehicles and access to 25 lines of the NJ TRANSIT bus network. In the future, the Old Bridge Park & Ride will allow buses the advantage of future planned Exclusive Bus Lanes (XBL) and Bus Bypass Shoulders (BBS) to prioritize buses on this congested corridor. The Old Bridge Park & Ride Facility is located on the northbound side of Route 9 and provides 916 parking spaces for NJ TRANSIT bus customers. Buses must currently exit Route 9 to drop off customers during the PM commute in a movement that increases travel time. Customers returning in the evening must walk approximately a quarter of a mile, with no protection from the elements, over the Meleta Way bridge to the park & ride facility on the northbound side.

If funded, a new enclosed pedestrian bridge would be constructed to connect the drop off point on the southbound side of Route 9 with the parking lots on the northbound side of Route 9, and a turnout would be constructed along the southbound side of Route 9 to reduce the complication of evening drop offs. This will improve operational efficiency and decrease travel time for customers continuing south from the park & ride.

ESTIMATED PROJECT COSTS (2020 Dollars):

$22 Million

Value to Customers

- New pedestrian bridge provides protection from the elements.

Value to Customers

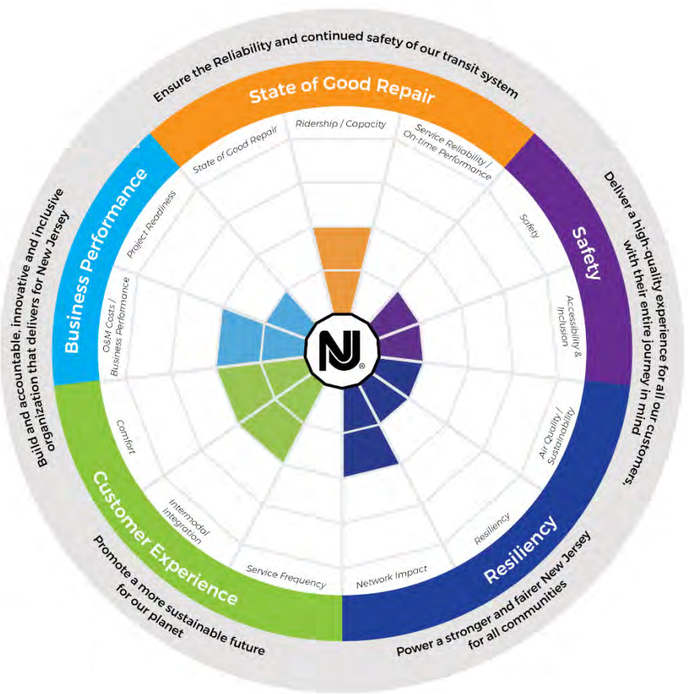
- Increases parking capacity leads to increased ridership and return on investment (ROI)
- New southbound turnout/drop off results in reduced travel time and improved operational efficiency

Existing: Old Bridge Park & Ride



Proposed: New Pedestrian Bridge





Project Sheet | **Old Bridge Park & Ride Enhancement**



LEGEND:

- Existing parking
- New facilities
- New SB turnout
- PM walking routes

PROJECT SHEET OLD BRIDGE PARK AND RIDE ENHANCEMENT

ESTIMATED TOTAL PROJECT COSTS

$22M

Intermodal Integration
Enhanced bus operations and pedestrian bridge would make it easier for customers to transition from their car to a bus

Comfort
Pedestrians would be able to more safely connect from one mode of transportation to another on their commute

Ridership/Capacity
Decreased commute times with faster dedicated bus corridors would attract more riders

O&M Costs/Business Performance
Enhanced pedestrian and bus amenities would increase ridership revenues and operational efficiency

STRATEGIC GOALS MET

Deliver a high-quality experience for all our customers, with their entire journey in mind

Ensure the reliability and continued safety of our transit system

Park and Ride enhancement would ***improve operational efficiency and decrease travel time*** *for customers.*

Description

NJ TRANSIT operates 14 Park & Ride facilities throughout the state which provide parking for over 8,800 vehicles and access to 25 NJ TRANSIT bus lines. Passenger shelters are provided at each park & ride facility. These shelters are overcrowded and are at or past the end of their service life, and do not provide any amenities to customers other than perfunctory limited weather shielding.

If funded, the Park & Ride Bus Shelter Modernization Program would replace existing passenger shelters. The new structures could feature well-lit climate-controlled enclosures with automatic doors and may incorporate solar panels. Accessibility features will be considered during the design. Paving and curb repairs, drainage repairs, pavement striping, exterior lighting, CCTV cameras installation, PA systems and customer information displays are other key elements which could also be implemented at each facility as part of this project. Off-board fare collection could be included at each location.

***ESTIMATED PROJECT COSTS (2020 Dollars):**

$75 Million

**Estimates are based upon concept for design*

Value to Customers

- Increases safety and comfort

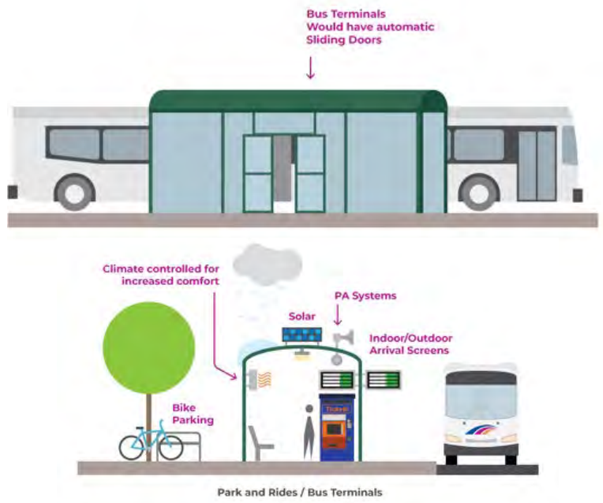
Value to State

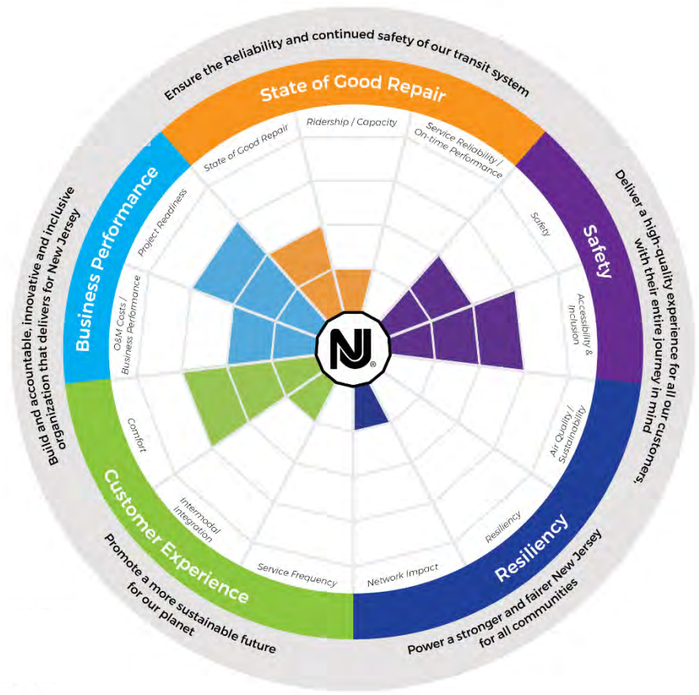
- Increases return on investment (ROI) for revenue vehicles due to increased attractiveness of facility

Existing:
Old Bridge Park & Ride Enclosure



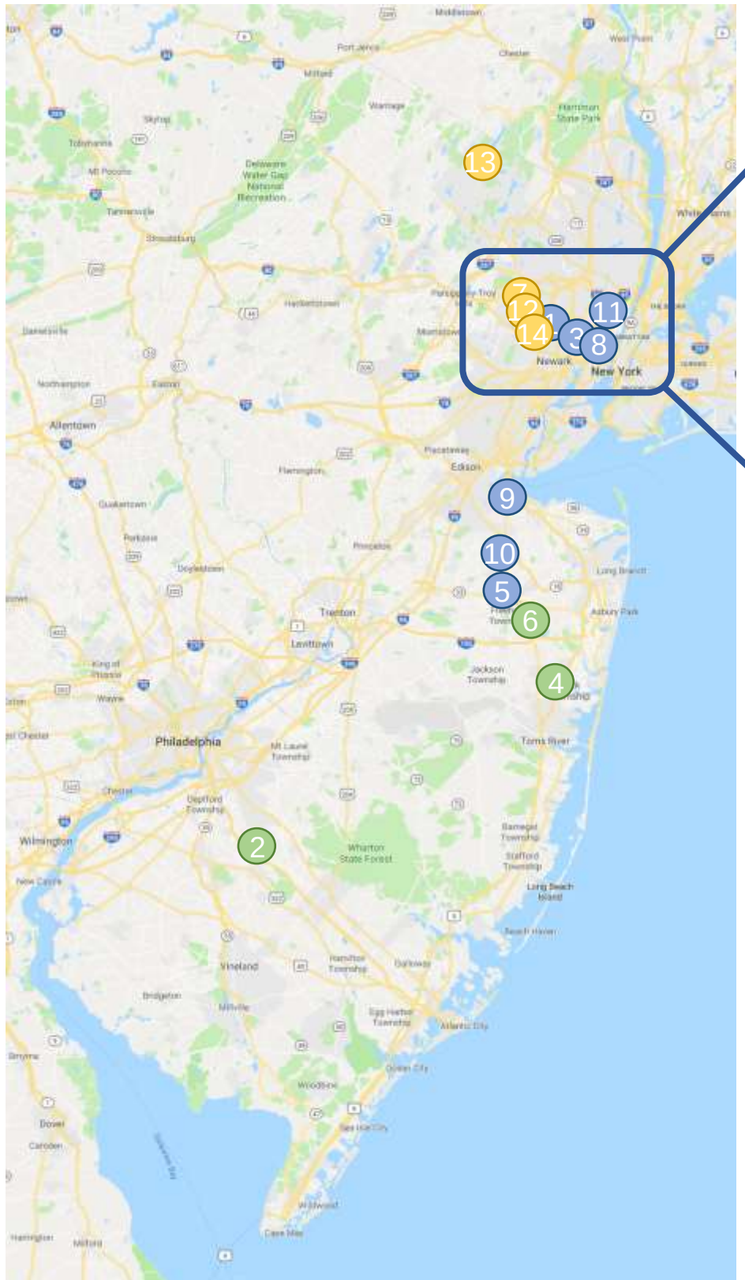
Proposed:
Example Architecturally Enhanced Enclosure

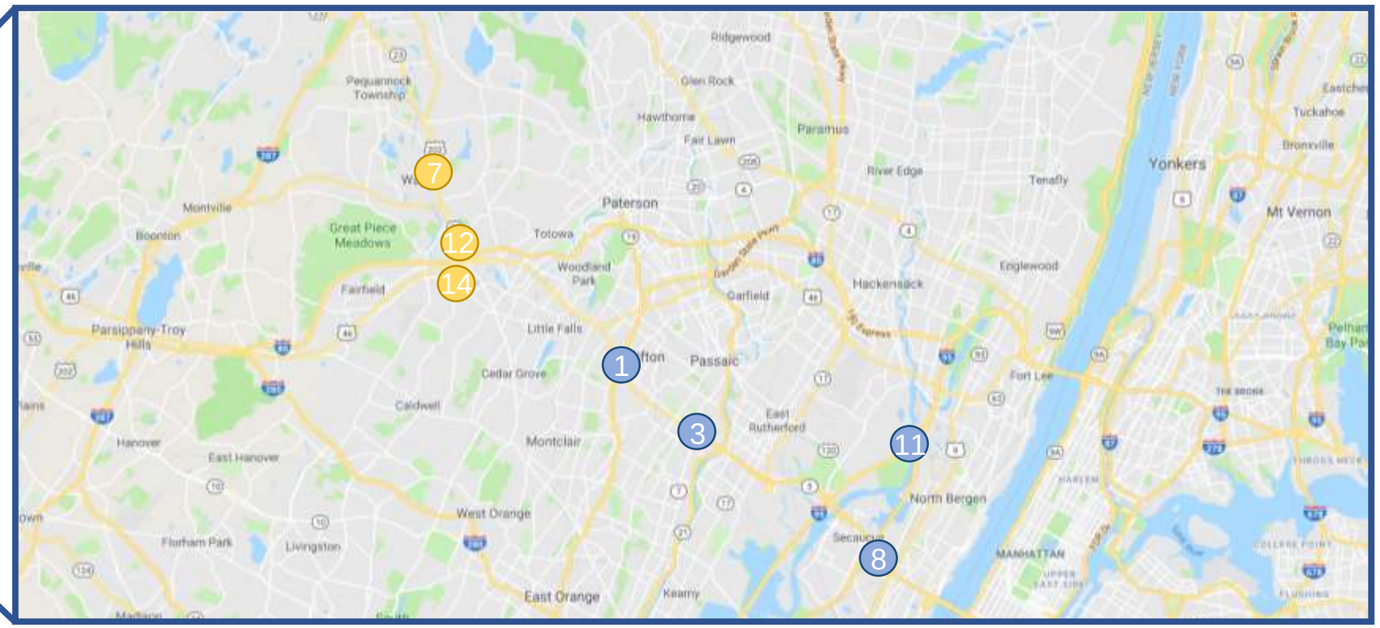




Project Sheet | Park & Ride Bus Shelter Modernization Program

Park & Ride Locations





	Park & Ride Facility	Parking Spaces	Shelter Footprint (SF)	Construction Year
1	Allwood	695	980	3
2	Avandale	330	700	2
3	Clifton Commons	134	450	3
4	Dorado	230	1,100	2
5	Freehold Mall	349	1,200	3
6	Howell	462	3,500	2
7	Mother's	286	600	4
8	North Bergen	1,504	6,000	3
9	Old Bridge	913	4,000	3
10	Union Hill	589	1,000	3
11	Vince Lombardi	1,022	6,000	3
12	Wayne 23	1,017	3,000	4
13	West Milford	252	600	4
14	Willowbrook	1,082	1,300	4

LEGEND:	
Year 1	Design
Year 2	Avandale, Dorado, Howell
Year 3	Allwood, Clifton Commons, Freehold Mall, North Bergen, Old Bridge, Union Hill, Vince Lombardi
Year 5	Mother's, Wayne 23, West Milford, Westbrook

PROJECT SHEET PARK & RIDE BUS SHELTER MODERNIZATION PROGRAM

ESTIMATED TOTAL PROJECT COSTS

$75M

Safety and Security
CCTV cameras, new PA systems, and new customer information displays at each station would enhance safety

State of Good Repair
Existing shelters at the end of their service would be prioritized for replacement

STRATEGIC GOALS MET

Deliver a high-quality experience for all our customers, with their entire journey in mind

Ensure the reliability and continued safety of our transit system

Comfort
New shelters would be climate-controlled, well-lit, and sized to reduce crowding

Accessibility and Inclusion
New shelters would be accessible for all customers

*New shelters would be **accessible for all, well-lit, and climate controlled**, yielding **safer, cleaner**, and **more comfortable shelters**.*

Description

NJ TRANSIT operates over 200 bus routes that provide service to 386 municipalities across New Jersey. Along those routes, NJ TRANSIT has furnished and installed local bus shelters that are maintained by local municipalities. These bus shelters vary in age; some have reached the end of their anticipated service life and are in poor condition. In addition, lack of lighting at the bus shelters is a safety concern. The existing bus shelters provide limited weather protection. Upgrading these shelters is an opportunity to add value to the customer experience.

If funded, this project would replace and augment existing bus shelters with new enhanced bus shelters. The shelter design would be standardized to reduce procurement costs and simplify the installation. The new shelters would include solar panels to power lighting and enhance the customer experience.

***ESTIMATED PROJECT COSTS (2020 Dollars):**

$17 Million

**Estimates are based upon concept for design*

Value to Customers

- Increases safety, security, and comfort for customers

Value to State

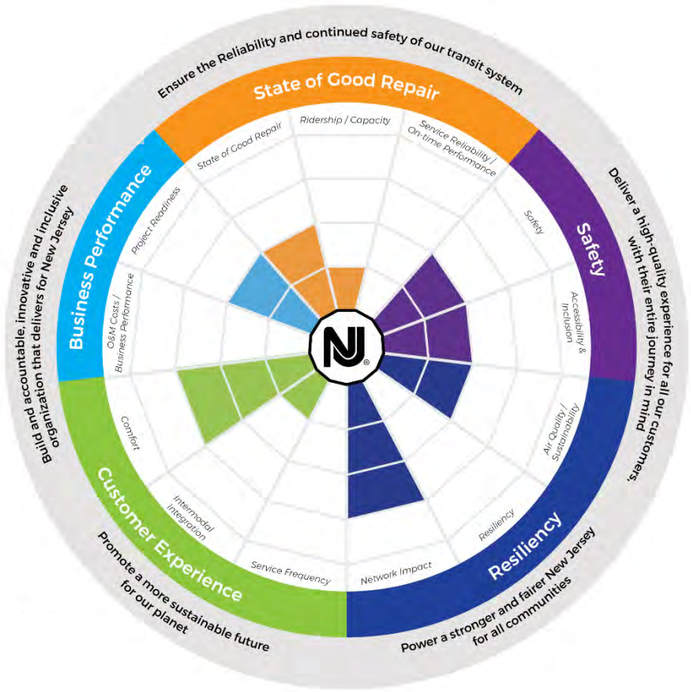
- Increases return on investment (ROI) for revenue vehicles due to increased attractiveness of facilities
- Enhances safety for customers

Existing: Typical Local Bus Shelter



Proposed: "Green" Powered Enhanced Shelter





PROJECT SHEET LOCAL BUS SHELTER MODERNIZATION PROGRAM

ESTIMATED TOTAL PROJECT COSTS

$17M

Network Impact
Safer and more comfortable bus shelters would make it easier for customers to use the bus network

State of Good Repair
Modernized shelters would reduce average age of bus shelters and maintenance and operations costs

Safety
Improved lighting at bus shelters would enhance customer safety

Comfort
Modern bus shelters would contain modern amenities to improve customer comfort while waiting

STRATEGIC GOALS MET

Deliver a high-quality experience for all our customers, with their entire journey in mind

Ensure the reliability and continued safety of our transit system

*New shelters would include solar panels to **power lighting elements to enhance customer experience**.*

Description

The Passaic Bus Terminal provides service to 10 NJ TRANSIT bus lines and is located within a turn-out on Main Avenue in Passaic and provides no off-street bus facility. There is currently space for four 40-foot buses within the terminal. The NJ TRANSIT Fleet Replacement Plan will include the replacement of many of the existing 40-foot NABI Suburban and Transit style buses with new 60-foot articulated buses. These new, larger buses will further reduce operational capacity at the facility.

If funded, the Passaic Bus Terminal Project would replace the existing terminal turn-out with a new off-street terminal facility. The new location could provide space for up to 12 buses within the terminal facility and provide amenities such as solar panels mounted to the terminal awnings, CCTV cameras, improved lighting, PA systems, customer information displays, and off-board fare collection. It would also provide an opportunity for integration with battery electric buses.

ESTIMATED PROJECT COSTS (2020 Dollars):

$6 Million

Value to Customers

- Increases safety, comfort, and access
- Improves customer experience

Value to State

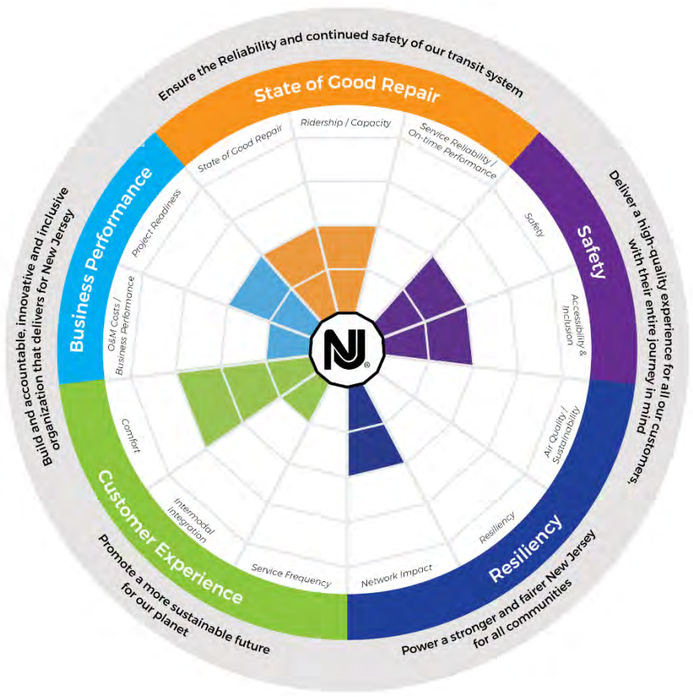
- Increases return on investment (ROI) for Revenue vehicles due to increased ridership and lower cost of maintenance

Existing:
Passaic Bus Terminal Transportation Center



Proposed:
Upgraded Bus Terminal Facility





PROJECT SHEET PASSAIC BUS TERMINAL REDEVELOPMENT

ESTIMATED TOTAL PROJECT COSTS

$6M

Comfort
New customer amenities, including covered waiting areas, enhanced lighting, and upgraded information displays, would enhance comfort

Ridership/Capacity
A redeveloped bus terminal would accommodate more buses and riders to meet future ridership demand

State of Good Repair
A brand new facility would replace the aging facility and provide an opportunity for integration with battery electric buses

Safety
A new facility with improved customer-facing amenities and improved layout for bus pick-ups and drop-offs would improve overall pedestrian safety

STRATEGIC GOALS MET

Deliver a high-quality experience for all our customers, with their entire journey in mind

Ensure the reliability and continued safety of our transit system

Redeveloping Passaic Bus Terminal would ***replace the existing terminal*** *with a new off-street terminal facility that will* ***enhance comfort, safety, and state of good repair****.*

Description

NJ TRANSIT's bus terminals and multimodal facilities (Newark Penn, Secaucus Junction, and Hoboken Stations) provide access to customers for numerous bus lines, and at multimodal facilities transfers to rail and/or light rail lines. At Secaucus Junction and Hoboken Terminal, bus customers are provided with overhead awnings, but no additional comfort or safety features. At Newark Penn Station, bus customers have access to enhanced enclosures on the Market Street side of the station which include complete enclosure and climate control, while enclosures on Raymond Boulevard are less significant and exhibit signs of advanced deterioration. The bus terminal facilities vary in age and require rehabilitation and upgrades to restore them to a state of good repair and improve customer experience

When funded, this project would upgrade the existing passenger areas with upgraded climate-controlled enclosures featuring automatic doors and solar panels where feasible. The new enclosures would be of similar construction to those that exist on Market Street at Newark Penn Station. The deteriorated existing passenger enclosures at Newark Penn Station would be completely replaced while new lighting and repairs to overhead rail viaduct will be completed. At Secaucus Junction, the existing awnings along the bus pick-up and drop-off lanes would be replaced with new full enclosures, and solar panels would be installed on the new enclosure roofs where full sun exposure is possible to offset operating costs. Both facilities would include new modern PA equipment and new digital customer information displays to improve the customer experience and to improve accessibility. Bus terminal facilities would be cleaned and upgraded with new HVAC and bathrooms where needed.

***ESTIMATED PROJECT COSTS (2020 Dollars):**

$38 Million

**Estimates are based upon concept for design*

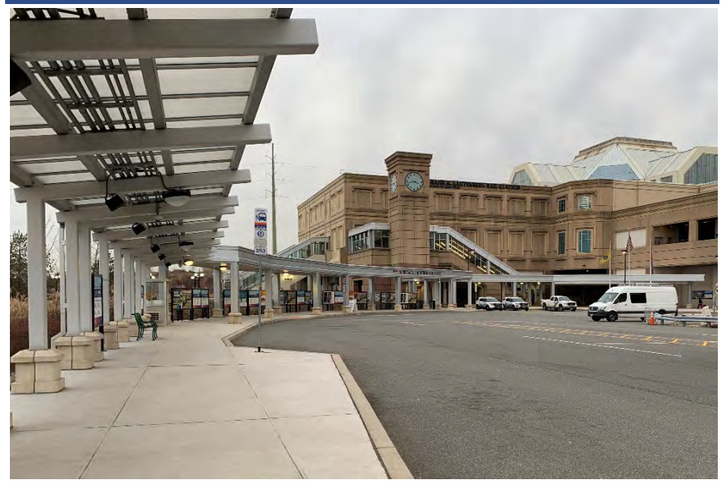
Value to Customers

- Increases safety, comfort, and access
- Improves customer experience

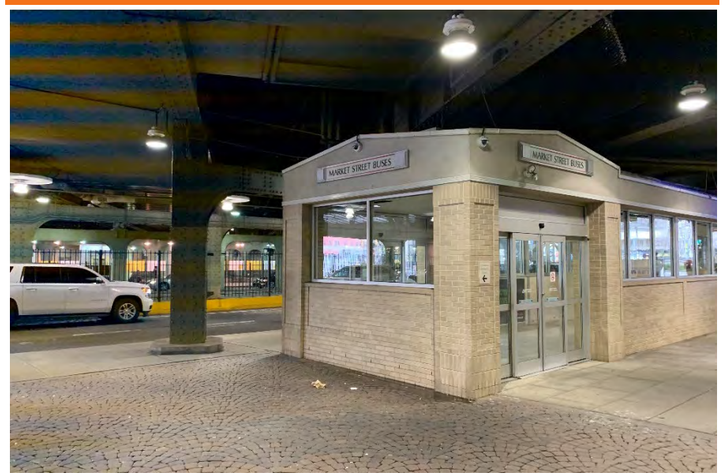
Value to State

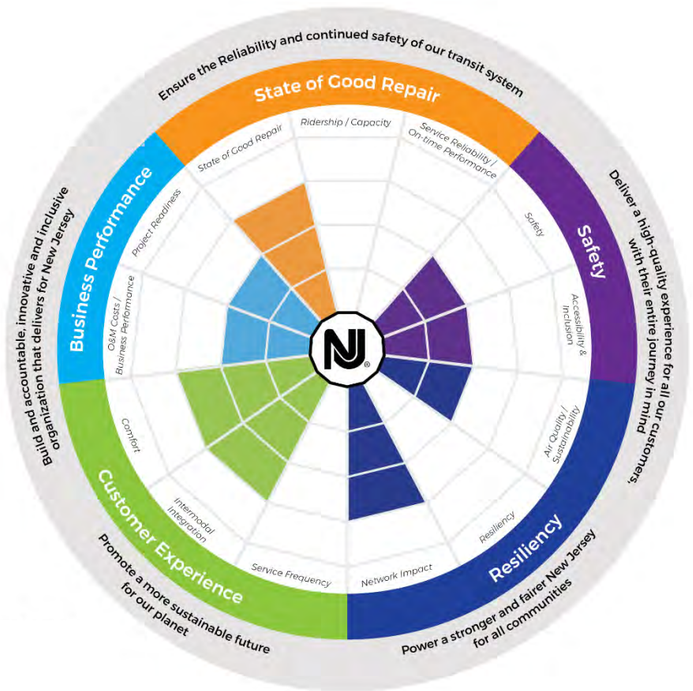
- Increases return on investment (ROI) for Revenue vehicles due to increased ridership and lower cost of maintenance

Existing:
Bus Terminal at Secaucus



Proposed:
New Modern, Fully Enclosed Bus Shelter





PROJECT SHEET MULTIMODAL AND BUS TERMINAL FACILITY IMPROVEMENTS

ESTIMATED TOTAL PROJECT COSTS

$38M

O&M Costs/Business Performance
Installation of solar panels and high efficiency lighting would reduce operating costs

Intermodal Integration
Improved passenger facilities at major nodes would provide better modal connections for customers

Comfort
New facilities would offer improved and modernized customer amenities

State of Good Repair
Rehabilitated and upgraded bus facilities across the network would improve overall state of good repair

STRATEGIC GOALS MET

Deliver a high-quality experience for all our customers, with their entire journey in mind

Ensure the reliability and continued safety of our transit system

Newark Penn Station and Secaucus Junction would be upgraded to ***improve customer experience and connections***.

Description

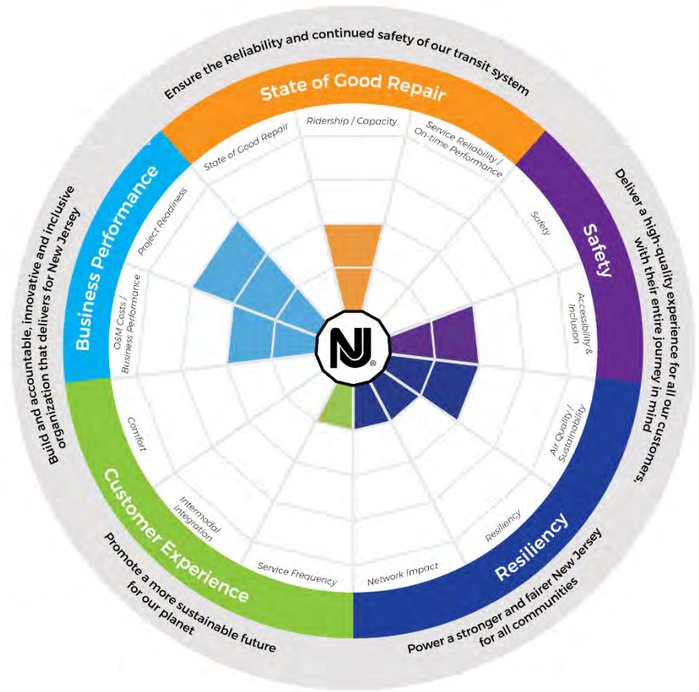
Build on previous studies examining light rail service in Middlesex County. The most recent study was completed in 2001, and proposed a light rail alignment following Route 18 and connecting Piscataway, New Brunswick, and East Brunswick. An updated study would evaluate alignments and propose additional modal alternatives beyond light rail, including BRT and autonomous rail or bus vehicles.

ESTIMATED PROJECT COSTS (2020 Dollars):

$10 Million

Existing: NJ TRANSIT Light Rail Service





Value to Customers

- Expands transit network to provide convenient options for more customers
- Creates new and faster transit connectivity to employment centers, educational institutions, medical centers, and other major trip attractors and generators throughout the State

Value to State

- A more economically competitive region with improved local growth opportunities.
- Creates a more efficient and environmentally sustainable transit network.
- Lessens congestion on local roads and major highways.

PROJECT SHEET NEW BRUNSWICK RAPID SURFACE TRANSIT STUDY

ESTIMATED TOTAL PROJECT COSTS

$10M

Air Quality/Sustainability
An expanded transit network would reduce vehicle emissions and provide a more efficient, sustainable transportation option

Network Impact
Expanding the transit network would provide better transit connectivity to key destinations

Project Readiness
The study could be completed within two years and would be ready to start very quickly

Ridership/Capacity
Expanding the transportation network would increase the customer base and provide more convenient options to existing customers

STRATEGIC GOALS MET

Deliver a high-quality experience for all our customers, with their entire journey in mind

Power a stronger and fairer New Jersey for all communities

The New Brunswick Rapid Surface Transit Study would allow NJ TRANSIT to ***expand service*** *and* ***better support economic vitality****.*

Description

New Jersey Transit operates over **200 bus routes** and three light rail lines throughout the state. To improve connectivity of New Jersey's transportation network, NJ TRANSIT is interested in developing rapid transit systems aimed at improving the speed and performance of surface transportation and to connect customers to major destinations with express service.

The Rapid Surface Transit System Development and Design Program consists of studies and design work necessary to progress the development of rapid surface transit systems and other dedicated surface treatments that improves the on-time performance of the bus and light rail network. This program aims to improve connectivity and travel times to critical destinations and adds connections to missing links throughout the state.

If funded, on-road amenities that would be explored and developed for these systems may include design of right of way improvements for dedicated surface transportation systems on both existing and new infrastructure, pedestrian access improvements to stops and stations, park and ride improvements, off-board ticketing, new vehicle fleet planning, and if the system is electrified, dedicated infrastructure for charging.

ESTIMATED PROJECT COSTS (2020 Dollars)

$538 Million

Proposed: Rapid Surface Transit Systems

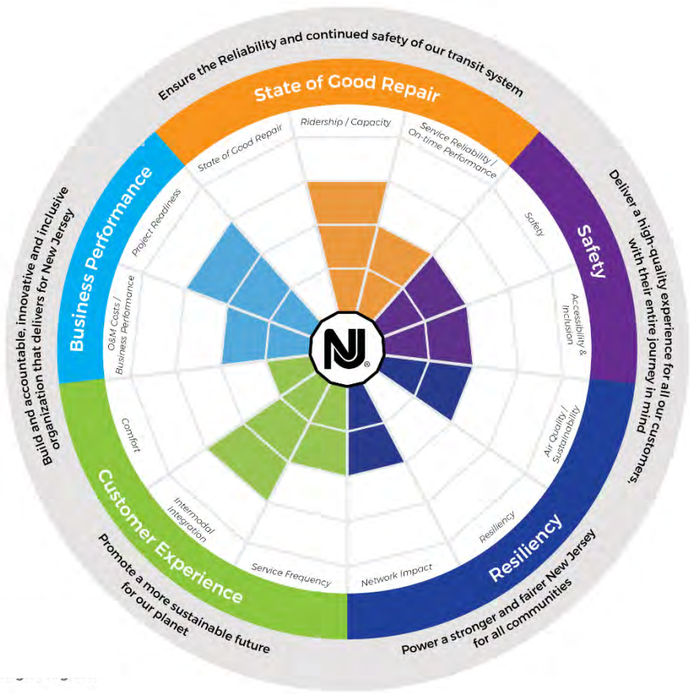


Value to Customers

- Creates new and faster transit connectivity to employment centers, airports, educational institutions, medical centers, and other major trip generators
- Provides more reliable on-time performance of bus services
- Includes dedicated stations providing a comfortable wait
- Creates potential to bring more bicycle and pedestrian links to several counties

Value to State

- Creates a more economically competitive region with improved local growth opportunities
- Develops a more efficient and environmentally sustainable transit network
- Lessens congestion on local roads and major highways
- Allows for potential to set a precedent for bus rapid transit in New Jersey
- Provides better connectivity for customers.
- Improves safety for state residents



PROJECT SHEET RAPID SURFACE TRANSIT SYSTEM DEVELOPMENT AND DESIGN PROGRAM

ESTIMATED TOTAL PROJECT COSTS

$538M

Service Reliability/On-Time Performance
Faster and more efficient services and routes would yield stronger on-time performance

Network Impact
Adding connections would improve access to missing links across the State

Ridership/Capacity
Increased express service offerings to customers would capture more ridership and demand

Intermodal Integration
More connections provided to transit hubs would allow for quicker journeys to and from major destinations

STRATEGIC GOALS MET

Deliver a high-quality experience for all our customers, with their entire journey in mind

Ensure the reliability and continued safety of our transit system

*Improving **speed** and **performance** of the surface transportation system would **connect customers to major destinations**.*

Description

NJ TRANSIT's Princeton Branch is a 2.7-mile electrified commuter rail line running between Princeton Junction (in West Windsor) and Princeton, the line's only two stations. At Princeton Junction, passengers connect with Northeast Corridor rail service to New York City, Newark, and Trenton, as well as to Amtrak regional and national rail services. Princeton Branch service is provided exclusively by Arrow III self-propelled Electric Multiple Unit (EMU) cars built in 1977 which have endured long service lives. New multi-level EMUs being rolled out over the NJ TRANSIT rail system would be ill-suited for operation on the Princeton Branch.

If funded, the Princeton Transitway Project would implement a new surface transportation route to serve the Princeton area. The existing Princeton Branch right-of-way would provide an anchor for this new system, which would help to accommodate Princeton University's plans to expand housing and facilities beyond the current campus limitations. The study and design phase would determine the preferred alternative for the initial implementation of the surface transportation route. The design phase would include removal of the electrified rail service, which is costly to maintain, and replace it with a surface transportation route between Princeton and Princeton Junction.

ESTIMATED PROJECT COSTS (2020

$61 Million

Value to Customers

- Provides access to new comfortable vehicles
- Improves reliability of service due to elimination of electrified rail

Value to State

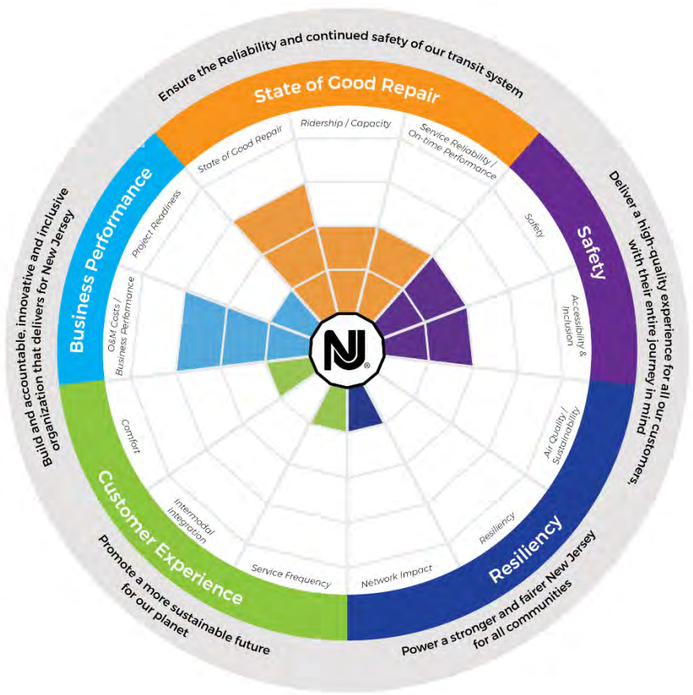
- Reduces operating costs resulting in more efficient use of funds
- Improves safety and reliability of surface transportation system over electrified rail

Existing: Dinky Electrified Rail Service



Proposed: Surface Transportation System





PROJECT SHEET PRINCETON TRANSITWAY

ESTIMATED TOTAL PROJECT COSTS

$61M

O&M Costs/Business Performance
Implementing the Transitway would reduce maintenance costs while providing expanded service

Comfort
The Transitway would improve customer experience through the use of modern equipment

Ridership/Capacity
Improved capacity would enable the service to meet residential growth

State of Good Repair
Replacing an old and expensive rail service with modern surface transportation would improve overall state of good repair

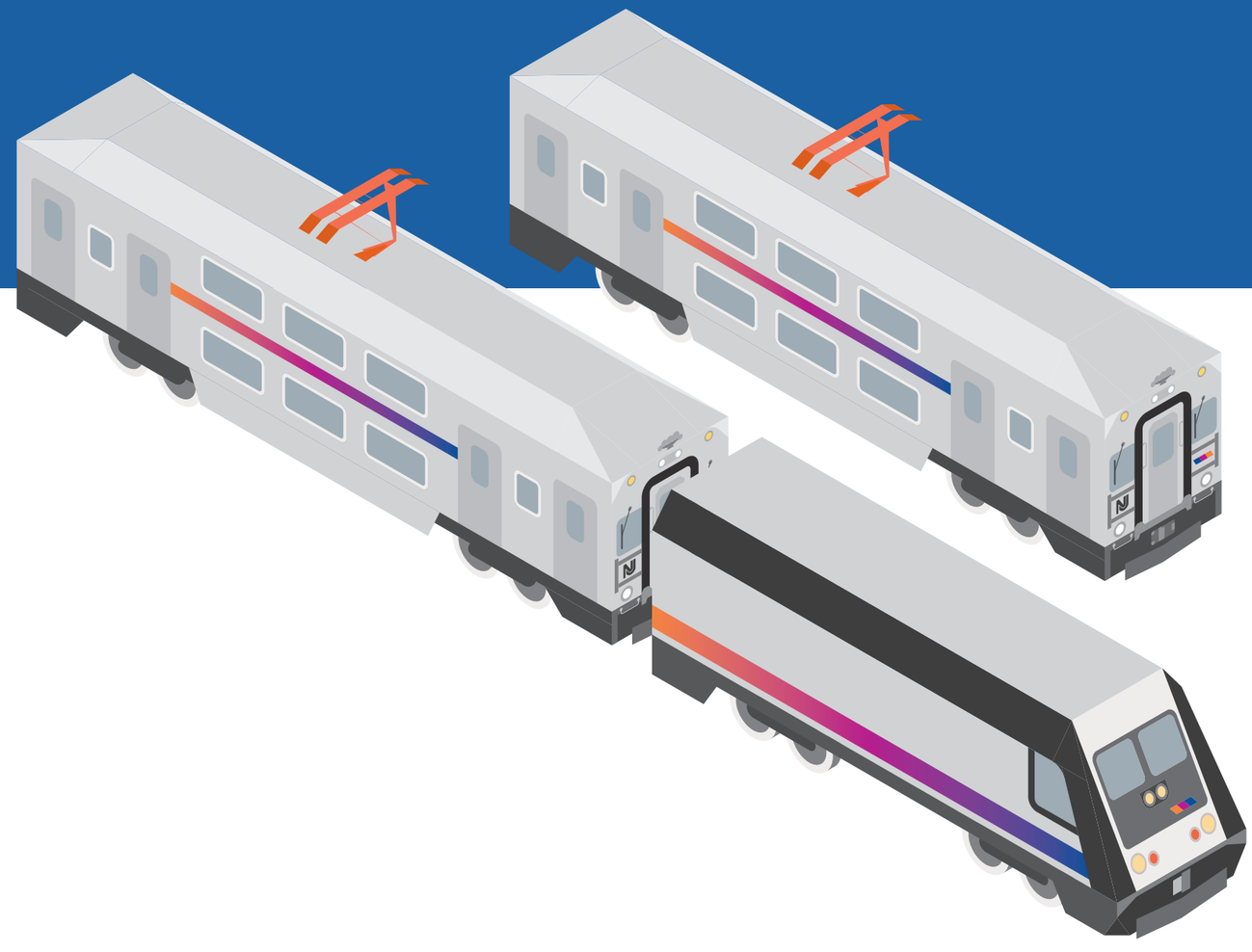
STRATEGIC GOALS MET

Deliver a high-quality experience for all our customers, with their entire journey in mind

Ensure the reliability and continued safety of our transit system

The Princeton Transitway would provide ***an anchor to accommodate expanded housing and facilities*** *in the surrounding area.*

Rail Fleet



NJTRANSIT
The Way To Go.

Description

There are approximately 1,100 rail cars and 179 locomotives that are part of the NJ TRANSIT rail fleet. About 680 of those rail cars are single-level; the Arrow III cars (pictured at right) date back to 1977, while other versions of the Comet single-level cars entered service in 1982, 1996 and 2002. About 430 cars are multilevel. The first iteration of Bombardier's ML1 cars went into service in 2006, while the ML2s went into service in 2012. A third version (the ML3) is scheduled to begin running in 2023. Multi-level cars can fit more passengers than the single-level cars. The multi-levels also provide higher comfort levels for passengers; new ML3s will also feature WiFi access, infotainment screens, and USB charging ports.

If funded, this fleet replacement program would strive to replace all of NJ TRANSIT's single-level cars with multi-levels over the next eight years. Existing ML1s and ML2s would also be overhauled during this time period to increase car efficiency and comfort. In addition, about 25 dual-power locomotives (which can run on both diesel- and electric-powered rail lines) would be added to the fleet, while about 10 diesel locomotives would be retired. These actions would ultimately reduce the average fleet age and drastically improve reliability.

ESTIMATED PROJECT COSTS (2020 Dollars):

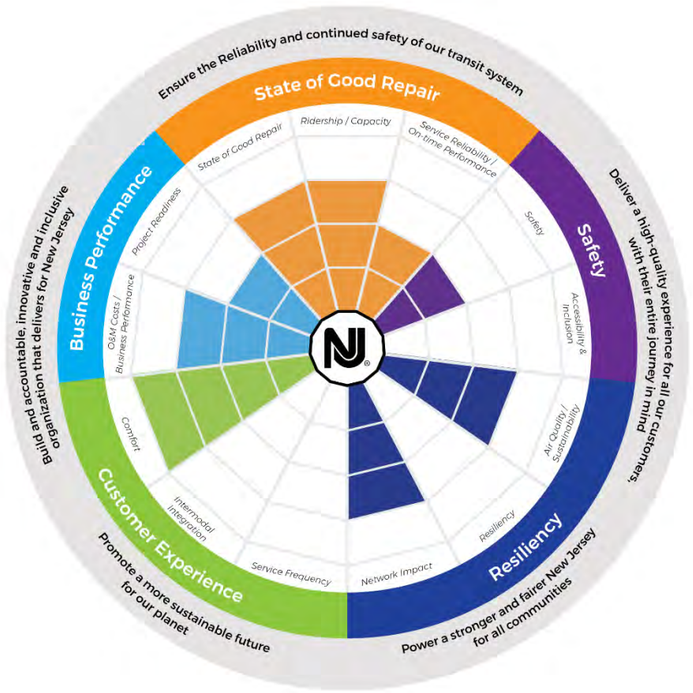
$3.52 Billion

Existing: Single Level Fleet



Proposed: New Updated Multilevel Cars





Value to Customers

- Increased on-time performance (OTP), safety and service reliability

Value to State

- Lowers operating expenses to enable more efficient use of public funds
- Reduces potential injuries associated with increased on-site maintenance work
- Increases return on investment (ROI) from increased ridership

PROJECT SHEET RAIL FLEET REPLACEMENT PROGRAM

ESTIMATED TOTAL PROJECT COSTS

$3.52B

Air Quality/Sustainability
The dual-powered locomotives added to the fleet would run on both diesel and electric powered rail lines, reducing emissions and improving air quality

Comfort
New rail cars would be equipped with modern amenities to maximize customer experience and comfort

O&M Costs/Business Performance
Maintenance and operations expenses would be reduced as service performance increases with new vehicles

State of Good Repair
Reducing the average age of the rail fleet vehicles and decreasing equipment failure occurrences would improve state of good repair

STRATEGIC GOALS MET

Deliver a high-quality experience for all our customers, with their entire journey in mind

Promote a more sustainable future for our planet

*The rail fleet replacement program would lead to an **increase of about 40 rail cars** and **15 locomotives for** the fleet while **improving customer experience and air quality**.*

Description

Trains currently running along NJ TRANSIT rail lines are either powered with diesel fuel-powered engines or with electrified overhead catenary wires. Diesel engines are less efficient in providing power to the trains while research shows they increase carbon emissions. Powering cars using overhead catenary wires is similarly less efficient because electricity must flow along a series of catenary lines, which dissipates energy as it travels. Adding battery storage capacity allows for further savings via energy capture through regenerative braking, which is currently not possible with existing rolling stock design. Additional benefits include the ability to run electric trains where existing catenary power supply is disabled due to extreme events, or depowered for service.

If funded, the Train Battery Pilot project would test the use of batteries to power existing NJ TRANSIT trains. Lithium-ion batteries are being studied for acquisition to be installed either as battery support tender cars, or directly into passenger carrying rolling stock. Pilot non-revenue runs are currently contemplated to be run along either the North Jersey Coast Line between Bay Head and Long Branch using retrofitted multilevel cars. This portion of the North Jersey Coast Line does not have a traction power system, so the contemplated method of operation would allow single-seat rides from Newark or New York to Bay Head where the consist could recharge in the traction electrified section from Long Branch to New York. The pilot project would be the first step towards transitioning to a cleaner, more efficient technology that will reduce energy costs for NJ TRANSIT and bring potential environmental benefits.

***ESTIMATED PROJECT COSTS (2020 Dollars):**

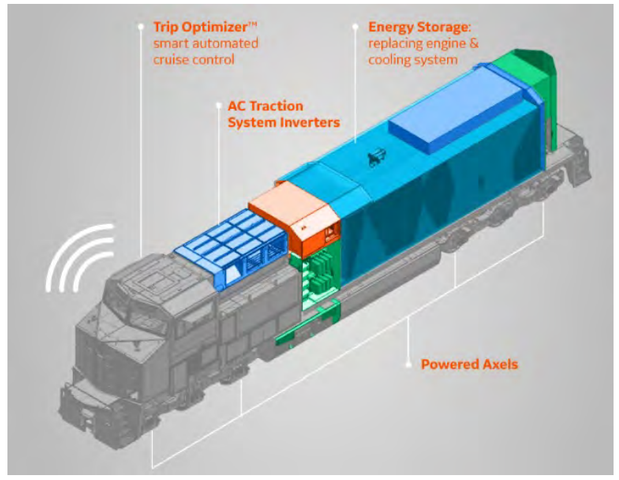
$46 Million

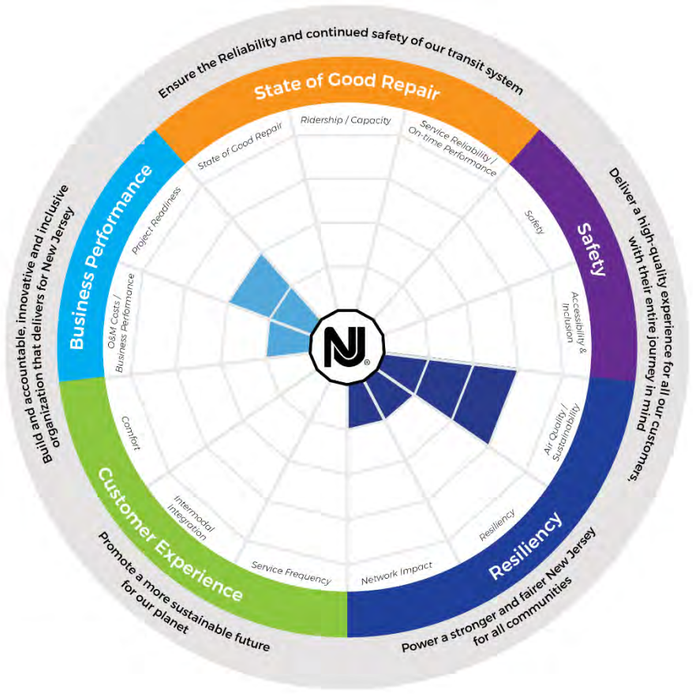
**Estimates are based upon concept for design*

Existing: Arrow III EMU Cars



Proposed: Battery Powered Locomotive





Value to Customers

- Increases reliability of service

Value to State

- Lowers operating cost by providing more efficient power generation
- Minimizes environmental impacts

PROJECT SHEET TRAIN BATTERY PILOT

ESTIMATED TOTAL PROJECT COSTS

$46M

O&M Costs/Business Performance
Transitioning to battery power would reduce energy costs and mitigate revenue loss from power outages

Network Impact
Piloting battery power would pave the way for the full rail system to transition in the future

Air Quality/Sustainability
Beginning the transition to battery power is the first step in lowering carbon emissions

Resiliency
Battery power would reduce the rail system's vulnerability to service disruptions resulting from power outages

STRATEGIC GOALS MET

Promote a more sustainable future for our planet

Ensure the reliability and continued safety of our transit system

*Investing in **emerging technology** would allow NJ TRANSIT to be more **capable to adopt state-of-art systems**.*

Description

NJ TRANSIT must provide consistently reliable service to its customers along all its rail lines. To ensure this, the agency frequently inspects all revenue fleet vehicles and maintains them as needed to keep them in a state of good repair. Typically, rolling stock is removed from service and placed over pedestal pits, which are used to inspect the undercarriage of the multi-level train cars and to perform maintenance on all train car types. These pits are located at various rail yards and therefore the trains must be directed to one of the yards whenever an inspection is required. This procedure is time consuming and requires additional cost and resources to perform.

If funded, this project would install Machine Vision devices on existing NJ TRANSIT tracks. As trains run over the device, the device would automatically assess the condition of critical train components, such as the wheel profile and brake conditions. This information would then be sent to the maintenance department to determine if a train car needs to be sent to a yard. These devices would be strategically placed in locations that experience frequent train traffic, such as at the tracks east of the East End interlocking, which supports all trains in and out of Hoboken Station. Implementation of Machine Vision would allow NJ TRANSIT to more efficiently monitor the condition of its rail fleet and would decrease the need to send cars to rail yards for inspection, thus increasing uptime for the revenue rolling stock.

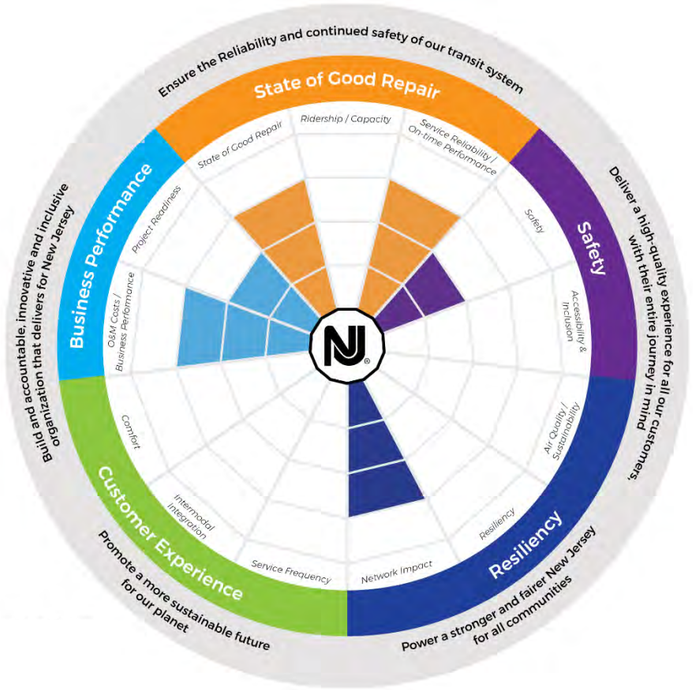
ESTIMATED PROJECT COSTS (2020 Dollars):

$32 Million

Proposed: Machine Vision Device







Value to Customers

- Reduces train delays
- Provides more reliable service and increased on-time performance with more efficient detection of issues with rolling stock which may cause service disruptions

Value to State

- Minimize revenue loss from service disruptions associated with equipment malfunction

PROJECT SHEET MACHINE VISION IMPLEMENTATION

ESTIMATED TOTAL PROJECT COSTS

$32M

Network Impact
Placing monitoring devices in strategic locations throughout system would maximize equipment uptime, improving the overall network

State of Good Repair
Upgrading monitoring equipment would improve fault detection to minimize potential damage.

STRATEGIC GOALS MET

Deliver a high-quality experience for all our customers, with their entire journey in mind

Ensure the reliability and continued safety of our transit system

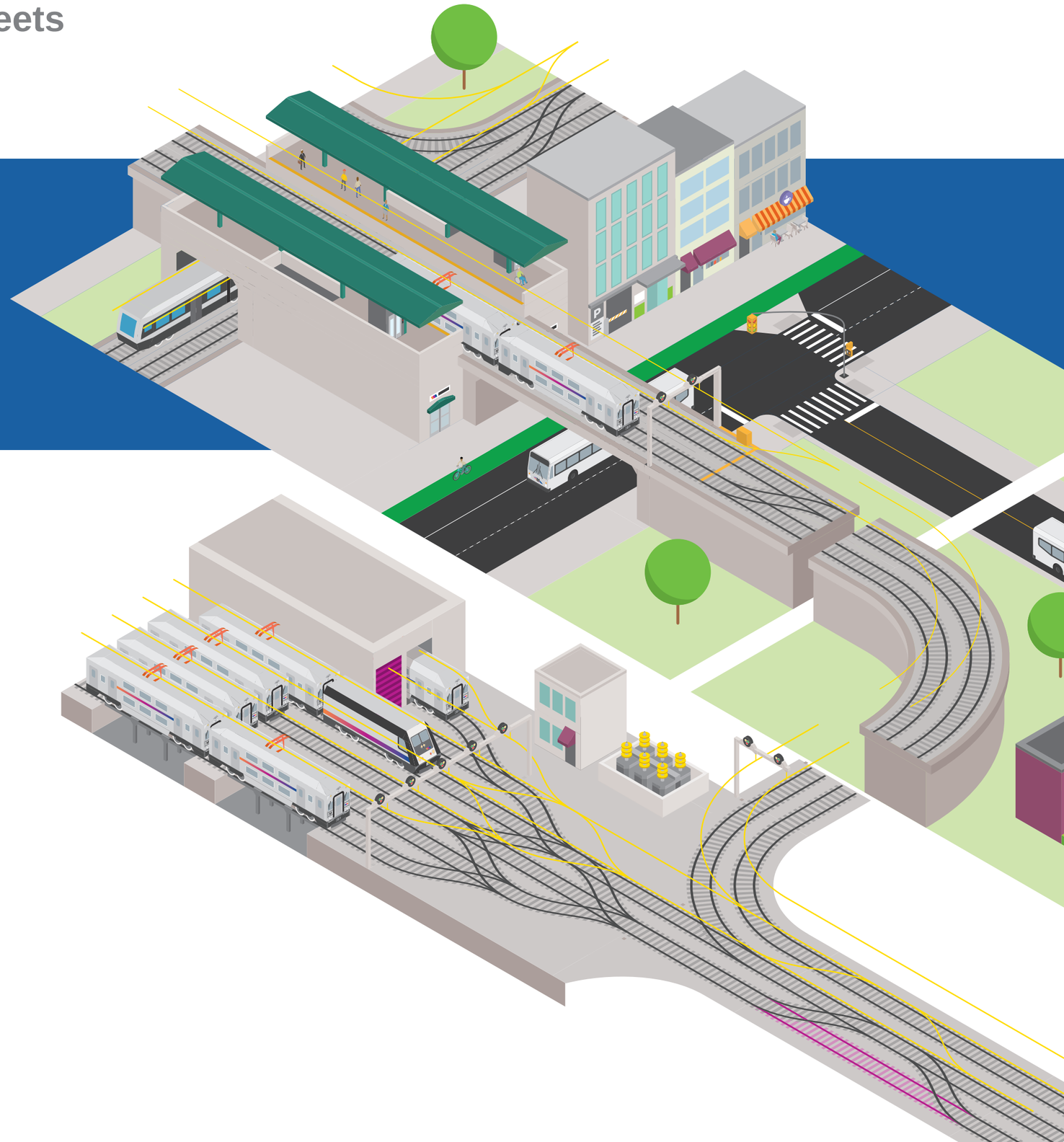
Service Reliability/On-Time Performance
Enhanced monitoring would prevent train malfunctions and delays

O&M Costs/Business Performance
Enhanced monitoring would lead to better maintained and utilized rail vehicles

Monitoring devices would be ***strategically placed to find potential faults before they disrupt service***.

Appendix B Capital Plan Project Sheets

Rail Infrastructure



NJTRANSIT
The Way To Go.

Description

The Raritan River Bridge spans 2,920 feet over the Raritan River carrying the NJ TRANSIT North Jersey Coast Line between Perth Amboy and South Amboy. The existing bridge was originally constructed in 1908 (112-years old) and features a movable swing span. The existing bridge has a low vertical profile, and, as a result, is at high risk of damage from extreme weather events. During Superstorm Sandy the existing bridge became submerged and was severely damaged, resulting in an 18-day outage for both rail service and marine traffic as the bridge was realigned and repaired. While several repair and rehabilitation contracts to keep the bridge in service have been executed, the movable span exhibits frequent operational issues as excessive maintenance costs continue to escalate with the bridge approaching the end of its useful life. In addition to the extreme event risks and recurring maintenance issues, the bridge is subject to frequent marine vessel collisions due to the poor channel geometry at its swing span.

If funded, the project would include a new off-line replacement of the existing obsolete bridge with a new, two track vertical lift bridge on an improved vertical alignment. The new movable structure would provide a more resilient structure with additional vertical clearance above the 100-year flood elevation. The introduction of new mechanical and electrical systems would provide for more reliable movable span operations, resulting in reduced maintenance costs from current thresholds. In addition, improved navigation channel geometry at the lift span would significantly reduce risk of vessel collision with the bridge's pier protection systems and associated costly repairs.

***ESTIMATED PROJECT COSTS (2020 Dollars)**

$595 Million

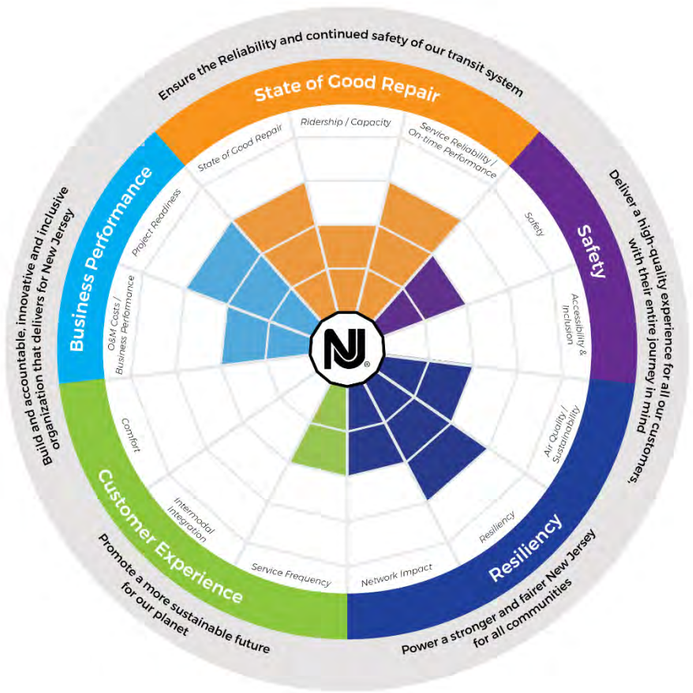
** Total estimated 2020 project cost indicates total cost over span of the project and includes funds already spent*

Existing: Existing Swing Bridge



Proposed: New Vertical Lift Bridge





Value to Customers

- Less disruption to service associated with operational issues and/or excessive maintenance work
- Safer navigation for marine users

Value to State

- Reduces repair, rehabilitation, and maintenance expenses to enable more efficient use of public funds
- Substantially reduces risk of major disruption or outage due to extreme weather events

PROJECT SHEET RARITAN RIVER BRIDGE REPLACEMENT

ESTIMATED TOTAL PROJECT COSTS

***$595M**

**TOTAL ESTIMATED 2020 PROJECT COST INDICATES TOTAL COST OVER SPAN OF THE PROJECT AND INCLUDES FUNDS ALREADY SPENT*

Network Impact
North Jersey Coast Line trains that travel over the bridge would experience fewer delays and risks from bridge closings

Service Reliability/On-Time Performance
Once replaced, the bridge would be more reliable for rail operations during both normal weather and extreme events

Resiliency
The new bridge would clear the 100-year flood elevation and is a more resilient structure

State of Good Repair
Replacing the 112-year old bridge with a new and resilient bridge would improve state of good repair

STRATEGIC GOALS MET

Deliver a high-quality experience for all our customers, with their entire journey in mind

Ensure the reliability and continued safety of our transit system

*Bridge replacement would add **more reliable movable span** operations resulting in **reduced maintenance costs**.*

Description

NJ TRANSIT maintains over 100 overhead bridges, which support roadways and walkways over various NJ TRANSIT rail lines throughout the state. Numerous structures on the NJ TRANSIT rail system have well exceeded their anticipated service life. As the age of these structures continues to advance, maintenance costs have escalated.

If funded, the Overhead Bridge Replacement Program would establish a delivery process that would identify and prioritize the replacement of bridges in most dire need of attention. Four bridges would be selected each year for advancement into the NJ TRANSIT capital delivery process. The program would establish a plan to eventually replace all overhead bridges on the NJ TRANSIT system to restore them to a state of good repair and reduce the age of each bridge to within its estimated service life of 75 to 100 years.

***ESTIMATED COSTS PER YEAR (2020 Dollars):**

$40 Million

**Design/Construction cycles to repeat per year*

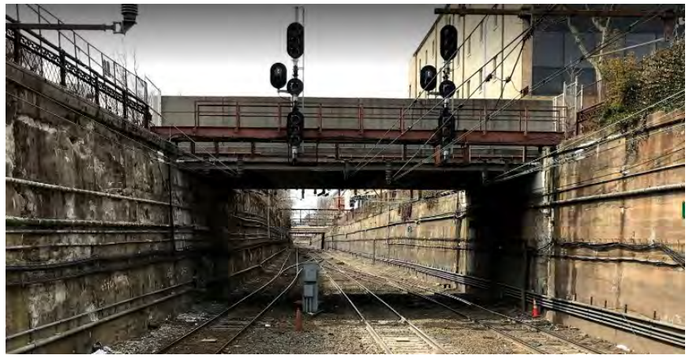
Value to Customers

- Increased On-Time Performance (OTP), safety, and service reliability

Value to State

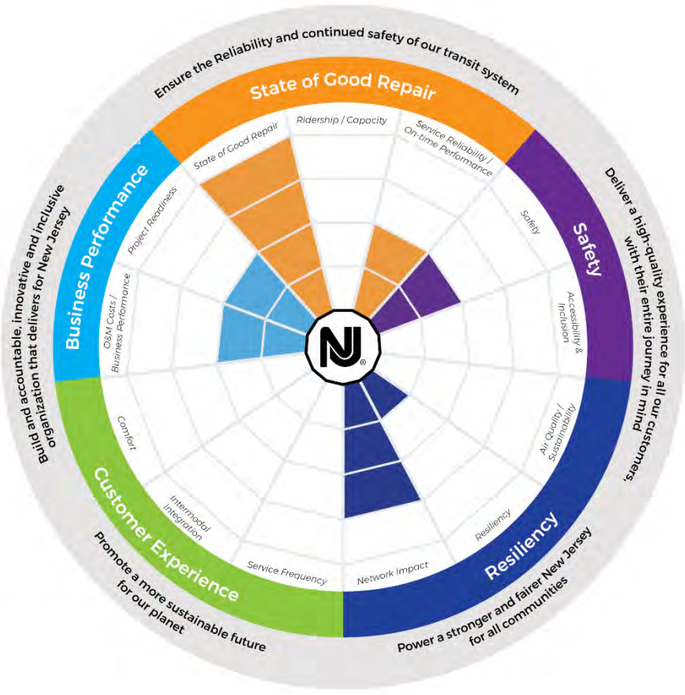
- Lowers operating expenses hence more efficient use of public funds
- Reduces potential injuries associated with increased on-site maintenance work

Existing: Overhead Bridge



Proposed: New Overhead Bridge





PROJECT SHEET OVERHEAD BRIDGE REPLACEMENT PROGRAM

ESTIMATED TOTAL PROJECT COSTS

***$86M**

**5 YEAR PROJECT COSTS*

O&M Costs/Business Performance
New bridges would require less repairs and maintenance costs

Safety
New bridges would bring the average age of the structures back to a safe margin within the desired service life

Network Impact
The decrease in the age of the bridges would support the network by reducing delays due to operational or structural issues

State of Good Repair
Replacing all overhead bridges would reduce the overall age of bridges

STRATEGIC GOALS MET

Deliver a high-quality experience for all our customers, with their entire journey in mind

Ensure the reliability and continued safety of our transit system

*This program would **establish a plan to replace all overhead bridges on the NJ TRANSIT system to restore them to a state of good repair**.*

Description

The Newark Draw Bridge carries NJ TRANSIT's Morris & Essex, Gladstone, and Montclair-Boonton lines over the Passaic River in Newark. The existing swing bridge was constructed in 1903 and is 117 years old. Given its age, the bridge has exceeded its anticipated service life of 75 years and maintenance expenses have begun to escalate due to advanced deterioration and increased component failure. The bridge is also an operational bottleneck, since it only carries two tracks, while rail right-of-way to the east and west both carry three tracks. In addition to the bottleneck condition, delays are also caused by signal issues and track outages required for maintenance and repairs. Overtime pay is often necessary for maintenance work since track outages are not possible during congested peak hours.

If funded, replacing the bridge with a more reliable, three track bridge would provide capacity enhancement and increase operating efficiency on the Morris and Essex, Gladstone, and Montclair-Boonton Lines to catch up to and meet future ridership growth. Further research into the latest minimum vertical clearance requirements for maritime vessels per the United States Coast Guard would be necessary to determine whether the existing vertical lift bridge could be replaced with a more economical and reliable fixed bridge.

ESTIMATED PROJECT COSTS (2020 dollars):

$676 Million

Value to Customers

- Increases on-time performance (OTP), safety, and service reliability
- Creates track redundancy and increases capacity allowing system to accommodate ridership growth and to provide more reliable service for a longer period

Value to State

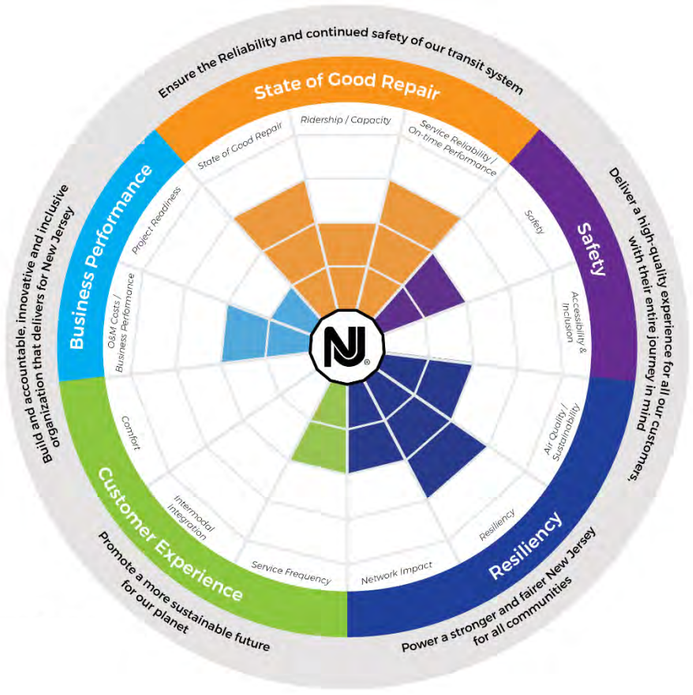
- Lowers operating expenses and enables more efficient use of public funds
- Reduces potential injuries by decreasing on-site maintenance work
- Increases return on investment (ROI) from increased ridership

Existing: Existing Newark Draw



Proposed: New Bridge





PROJECT SHEET NEWARK DRAW BRIDGE REPLACEMENT & CAPACITY ENHANCEMENT

ESTIMATED TOTAL PROJECT COSTS

$676M

Ridership/Capacity
The three track bridge would increase capacity and accommodate future ridership growth

Network Impact
The new bridge would improve operating efficiency across three of NJ TRANSIT's rail lines

Resiliency
Redundancy with the third track would allow for quicker system recovery

State of Good Repair
Replacing the obsolete bridge with a three-track bridge would reduce maintenance cost and frequency

STRATEGIC GOALS MET

Deliver a high-quality experience for all our customers, with their entire journey in mind

Ensure the reliability and continued safety of our transit system

Replacing the bridge would ***enhance capacity*** *and allow service to* ***keep up with ridership growth****.*

Description

NJ TRANSIT maintains 612 undergrade bridges, including 537 structures which support operating rail lines over various roadways, streams and other features throughout the state. Numerous structures on the NJ TRANSIT rail system date back to the late 19th century and have well exceeded their anticipated service life. As the age of these structures continues to advance, maintenance costs have escalated.

If funded, the Undergrade Bridge Replacement Program would establish a delivery process that would identify and prioritize the replacement of bridges in most dire need of attention. Four to eight bridges would be selected each year for advancement into the NJ TRANSIT capital delivery process. The program would establish a plan to eventually replace all undergrade bridges on the NJ TRANSIT system to restore them to a state of good repair and reduce the age of each bridge to within its estimated service life of 75 to 100 years.

***ESTIMATED COSTS PER YEAR (2020 Dollars):**

$90 Million

**Design/Construction cycles to repeat per year*

Value to Customers

- Increased On-Time Performance (OTP), safety, and service reliability

Value to State

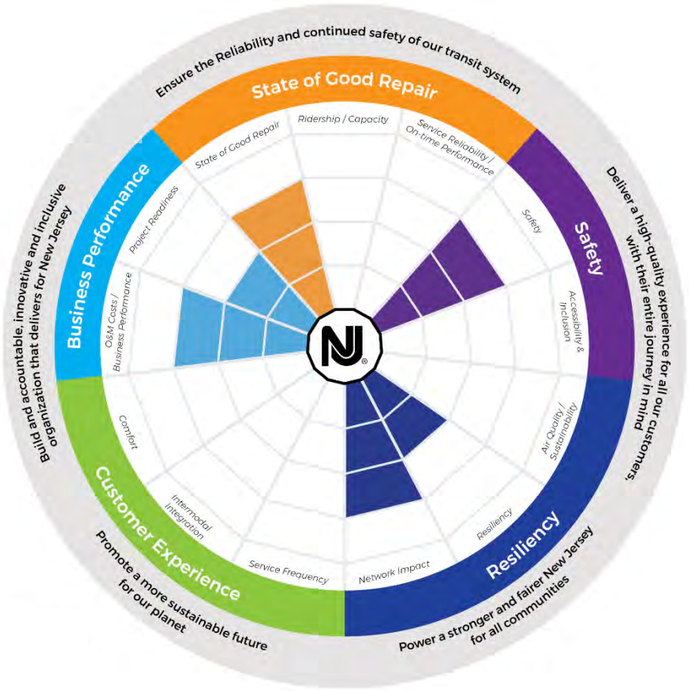
- Lowers operating expenses hence more efficient use of public funds
- Reduces potential injuries associated with increased on-site maintenance work

Existing: Undergrade Bridge



Proposed: New Undergrade Bridge





PROJECT SHEET UNDERGRADE BRIDGE REPLACEMENT PROGRAM

ESTIMATED TOTAL PROJECT COSTS

***$193M**

**5 YEAR PROJECT COSTS*

O&M Costs/Business Performance
New undergrade bridges would reduce maintenance costs and reduce associated track outages

Safety
New undergrade bridges requiring less maintenance would improve worker safety as fewer workers be needed on site

STRATEGIC GOALS MET

Deliver a high-quality experience for all our customers, with their entire journey in mind

Ensure the reliability and continued safety of our transit system

State of Good Repair
Replacing all undergrade bridges beyond their useful service life would improve state of good repair

Network Impact
Replacing undergrade bridges would reduce delays and eliminate speed restrictions on deficient bridges

*Replacing undergrade bridges would **positively impact rail service** and **state of good repair**.*

Description

The South Laurel Avenue (CR52) Bridge in Middletown carries two electrified tracks on the North Jersey Coast Line over a two-lane county road. The bridge provides a 29-foot curb-to-curb horizontal clearance for traffic traveling on the roadway below, with no room for sidewalks, shoulders, or a bikeway. This creates a horizontal pinch point for traffic that reduces the roadway capacity and increases traffic issues through the corridor. Similarly, the bridge only provides a 12'-5" vertical clearance between the roadway and the bottom of the bridge steel girders. This substandard clearance results in the bridge being frequently hit by truck traffic, causing damage and train delays until emergency repairs are completed.

If funded, this project would replace the existing bridge with a longer span bridge to improve the horizontal clearance of the roadway below. The new bridge would also be designed to help increase the vertical clearance to eliminate truck impacts on the superstructure. This project would be coordinated with Monmouth County and its roadway improvement project. Ultimately, these improvements would not only benefit the county road by increasing its capacity and reducing traffic buildup, but they would mitigate NJ TRANSIT service disruptions caused by truck collisions with the bridge and reduce the need for emergency repairs.

***ESTIMATED PROJECT COSTS (2020 Dollars):**

$47 Million

**Cost estimate assumes new raised bridge on same alignment*

Existing: Bridge Conditions





Proposed: Superstructure Alternatives

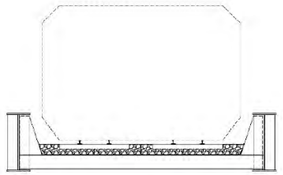


FIGURE 1 – Single Structure Through Girder with Ballasted Deck

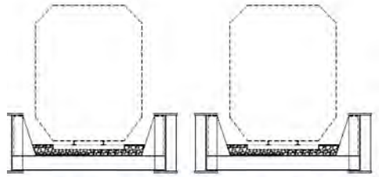


FIGURE 3 – Dual Structure Through Girder with Ballasted Deck

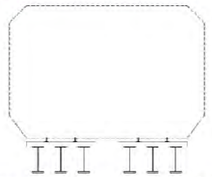
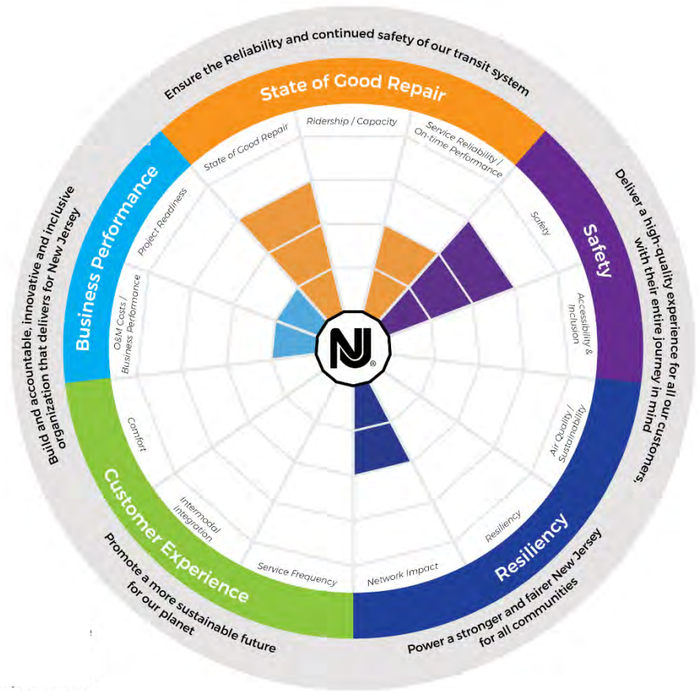


FIGURE 2 – Dual Structure Multi Girder with Open Deck



FIGURE 4 – Dual Structure Multi Girder with Ballasted Deck



Value to Customers

- Reduces train delays from vehicular collisions and emergency bridge repairs

Value to State

- Decreases maintenance and repair costs

PROJECT SHEET SOUTH LAUREL AVENUE BRIDGE REPLACEMENT & CLEARANCE IMPROVEMENT

ESTIMATED TOTAL PROJECT COSTS

$47M

Service Reliability/On-Time Performance
Improving clearance would reduce delays caused by vehicle collisions with the bridge

Network Impact
Eliminating service disruptions and emergency repairs due to collisions would improve North Jersey Coast Line service

State of Good Repair
Bridge replacement and clearance improvement would reduce maintenance frequency and costs

Safety
Improvements would prevent vehicle collisions and provide safer travel for motorists, pedestrians, and bicyclists

STRATEGIC GOALS MET

Deliver a high-quality experience for all our customers, with their entire journey in mind

Ensure the reliability and continued safety of our transit system

Improving the roadway and increasing clearance would ***significantly improve safety and service reliability***.

Description

Brielle Draw is a 1,200-foot long bridge with a rolling lift movable span that carries the NJ TRANSIT North Jersey Coast Line over the Manasquan River between the Boroughs of Brielle and Point Pleasant. The existing bridge was originally constructed in 1911 and is 109 years old. The structure carries a single track over the river creating an operational bottleneck, as the right-of-way to both the north and south carries two tracks. This bridge has greatly exceeded its anticipated service life of 75 years, and maintenance expenses have escalated due to the increased frequency of component failure. The bridge piers also exhibit significant scour and undermining which has resulted in the structure's ongoing settlement. Given the poor condition of the structure, train speeds are currently restricted to 20 mph. Maintenance work requires premium pay as track outages are not possible during service hours without complete service suspension. Also, the low profile of the existing structure to the river creates an extremely high flood risk.

If funded, this project would replace the existing bridge with a more reliable, double track movable bridge, on a higher vertical profile. The increased rail capacity on the bridge would provide corridor enhancement and improved operational efficiency on the North Jersey Coast Line while reducing operating costs. The raised profile would reduce the number of required marine openings, thereby reducing service disruptions, while also mitigating the risk of flood damage and potential for extended service outages during extreme events.

***ESTIMATED PROJECT COSTS (2020 Dollars):**

$204 Million

**Estimates are based upon concept for design*

Value to Customers

- Increases on-time performance (OTP), safety, and service reliability

Value to State

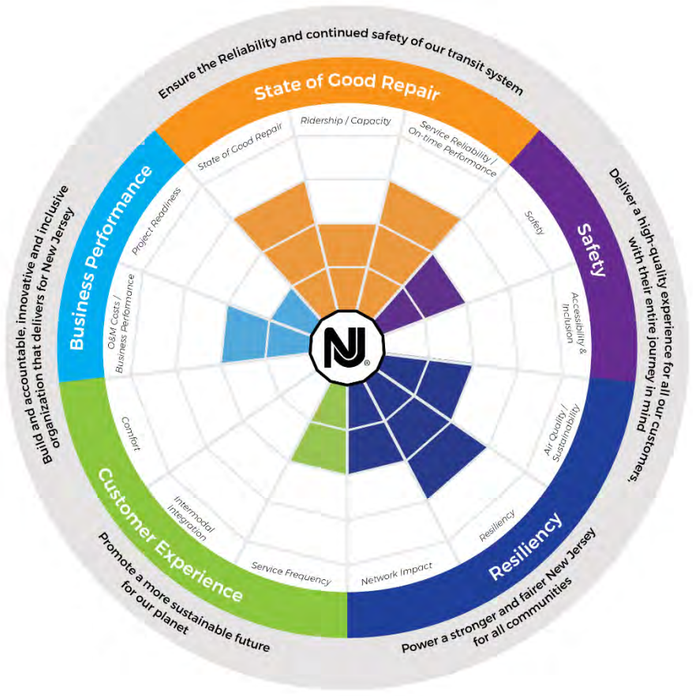
- Lowers operating expenses to enable more efficient use of public funds
- Reduces potential injuries by decreasing on-site maintenance work
- Increases return on investment (ROI) from increased ridership

Existing: Brielle Draw



Proposed: New Bascule Bridge





PROJECT SHEET BRIELLE DRAW REPLACEMENT AND CAPACITY ENHANCEMENT

ESTIMATED TOTAL PROJECT COSTS

$204M

Ridership/Capacity
The new bridge would allow for speeds greater than 30 mph, while a double track bridge would increase capacity

Service Reliability/On-time Performance
Increased vertical height would reduce bridge openings and allow higher speeds so trains can better meet their schedules

Resiliency
A raised bridge would reduce flood risk and flood scour resistant track would allow for quicker system recovery

State of Good Repair
Replacing the bridge with modern, more reliable and efficient technology would improve state of good repair

STRATEGIC GOALS MET

Deliver a high-quality experience for all our customers, with their entire journey in mind

Ensure the reliability and continued safety of our transit system

*A new bridge would be **reliable**, **increase rail capacity**, and **resilient to weather events** and **train breakdowns**.*

Description

HX Draw is a ±1,100-foot long bridge that carries the NJ TRANSIT Bergen County and Pascack Valley Lines over the Hackensack River between Secaucus and East Rutherford. The existing double track, overhead counterweight Strauss bascule bridge was originally constructed in 1911 and is 109 years old. Given its age, the bridge has exceeded its anticipated service life of 75 years and maintenance expenses have begun to escalate due to advanced deterioration and component failure. In addition, the structure provides minimal vertical clearance for maritime traffic, resulting in frequent bridge openings that are disruptive to rail operations.

If funded, this project would replace the existing river crossing with a more reliable movable bridge that would reduce operating and maintenance costs while extending overall service life. The vertical profile for the new bridge would be raised as much as is practicable to increase vertical clearance for navigable vessels and reduce required marine openings. Rail speed restrictions on the new bridge would also be removed, allowing for faster service across the structure. The new bridge would ultimately improve operational efficiency on the Bergen County and Pascack Valley Lines.

***ESTIMATED PROJECT COSTS (2020 Dollars):**

$269 Million

**Estimates are based upon concept for design*

Value to Customers

- Increases On-Time Performance (OTP), safety, and service reliability

Value to State

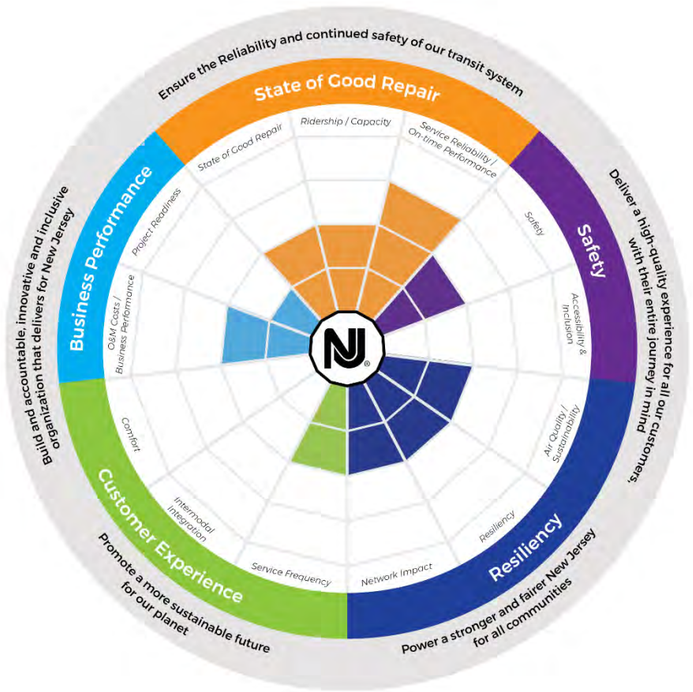
- Reduces operating expenses to enable more efficient use of public funds
- Reduces potential injuries by decreasing increased on-site maintenance work
- Increases return on investment (ROI) from increased ridership

Existing: Existing HX Draw



Proposed: New Movable Bridge





PROJECT SHEET HX DRAW BRIDGE REPLACEMENT

ESTIMATED TOTAL PROJECT COSTS

$269M

Resiliency
More robust infrastructure would support the bridge, lowering the chance of train breakdowns and addressing flood and scour issues

Service Reliability/On-time Performance
A new movable bridge would help eliminate conflicts with maritime traffic and allow for smoother service delivery

Service Frequency
The new bridge would be able to handle trains traveling above 30 mph, allowing for more frequent service

State of Good Repair
Replacing a 109-year old bridge with a movable and modern bridge would bring the bridge crossing to state of good repair

STRATEGIC GOALS MET

Deliver a high-quality experience for all our customers, with their entire journey in mind

Ensure the reliability and continued safety of our transit system

*HX Draw would be a **modern movable bridge**, **improve operations**, and deliver **more frequent service**.*

Description

The Upper Hack Lift Bridge carries the NJ TRANSIT Main Line over the Hackensack River between Secaucus and Lyndhurst. The existing single-track, vertical lift bridge was originally constructed in 1959 and is 61 years old. The single-track cross section creates an operational bottleneck as the right-of-way to both the north and south carries two or more tracks. This restricts the efficient flow of rail traffic, directly impacting service and expansion efforts to the adjacent meadowlands retail and entertainment complex.

If funded, this project would construct a new, double track lift bridge adjacent to the existing bridge, which would increase capacity on the Main Line to meet demands of anticipated growth and potential future expansion. The addition of a new independent structure would also add critical operational redundancy to the Main Line, as it is currently impossible to service the track on the bridge without a complete closure of the line. The vertical profile for the new bridge would be raised as much as is practicable to increase vertical clearance for navigation, thereby reducing the required bridge openings for navigable vessels. The existing bridge would also be rehabilitated to extend its service life, while continuing to operate alongside the new bridge. Overall, this project would improve operational efficiency and resiliency along the corridor, while lowering operating costs along the Main Line.

***ESTIMATED PROJECT COSTS (2020 Dollars):**

$267 Million

** Estimates are based upon concept for design*

Value to Customers

- Increases On-Time Performance (OTP), safety, and service reliability
- Increases capacity to allow for sustained OTP accounting for long term ridership growth

Value to State

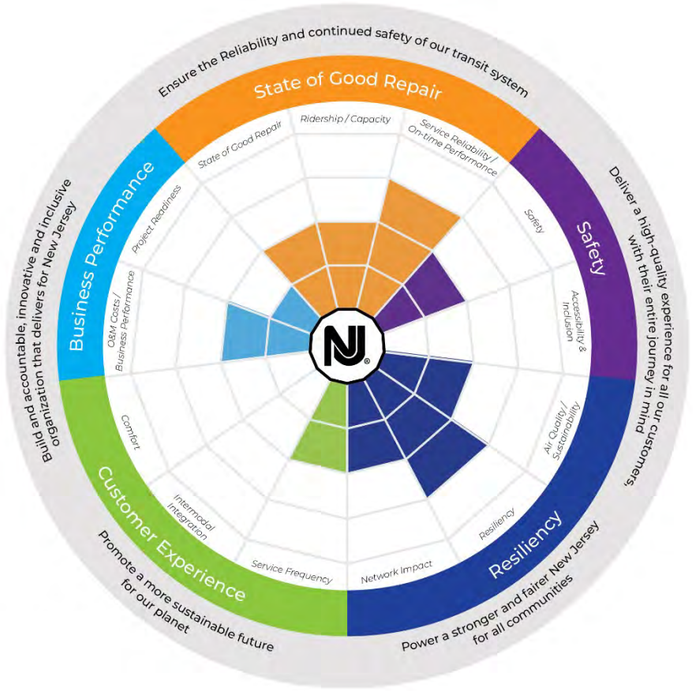
- Reduces operating expenses to enable more efficient use of public funds
- Reduces potential injuries by decreasing increased on-site maintenance work
- Increases return on investment (ROI) from increased ridership

Existing: Upper Hack Lift



Proposed: New Vertical Lift Bridge





PROJECT SHEET UPPER HACK LIFT BRIDGE CAPACITY ENHANCEMENT

ESTIMATED TOTAL PROJECT COSTS

$267M

O&M Costs/Business Performance
A new double track bridge would increase line capacity and meet current and future ridership growth

Service Reliability/On-time Performance
Both the new and rehabbed bridge would reduce service conflicts and facilitate improve through traffic

Resiliency
Track redundancy would allow for quicker system recovery and agility to respond to train breakdowns

State of Good Repair
The 61 year old bridge would be rehabilitated to extend its service life, while combining with the new bridge.

STRATEGIC GOALS MET

Deliver a high-quality experience for all our customers, with their entire journey in mind

Ensure the reliability and continued safety of our transit system

*This project would **improve operational efficiency, relieve congestion, expand capacity,** and make the **system more resilient** along the corridor.*

Description

The Shark River Draw Bridge carries the NJ TRANSIT North Jersey Coast Line over Shark River between the Boroughs of Belmar and Avon-By-The-Sea, NJ. The existing movable rolling lift bridge was originally constructed in 1937 and is 83-years old. This bridge has exceeded its anticipated service life and maintenance expenses have escalated due to the increased frequency of mechanical component failure. Due to the poor condition of the bridge, train speeds are restricted. Overtime pay is necessary for maintenance work since track outages are not possible during service hours.

The approach spans of the original bridge were replaced in 2008 with new concrete ballasted deck spans supported by steel pipe pile foundations. If funded, this project would replace the existing movable and flanking spans of the existing bridge with a more reliable, modern bascule span. The new bridge would improve operational efficiency on the North Jersey Coast Line and will reduce operating and maintenance costs.

ESTIMATED PROJECT COSTS (2020 Dollars):

$170 Million

Value to Customers

- Increases on-time-performance (OTP), safety, and service reliability

Value to State

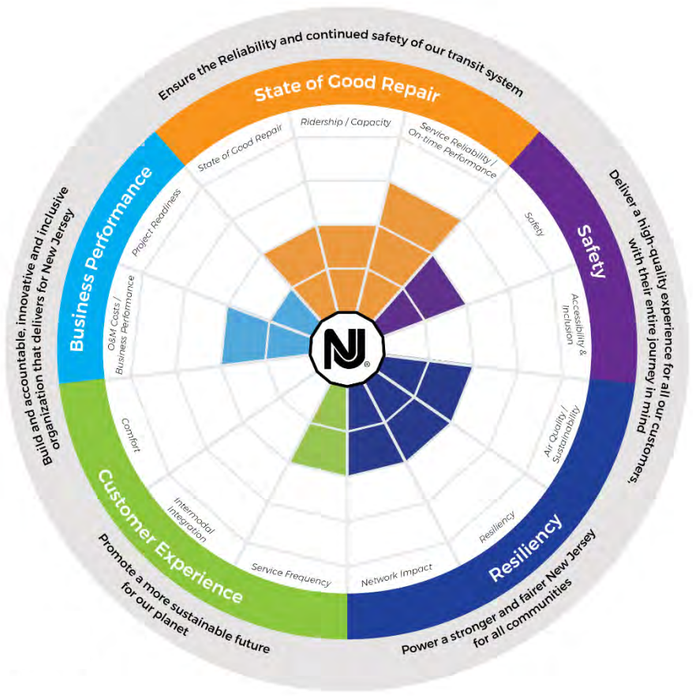
- Lowers operating expenses and uses public funds efficiently
- Reduces potential injuries by decreasing on-site maintenance work
- Increases return on investment (ROI) from increased ridership

Existing: Shark River Draw



Proposed: New Bascule Bridge





PROJECT SHEET SHARK RIVER DRAW BRIDGE REPLACEMENT

ESTIMATED TOTAL PROJECT COSTS

$170M

Resiliency
Newly designed infrastructure would be resilient against floods and seismic hazards

Service Reliability/On-Time Performance
Upgrading the bridge would allow trains to run with less restricted speeds reducing delays

O&M Costs/Business Performance
Replacing bridge would reduce operating and maintenance costs

State of Good Repair
Bridge replacement would improve operational efficiency on the North Jersey Coast line

STRATEGIC GOALS MET

Deliver a high-quality experience for all our customers, with their entire journey in mind

Ensure the reliability and continued safety of our transit system

*Replacing existing bridge spans would **improve service operations and reliability**, **resilience**, and **state of good repair**.*

Description

The West Front Street Bridge in Red Bank carries two electrified tracks on the North Jersey Coast Line over a two-lane road. The bridge only provides a 10'-11" vertical clearance between the roadway and the bottom of the bridge steel girders. This substandard clearance results in the bridge being frequently hit by truck traffic, causing damage which requires immediate repair.

If funded, this project would study various alternatives to improve vertical clearance and eliminate truck impacts on the superstructure. The study would determine the appropriate action to best address the challenges, eliminate disruptions caused by truck collisions with the bridge, and alleviate the need for emergency repairs. Additionally, any bridge work would be coordinated with Monmouth County and their roadway improvement project.

ESTIMATED PROJECT COSTS (2020 Dollars):

$2 Million

Value to Customers

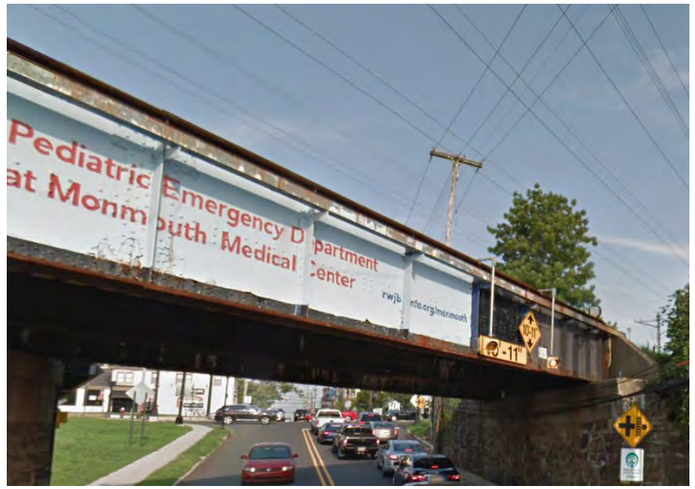
- Reduces train delays from vehicular collisions and emergency bridge repairs

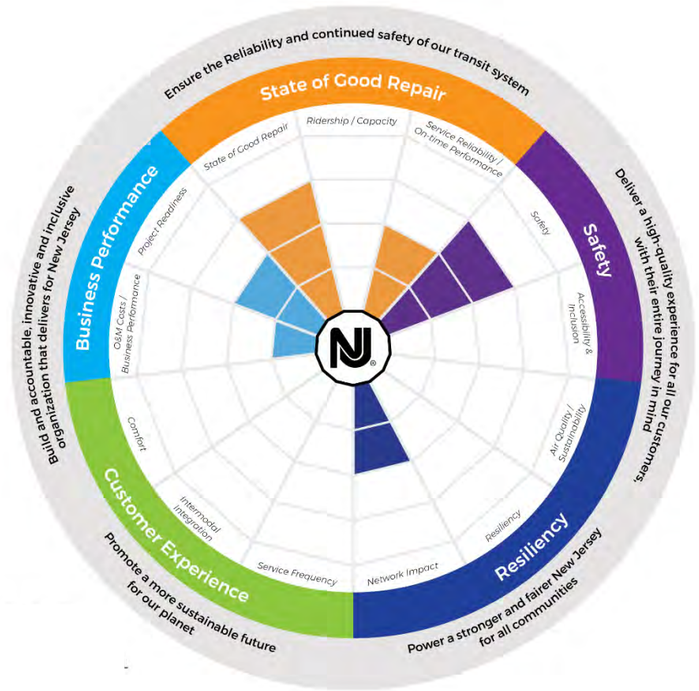
Value to State

- Decreases in maintenance and repair costs

Existing: Bridge Conditions







PROJECT SHEET WEST FRONT STREET BRIDGE REPLACEMENT STUDY

ESTIMATED TOTAL PROJECT COSTS

$2M

Service Reliability/On-Time Performance
Improving clearance would reduce delays caused by vehicle collisions with the bridge

Network Impact
Eliminating service disruptions and emergency repairs due to collisions would improve North Jersey Coast Line service

State of Good Repair
Bridge replacement and clearance improvement would reduce maintenance frequency and costs

Safety
Improving clearance would prevent vehicle collisions and provide safer travel for motorists, pedestrians, and bicyclists

STRATEGIC GOALS MET

Deliver a high-quality experience for all our customers, with their entire journey in mind

Ensure the reliability and continued safety of our transit system

*Replacing the bridge to **alleviate clearance issues** would **significantly improve safety and service reliability**.*

Description

The Morgan Draw Bridge carries the NJ TRANSIT North Jersey Coast Line over the Cheesequake Creek between Sayreville and Old Bridge. The existing movable rolling lift bridge was originally constructed in 1912 and is 108-years old. This bridge has exceeded its anticipated service life and maintenance expenses have begun to escalate due to the increased frequency of mechanical component failure. During Hurricane Sandy, the Morgan Draw Bridge experienced significant damage. Although the bridge was repaired, operation of the bridge has become challenging due to permanent misalignments. Due to the poor condition of the bridge, train speeds are restricted to 30 mph. Overtime pay is necessary for maintenance work since track outages are not possible during service hours.

If funded, this project would replace the existing ±360-foot long bridge with a more reliable, modern, and movable bridge. The new bridge would improve operational efficiency on the North Jersey Coast Line and reduce operating and maintenance costs.

ESTIMATED PROJECT COSTS (2020 Dollars):

$236 Million

Value to Customers

- Increases on-time-performance (OTP), safety, and service reliability

Value to State

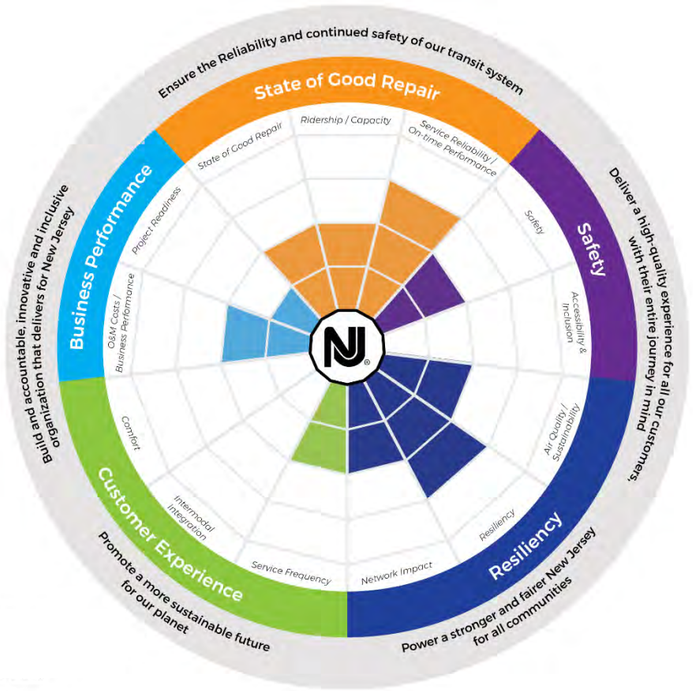
- Lowers operating expenses hence efficient use of public funds
- Reduces potential injuries by decreasing on-site maintenance work
- Increase return on investment (ROI) from increased ridership

Existing: Morgan Draw



Proposed: New Movable Bridge





PROJECT SHEET MORGAN DRAW BRIDGE REPLACEMENT

ESTIMATED TOTAL PROJECT COSTS

$236M

O&M Costs/Business Performance
New bridge would improve operational efficiency and reduce operations and maintenance costs

Service Reliability/On-Time Performance
New bridge with no misalignments would ensure more reliable train service

Resiliency
New bridge design would be resilient to flooding and seismic hazards

State of Good Repair
Replacing the bridge with a more reliable modern bascule bridge would enhance state of good repair

STRATEGIC GOALS MET

Deliver a high-quality experience for all our customers, with their entire journey in mind

Ensure the reliability and continued safety of our transit system

*The new bridge would **improve operational efficiency** on the North Jersey Coast Line and **reduce costs**.*

Description

The WC Interlocking is in Waldwick on NJ TRANSIT's Main Line. The tracks within the interlocking are used to turn trains shifting to the eastbound track which do not continue west to Suffern and to provide train access to the Waldwick Storage Yard. The current interlocking configuration requires trains to sit on the through tracks, obstructing through traffic and leading to frequent delays and service disruptions along the Main Line. Crew members are also required to deboard the trains to hand-operate switches adjacent to live train traffic in lieu of more modern, automated technology.

If funded, the WC Interlocking Reconfiguration would reduce delays on the Main Line and provide a safer and more reliable commute for customers by reconfiguring and upgrading the interlocking. Trains would now be allowed to continue through to Suffern while other trains maneuver into the yard, which would provide more operational flexibility. These upgrades would also provide significant safety enhancement by eliminating the need for crew members to deboard in order to turn trains back. Additionally, this project would significantly decrease maintenance costs by allowing routine maintenance to be performed with minimal disruption to scheduled rail service.

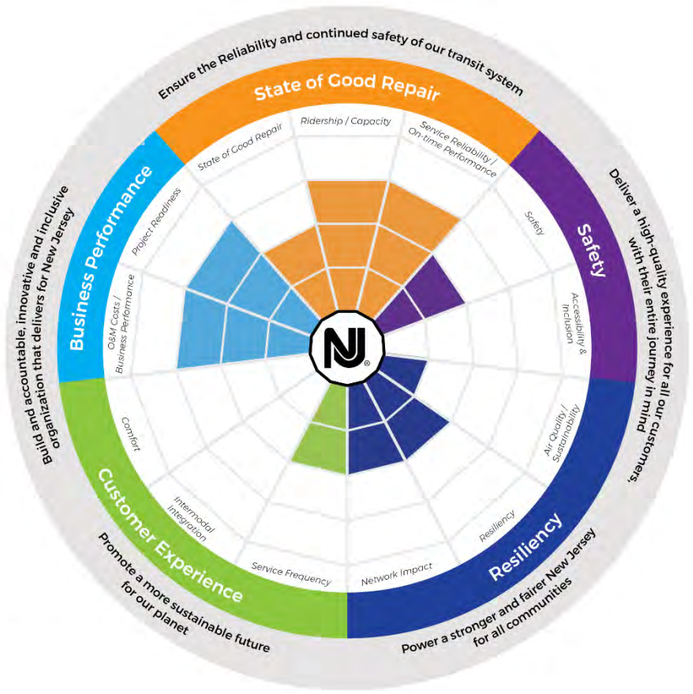
ESTIMATED PROJECT COSTS (2020 Dollars):

$13 Million

Existing: Interlocking Configuration Manual Switching



Manual switch throwing is still required at the Waldwick Yard to allow trains to turn back towards New York. This 100+ year old system is slow to operate and places conductors in harm's way.



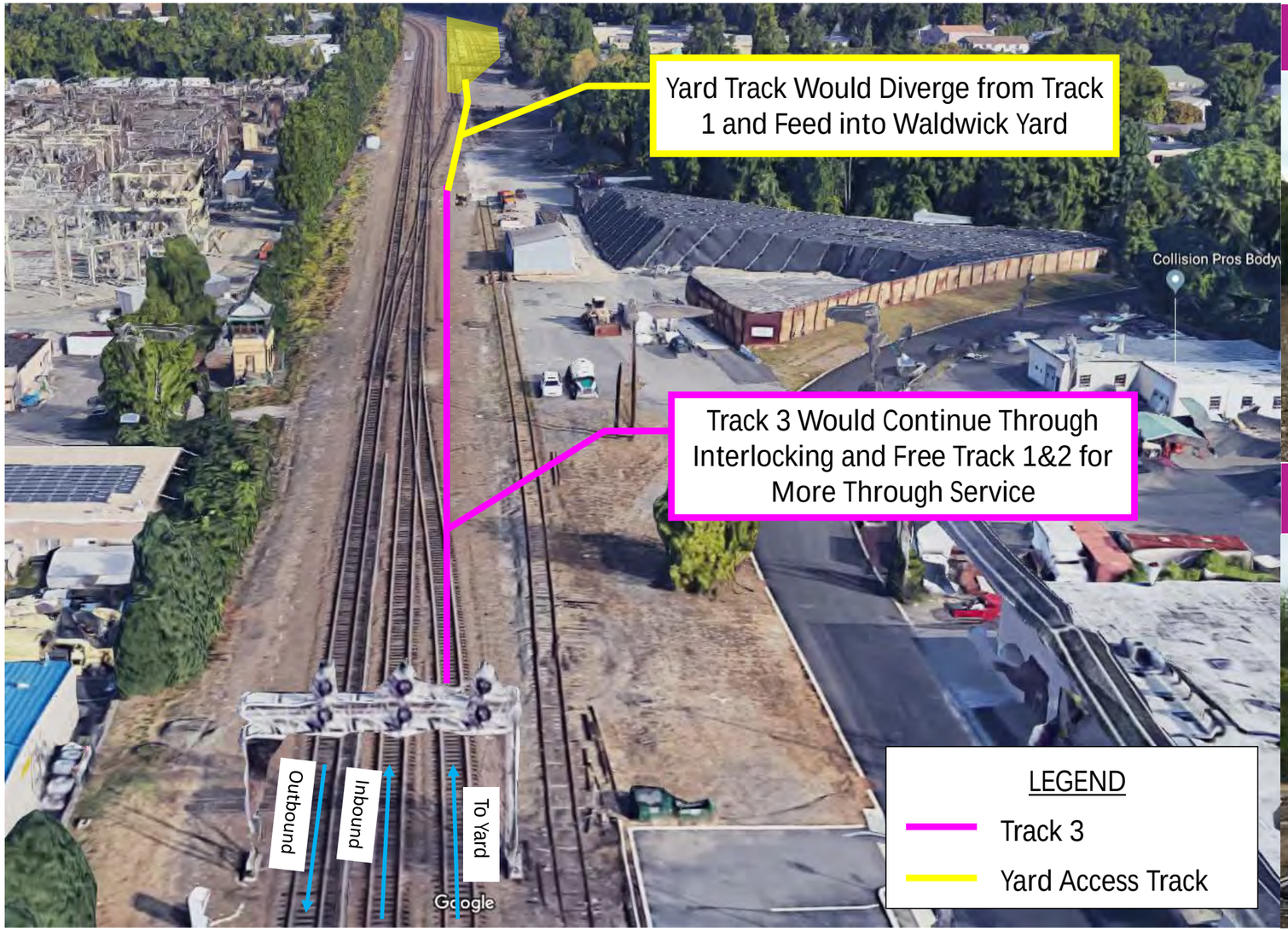
Value to Customers

- Reduces train delays from interlocking conflicts and increases on-time performance (OTP)

Value to State

- Increases OTP, safety, and service reliability
- Lowers operating cost, including unscheduled maintenance and overtime, which allows for more efficient use of public funds
- Reduces maintenance costs 33% by allowing daytime maintenance work and eliminating need for costly night shift work

Project Sheet | **WC Interlocking Reconfiguration**



Rail Yard Looking West



Interlocking Looking East



PROJECT SHEET WC INTERLOCKING RECONFIGURATION

ESTIMATED TOTAL PROJECT COSTS

$13M

O&M Costs/Business Performance
The project would lower operating costs and reduce maintenance costs on the Main Line by 33% by allowing for daytime maintenance

Service Reliability/On-Time Performance
The reconfiguration would reduce train delays from interlocking conflicts

Ridership/Capacity
The reconfiguration would eliminate a single track bottleneck, allowing for more trains to continue to Suffern

State of Good Repair
The service life of the interlocking would increase and manual switches would be converted to automatic

STRATEGIC GOALS MET

Deliver a high-quality experience for all our customers, with their entire journey in mind

Ensure the reliability and continued safety of our transit system

*The project would **decrease delays and service disruptions** along the Main Line.*

Description

The West Summit Interlocking is located just west of Summit Station and lies within a cut section of track between two concrete retaining walls. The interlocking serves two lines: two northern tracks as part of the Morristown Line, and a southern “Wall” track as part of the Gladstone Line. The existing interlocking is outdated and requires a speed limit reduction through the area. In addition, the current interlocking location prevents the extension of the existing undersized platforms to serve full-length trains. The configuration of the southern “Wall” track relative to the current interlocking also makes needed repairs of the south wall challenging while maintaining rail traffic. Finally, drainage and flooding issues regularly interfere with track signals, and results in contaminated ballast, false signal indications, and frequent delays.

If funded, this project would be broken up into two phases to address the existing challenges. Phase I would relocate the West Summit interlocking further west of the existing station and interlocking, installing a new turn track on the Gladstone Line, and installing two layover tracks near the existing NJ TRANSIT storage facility west of the station. The new track configurations and installations would allow for more through trains, which would increase line capacity and facilitate future extension of the existing station platforms. Phase II would include repairing the existing wall and improving the drainage at track level. This would ultimately improve track drainage to prevent flooding and delays.

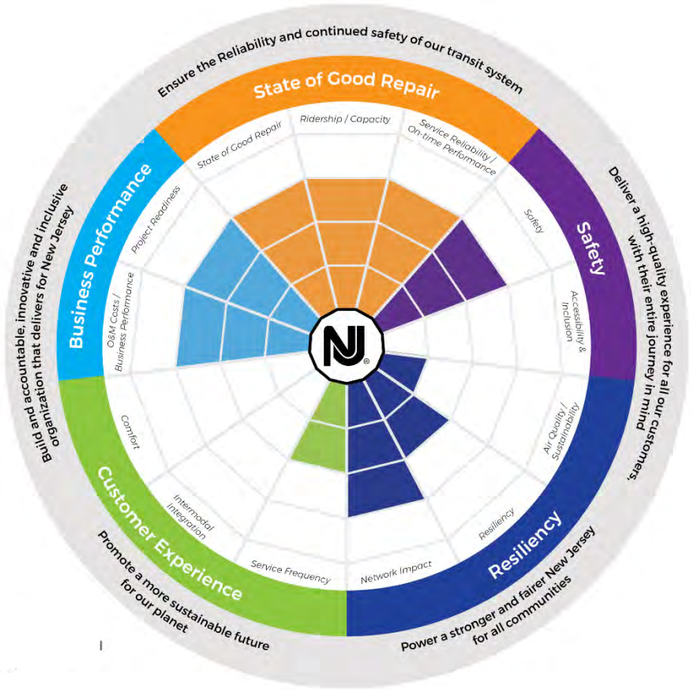
***ESTIMATED PROJECT COSTS (2020 Dollars):**

$97 Million

**Design for Phase I is already complete and not included in cost*

Existing: Contaminated Ballast & Outdated Switches





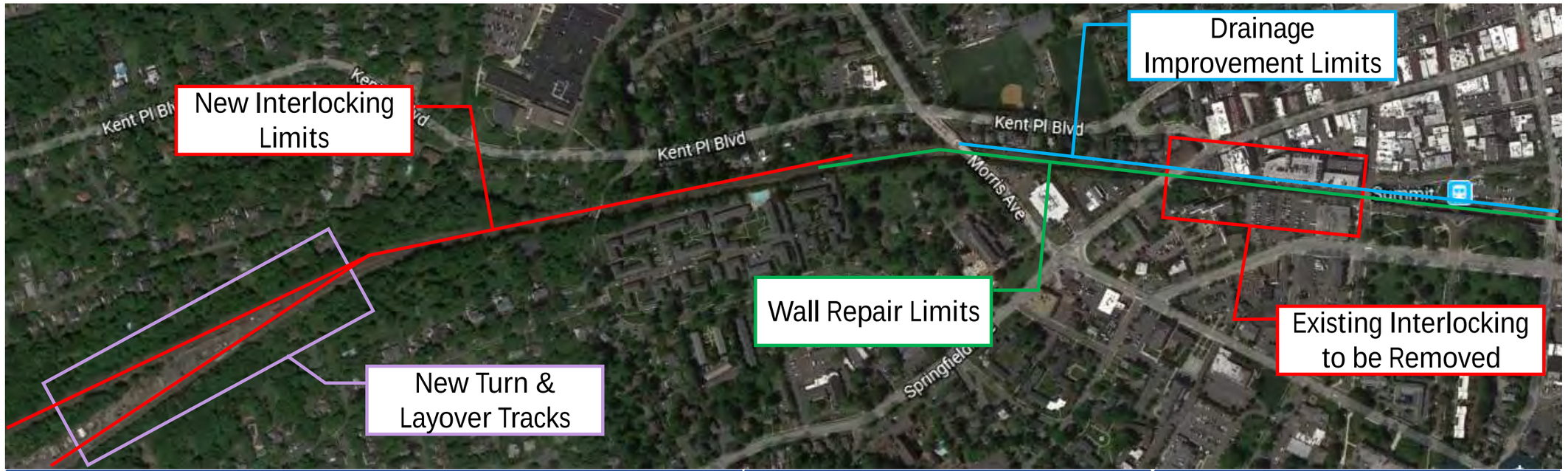
Value to Customers

- Increases on-time-performance (OTP)
- Decreases delays caused by interlocking conflicts and false signal indications

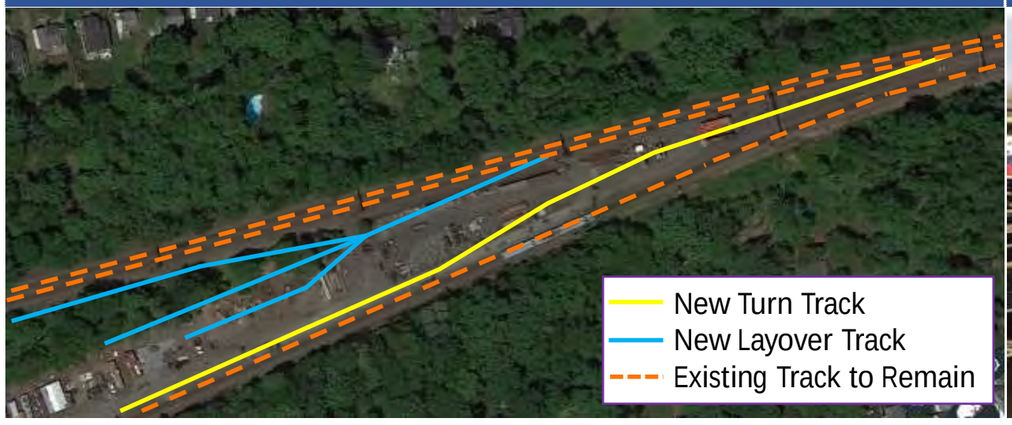
Value to State

- Increases OTP, safety, and service reliability, optimizing use of equipment and labor
- Lowers operating cost, which allows for efficient use of public funds

Project Sheet | **West Summit Interlocking, Wall Repair, & Drainage**



New Turn and Layover Tracks



Example Layover Tracks



Severe Wall Deterioration



PHASE I – Interlocking Relocation and Relocation of Existing Utilities along the Wall

PHASE II – Wall Repairs and Drainage Improvements

PROJECT SHEET WEST SUMMIT INTERLOCKING, WALL REPAIR, & DRAINAGE

ESTIMATED TOTAL PROJECT COSTS

$97M

Resiliency
New drainage systems would alleviate flooding and eliminate delays from false signal indications

Service Reliability/On-Time Performance
The new interlocking would eliminate a bottleneck in the system, allowing for increased flow of more trains, and would accommodate longer trains, easing congestion

Network Impact
Improvements would increase line capacity on the Gladstone and Morristown Lines

State of Good Repair
Flooding, structural, and operational issues would be fixed to enhance state of good repair

STRATEGIC GOALS MET

Deliver a high-quality experience for all our customers, with their entire journey in mind

Ensure the reliability and continued safety of our transit system

*The new track configurations and installations would **allow increased flow of trains, which would relieve congestion**.*

Description

The Millburn Interlocking is located just east of Millburn Station in Millburn and accommodates three tracks on NJ TRANSIT's Morristown Line: Tracks one and two continue west through the adjacent Millburn Station, and Track three terminates at the interlocking and converges with Track one. The absence of a third track at the station creates an operational bottleneck, preventing incoming trains from entering or passing through the station until platformed trains have moved. Additionally, the existing platforms are low level and undersized, preventing full berthing of longer trains.

If funded, this project would reconfigure the interlocking and extend Track three west through Millburn Station to allow for express train passage without hindering local train schedules, thereby relieving the existing bottleneck by increasing line capacity through the station. This project would also construct a new station building and construct new high-level platforms in order to accommodate larger trainsets and improve accessibility. These improvements would primarily enhance business performance and passenger experience at the station.

***ESTIMATED PROJECT COSTS (2020 Dollars):**

$111 Million

**Estimates are based upon concept for design*

Value to Customers

- Increases on-time-performance (OTP)
- Decreases delays caused by express and local train conflicts

Value to State

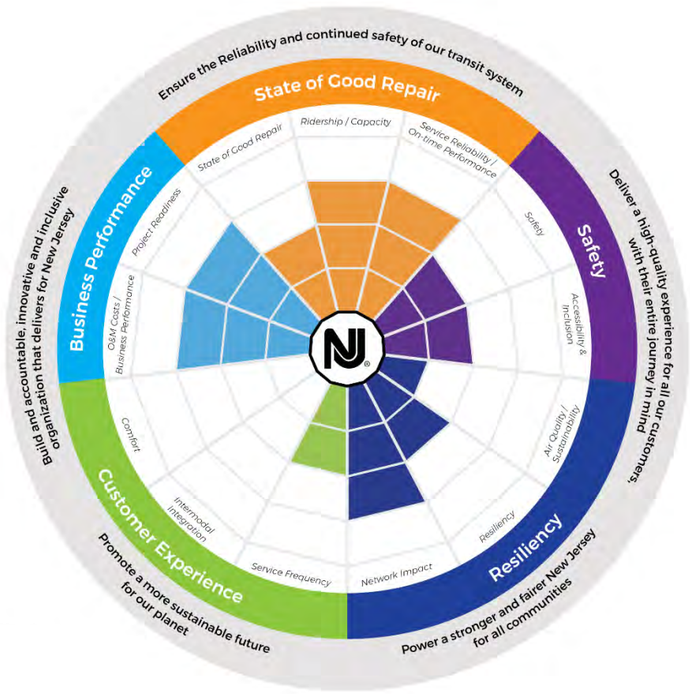
- Increases OTP and service reliability
- Lowers operating cost, which allows for more efficient use of public funds

Existing: Track Configuration



Proposed: New Third Track





PROJECT SHEET MILLBURN INTERLOCKING RECONFIGURATION

ESTIMATED TOTAL PROJECT COSTS

$111M

O&M Costs/Business Performance
A third track would increase train capacity on the line and a new station with universally accessible features would be more attractive for all customers

Service Reliability/On-Time Performance
A third track would allow express trains to run without delays

Ridership/Capacity
Longer track platforms and more efficient express-train operations would increase capacity for passengers and trains

State of Good Repair
A new, universally accessible platform, station building, and third express-track would be constructed

STRATEGIC GOALS MET

Deliver a high-quality experience for all our customers, with their entire journey in mind

Ensure the reliability and continued safety of our transit system

Reconfiguration of the Millburn Interlocking would ***enhance passenger experience*** *and* ***improve service reliability****.*

Description

Dover Station services NJ TRANSIT's Morris & Essex and Montclair-Boonton Line. The station is located within the Dover Interlocking, which is used to facilitate turning trains that do not continue west towards Hackettstown back east, and to provide access into the Dover Yard. The challenge with the current configuration is that trains larger than eight cars cannot fit between the interlocking signals and the grade crossing at S. Morris Street, which means the train blocks the grade crossing when stopped at the station. Furthermore, westbound trains on Track two that terminate at the station must use the interlocking to switch to Track one and enter Dover Yard. This complex move occupies the main tracks and prevents other trains from passing through, which results in frequent delays and reduced on-time performances along the Morris & Essex Line.

If funded, this project would look to study various alternatives to address the existing challenges at Dover Interlocking. Ultimately, the study would determine the appropriate action to best address the challenges, reduce the delays associated with the interlocking and grade crossing configuration, and improve train on-time performance along the Morris & Essex Line.

ESTIMATED PROJECT COSTS (2020 Dollars):

$1 Million

Value to Customers

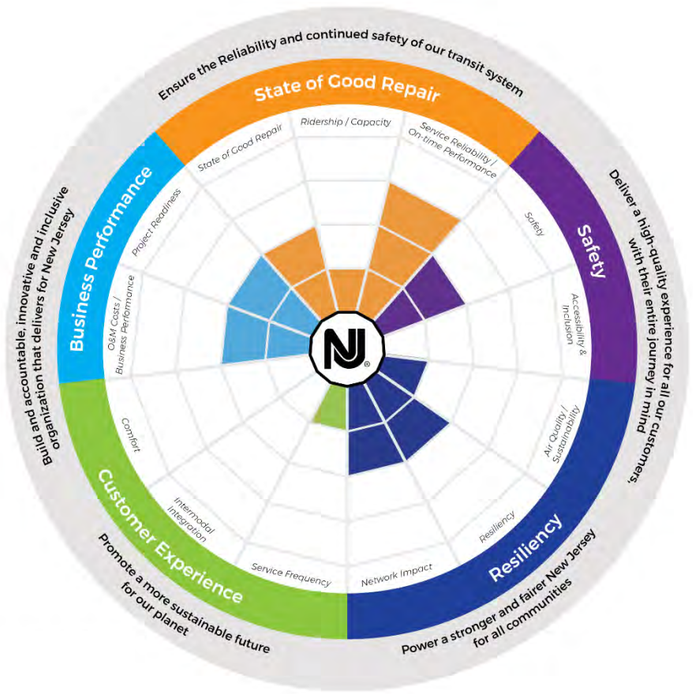
- Reduces train delays from interlocking conflicts

Value to State

- Increases OTP and service reliability, which will bolster public perception of NJ TRANSIT
- Lowers operating cost from unscheduled maintenance and overtime, which allows for efficient use of public funds

Existing: Station and Interlocking





PROJECT SHEET DOVER INTERLOCKING RECONFIGURATION STUDY

ESTIMATED TOTAL PROJECT COSTS

$1M

Network Impact
More efficient train movements would improve service on the Morris & Essex and Montclair-Boonton lines

Service Reliability/On-Time Performance
Reduced delays on the Morris & Essex and Montclair-Boonton lines would increase on-time performance

Safety
An upgraded interlocking would prevent bottlenecks and make train movements safer

State of Good Repair
Moving the interlocking outside of the station limits would improve train operations and extend service life

STRATEGIC GOALS MET

Deliver a high-quality experience for all our customers, with their entire journey in mind

Ensure the reliability and continued safety of our transit system

*The project would **reduce delays and provide safer and more reliable commutes** for customers.*

Description

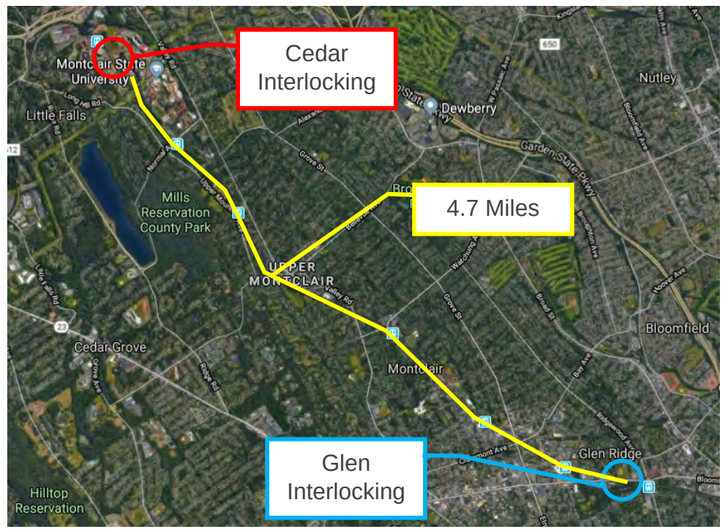
The Montclair-Boonton Line services NJ TRANSIT passengers between Denville and either Hoboken Terminal or New York Penn Station. Between Montclair State University Station and points east, trains operate on two tracks, whereas west of the station, the two tracks merge into a single track until reaching Denville Station where the line meets up with the Morristown Line. For this two-track territory on the Montclair-Boonton line, two primary interlockings allow trains to switch between the tracks when necessary, which is common when there are individual track outages for maintenance work. However, the distance between the two primary interlockings (Cedar Interlocking just east of Montclair State University and the Glen Interlocking west of Glen Ridge Station) is nearly five-miles. The great length between these primary interlockings creates challenges because it requires trains to operate over a long distance before they can switch tracks. This can result in significant delays in service during track outages.

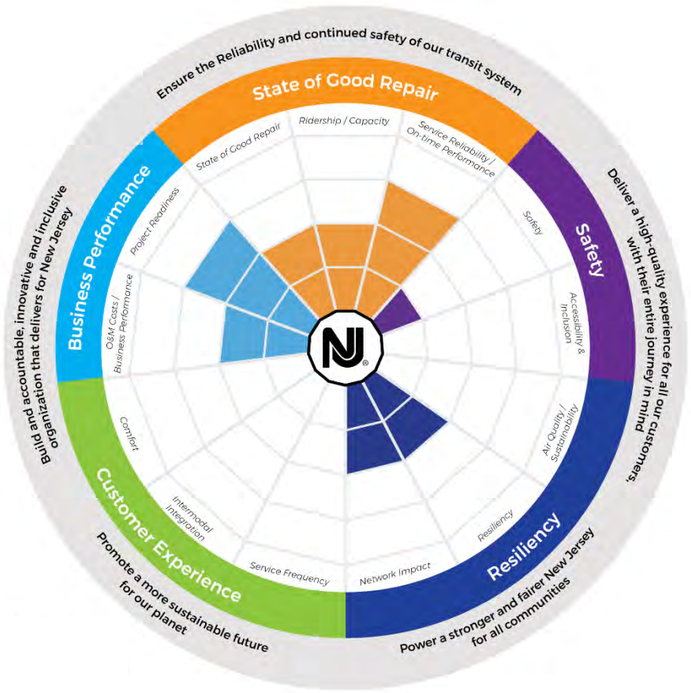
If funded, this project would construct a new interlocking between the existing Glen and Cedar interlockings to minimize the distance trains must travel before they can switch tracks. This would increase operational flexibility during track outages, which would significantly reduce delays and allow for increased service during these outages.

ESTIMATED PROJECT COSTS (2020 Dollars):

$14 Million

Existing: Distance between Interlockings





Value to Customers

- Reduces train delays during track outages

Value to State

- Increases operational flexibility and decreases delays during track outages

PROJECT SHEET NEW INTERLOCKING BETWEEN GLEN AND CEDAR INTERLOCKINGS

ESTIMATED TOTAL PROJECT COSTS

$14M

O&M Costs/Business Performance
Constructing a new interlocking would decrease delays and increase operational flexibility

Service Reliability/On-Time Performance
A new interlocking would significantly reduce delays while increasing service during planned track outages

Network Impact
New interlocking would reduce delays during track maintenance and increase operational efficiency

State of Good Repair
The new interlocking would make track maintenance easier while upgrading service on the line

STRATEGIC GOALS MET

Deliver a high-quality experience for all our customers, with their entire journey in mind

Ensure the reliability and continued safety of our transit system

*The new interlocking would **increase operational flexibility** during track outages and **reduce delays**.*

Description

Newark Penn Station serves as a critical link for NJ TRANSIT for commuter rail, bus and light rail service. The station is the busiest on NJ TRANSIT's system that is owned by the agency and is an essential node for customers traveling between New York and points west, as well as for customers traveling within the state. The station, however, needs a holistic overhaul. Current infrastructure is not always accessible for all, and platforms throughout the station need replacement. The station also needs lighting and display board upgrades and new paint throughout.

Following earlier phase work to improve Platform D conditions, additional platform work would be conducted at Platforms A, B and C if funding is approved. The roof replacement, which was initiated on a portion of the facility in 2014, would be completed. The station would receive an overall paint upgrade, HVAC improvements, and new LED lighting installations throughout. New Departure Vision boards that show passengers their waiting times would be incorporated, and a new PA system would allow riders to better hear announcements. Remaining escalators and elevators, as well as stairwells throughout the entire station would be overhauled to better comply with universal design standards. Restrooms would be upgraded along with replacement of Terrazzo flooring throughout the station. Updates would also be made to the bus and light rail waiting areas. An open concourse renovation concept could also be implemented to further modernize the facility. These improvements would provide an enhanced experience for customers and allow the system to be brought up to a state of good repair so it can better serve riders for years to come.

The station would receive a paint upgrade, and new LED lighting would be installed throughout. New Departure Vision boards that show passengers their waiting times would be hung, and a new PA system would allow riders to better hear announcements. Escalators and elevators throughout the entire station would be overhauled, and restrooms would be upgraded. (This is especially important for Track A, which currently does not have an escalator, and whose elevator is a freight elevator.) Terrazzo flooring throughout the station would be replaced, and stairwells throughout the stations would be improved (with sliding doors) to better comply with universal design concepts.

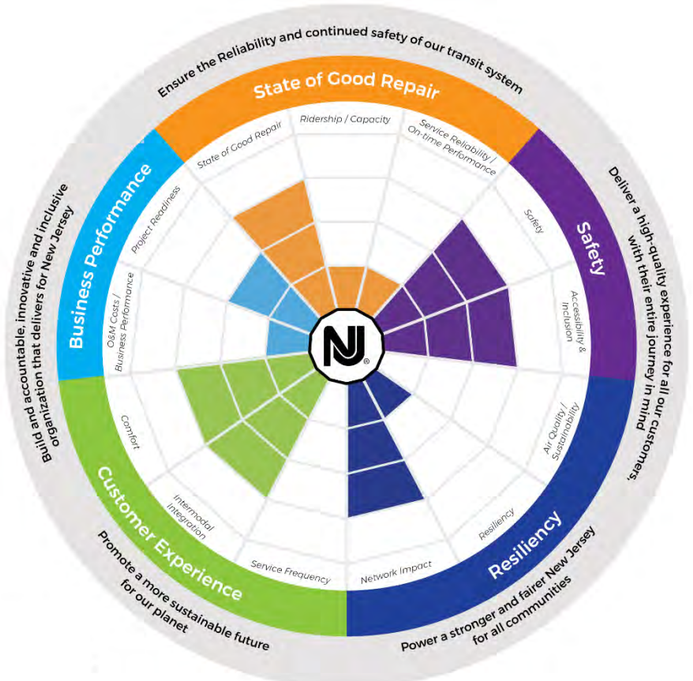
The bus lane areas at the station would also be upgraded on both the Raymond Boulevard and Market Street sides (to the north and south of the station, respectively). Existing enclosures would be replaced, and streetscape improvements would be moved forward to allow for a safer pedestrian experience at the station. The light rail area at Newark Penn would be modified to allow for platform edge doors and point of entry fare collection. New signage would be hung, and platforms would be rehabilitated. The police command center at Newark Penn Station would also be upgraded in order to bring it up to a state of good repair.

Other improvements:

- Roof replacement in PATH level, main waiting rooms, offices, and over Track D
- HVAC improvements in main concourse and waiting room
- Repair benches in all waiting rooms
- Add new stairs and add/refurbish elevators from Platforms D, C, B, and H down to concourse level
- BUS: Repave bus lanes, repaint underside of viaduct, upgrade lighting, upgrade bus waiting rooms, add digital displays
- LIGHT RAIL: The main operations control center for the Newark Light Rail is located at the Vehicle Base Facility in Bloomfield, NJ. In cases of emergency, a much smaller redundant operations control center is located in Newark Penn Station to ensure continuity of light rail service. This redundant control center, however, is severely undersized to serve as a true backup operations center for any sustained period of time. This project would expand the current NLR Backup Operations Control Center, add climate control and standard office space amenities, and update light rail communication utilities to Newark Penn Station.

Existing: Newark Penn Station





ESTIMATED PROJECT COSTS (2020 Dollars):

$454 Million

Value to Customers

- Rehabilitates passenger facilities to enhance travel experience
- Improves signage and communications to relay station information and rail service status

Value to State

- Extends service life of historical transit hub
- Provides more effective use of Capital funds in lieu of repetitive interim repairs
- Increased ROI from increased ridership

Newark Penn Station Improvements

1 Rail Platform D

Phase I

- Platform edges will be rebuilt, and new tactile strips and timber rub rails will be installed
- Overhead canopies, lighting fixtures, and deck joints will be replaced
- The roof over platform D will be replaced
- A new roof drainage system will be put in place, and the deck will be sealed with a high traction membrane coating

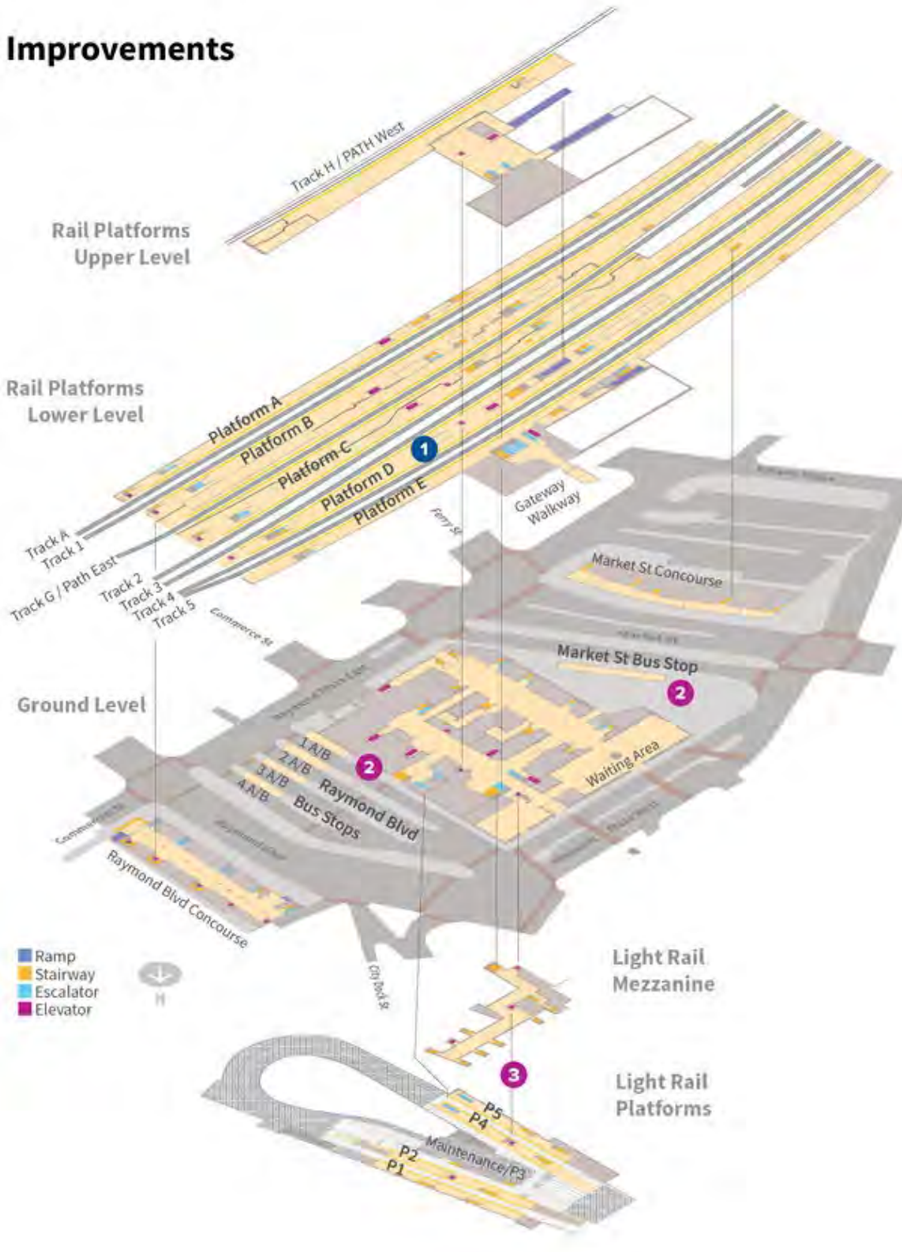
Phase II

- New passenger waiting area doors will be installed and exterior façade will be replaced
- Freight elevator to platform D will be refurbished to better serve customers
- New or stairs and elevators will be added or refurbished down to concourse level

2 Bus Areas

(Raymond Boulevard and Market Street sides)

- Existing enclosures will be replaced
- Streetscape improvements will be made to allow for a safer pedestrian experience at the station
- Bus lanes will be repaved, viaduct underside will be repainted, lighting and bus waiting rooms will be upgraded, digital displays will be added



3 Newark Light Rail Area

- A backup operations control center for Newark Light Rail will be added
- Platform edge doors will be installed
- A point of entry fare collection system will be installed
- Platforms will be reconstructed
- Station signage will be improved

General Station Improvements

- The station paint will be upgraded
- New LED lighting will be installed
- New DepartureVision boards will be installed, showing passengers their waiting times
- A New PA system will be installed, allowing riders to hear announcements better
- Escalators and elevators will be overhauled or added throughout the entire station
- Restrooms will be upgraded
- Terrazzo flooring will be replaced throughout the station
- Stairwells will be added or improved to better comply with universal design concepts
- The police command center will be upgraded
- Roof will be replaced on the PATH level, in main waiting rooms, and in offices
- The main concourse and waiting room will see improved HVAC and repaired benches and stairs. Additional stairs will also be added or refurbished from Platforms D, C, B, and H down to concourse level.

PROJECT SHEET NEWARK PENN STATION REHABILITATION

ESTIMATED TOTAL PROJECT COSTS

$454M

Accessibility and Inclusion
Platforms throughout the station would be replaced to be accessible for all and elevators would be upgraded for customers who need to utilize them

Comfort
A new PA system and Departure Vision boards would make it easier for customers to monitor their train's status

Intermodal Integration
Upgraded PA system, signage, Departure Vision boards, rail platforms, streetscape improvements, and bus lane areas would make it easier for customers to transfer between modes

Safety
Improved LED lighting, station platforms, escalators, and elevators would improve station safety

STRATEGIC GOALS MET

Deliver a high-quality experience for all our customers, with their entire journey in mind

Ensure the reliability and continued safety of our transit system

*Improvements would provide an **enhanced experience for customers and would allow the system to be brought up to a state of good repair**.*

In

Description

Newark Penn Station is a major rail hub for both Amtrak and NJ TRANSIT, and serves the Northeast Corridor, North Jersey Coast Line and Raritan Valley Line rail service. Platform D, which serves as one of the primary outbound platforms for both Tracks 3 and 4, needs rehabilitation in order to provide the requisite level of service for one of NJ TRANSIT's busiest stations.

If funded, improvements would be completed in two phases. Phase I features rehabilitation of the concrete platform. This includes reconstruction of the platform edge, addition of new tactile strips and rub rails; reconstruction of platform deck joints; repairs to shallow and deep concrete spalls; partial and full deck replacement (where required); and sealing of the rehabilitated deck with a suitable high traction membrane coating. Phase I rehabilitation would also include improvements to the existing overhead canopy, including structural repair/replacement of deteriorated steel members; full painting of the steel canopy structure; and installation of a new roof drainage system. Canopy enhancements would include new LED lighting, new variable message sign boards, and a new public announcement system with enhanced speakers to improve communications and overall customer experience.

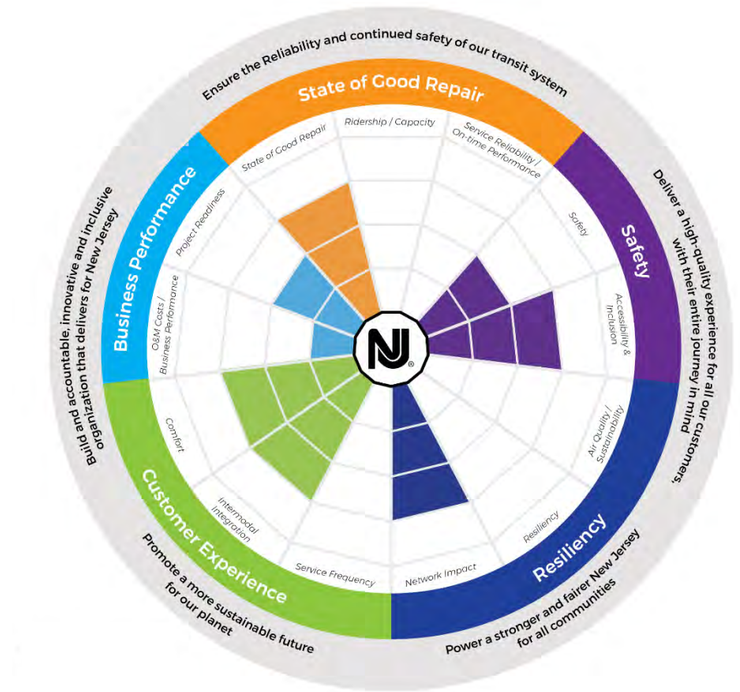
Phase II would include renewal of platform passenger waiting areas, including door and exterior façade replacement. In addition, rehabilitation of the existing platform freight elevator would be completed to accommodate combined passenger and freight movements. These improvements would enhance station operations and better accommodate passenger access to the station.

ESTIMATED PROJECT COSTS (2020 Dollars):

$26 Million

Existing: Station Conditions





Value to Customers

- Rehabilitates passenger facilities to enhance travel experience
- Improves signage and communications to relay station information and rail service status

Value to State

- Extends service life of historical transit hub
- Provides more effective use of Capital funds in lieu of repetitive interim repairs

PROJECT SHEET NEWARK PENN STATION - PLATFORM D IMPROVEMENTS

ESTIMATED TOTAL PROJECT COSTS

$26M

Accessibility and Inclusion
Platform improvements would provide better accessibility for all customers

Comfort
Enhanced communications systems and improved lighting on the platform would significantly improve customer comfort

Network Impact
An improved platform would positively impact the NEC, North Jersey Coast, and Raritan Valley Lines

State of Good Repair
Improvements would reduce maintenance and more effective roof drainage would mitigate future deterioration

STRATEGIC GOALS MET

Deliver a high-quality experience for all our customers, with their entire journey in mind

Ensure the reliability and continued safety of our transit system

*Platform improvements would **enhance travel experience**, **positively impact service**, and **extend service life**.*

Description

Trenton Station is a high-level platform station located on NJ TRANSIT and Amtrak's Northeast Corridor (NEC). This heavily used station supports an average of 3,673 passenger boardings per weekday and serves a key link to the state Capital region, Philadelphia, Newark, and New York City. The current station needs rehabilitation in order to return to a state of good repair.

If funded, the station's concrete platform would be rehabilitated. This includes reconstruction of the platform edge; addition of new tactile strips and rub rails; reconstruction of platform deck joints; and repairs to shallow and deep concrete spalls. The rehabilitated platform would be sealed with a suitable high traction membrane coating. Improvements to the existing overhead canopy would also be made, including structural repair/replacement of deteriorated steel members; full painting of the steel canopy structure; and installation of a new roof drainage system. Canopy enhancements would include new LED lighting, new variable message sign boards, and a new public announcement system with enhanced speakers to improve communications and overall customer experience. The police command center at Trenton Station would also be upgraded in order to bring it up to a state of good repair.

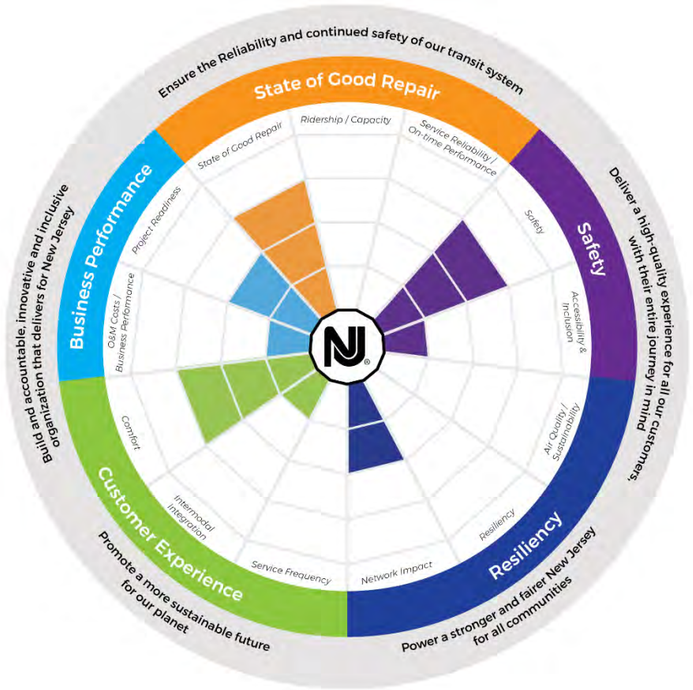
***ESTIMATED PROJECT COSTS (2020 Dollars):**

$49 Million

***Estimates are based upon concept for design**

Existing: Station Conditions





Value to Customers

- Enhances travel experience with rehabilitated passenger facilities
- Improves signage and communications to relay station information and rail service status

Value to State

- Extends service life of transit hub
- Reduces maintenance costs

PROJECT SHEET TRENTON STATION REHABILITATION

ESTIMATED TOTAL PROJECT COSTS

$49M

Safety
Enhance communications and lighting would improve passenger safety

Network Impact
Trenton station is heavily used and is a key network link to Philadelphia, Newark, and NYC

State of Good Repair
Rehabilitating platform and canopy improvements would reduce maintenance frequency

Comfort
Enhanced communication systems and lighting would improve customer experience and streamline movements

STRATEGIC GOALS MET

Deliver a high-quality experience for all our customers, with their entire journey in mind

Ensure the reliability and continued safety of our transit system

Rehabilitating Trenton Station would ***improve state of good repair***, ***comfort***, *and* ***safety at a key network link***.

Description

In an ongoing effort to improve passenger safety and accessibility across its rail system, and to further respond to the requirements of the Americans with Disabilities Act (ADA), NJ TRANSIT has identified a list of stations it intends to make accessible as part of this plan.

If funded, this project would construct high-level platforms, elevators, ramps, pedestrian overpasses, widened sidewalks and access paths where appropriate. In some instances, accessibility improvements are paired with physical condition upgrades to improve overall station state of good repair. Stations are prioritized according to physical conditions, current and projected ridership, local demographics, and potential environmental impacts. These improvements collectively would enhance both the safety and experience of the customer, further advance access to communities, and yield improved on-time performance, and more efficient operations as high-level platforms reduce train dwell time at stations which reduce travel times. In addition, all 30 stations would receive basic state of good repair upgrades as part of this work.

***ESTIMATED PROJECT COSTS (2020 Dollars):**

$790 Million

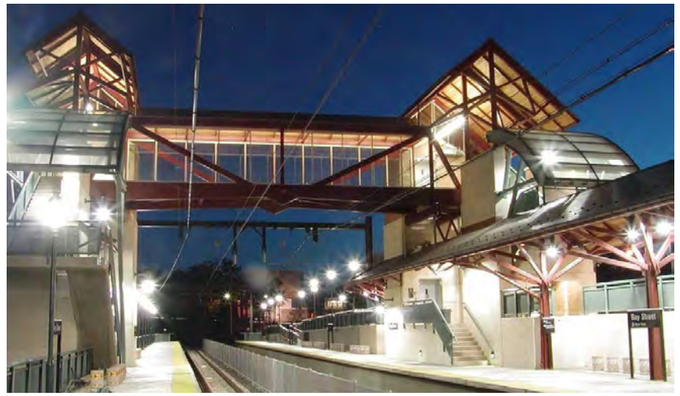
**Estimates are based upon concept for design*

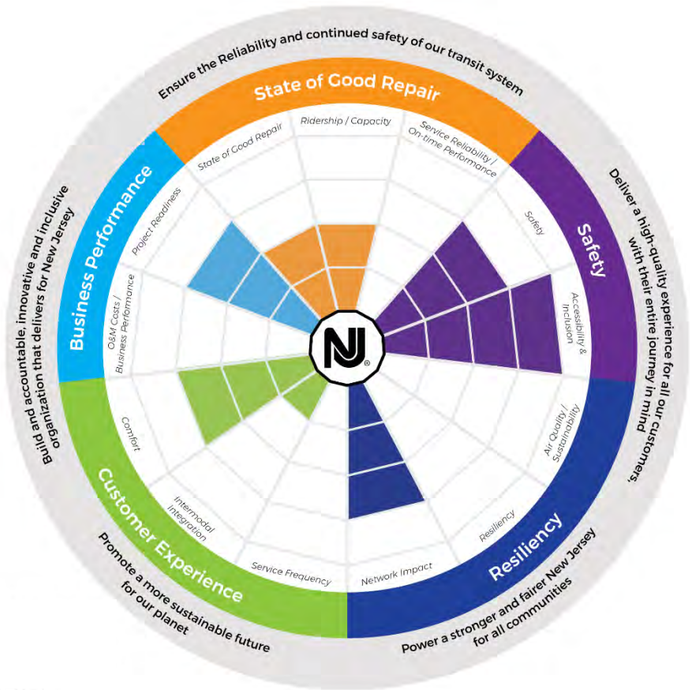
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Low Level Platform



High Level Platform with Elevators





Value to Customers

- Increases access for passengers
- Enhances comfort for customers at improved facilities
- Improves signage and communications to relay station information and rail service status

Value to State

- Improves station accessibility
- Extends service life of facilities while improving state of good repair systemwide



Group	Station
A	Raritan
	Orange
	Bloomfield
	Chatham
	Hawthorne
	Radburn
	Watsessing
	Glen Ridge
	Brick Church
	Maplewood
B	Walnut Street
	Little Silver
	New Providence
	Murray Hill
	Berkeley Heights
	Fanwood
	Delawanna
	Passaic
	Clifton
	Dunellen
C	Watchung Ave.
	Perth Amboy
	Upper Montclair
	Netherwood
	Broadway
	Wood-Ridge
	Avenel
	Little Falls
	Teterboro
	Garwood

PROJECT SHEET REGIONAL RAIL STATION MODERNIZATION & ACCESS PROGRAM

ESTIMATED TOTAL PROJECT COSTS

$790M

Safety
Infrastructure upgrades would provide safer access to stations for customers

State of Good Repair
Expanding accessibility would be paired with upgrades to improve overall station state of good repair

Accessibility and Inclusion
Upgraded rail stations would improve accessibility for all customers

Network Impact
Infrastructure at 30 stations across the NJ TRANSIT rail network would be upgraded to improve accessibility to the rail network

STRATEGIC GOALS MET

Deliver a high-quality experience for all our customers, with their entire journey in mind

Ensure the reliability and continued safety of our transit system

*Modernization and access improvements would **enhance safety**, **access**, **customer experience**, and **operations**.*

Description

Lyndhurst Station is one of two stations in Lyndhurst that services the Main Line. This station, which accommodates approximately 1,000 passengers per weekday, is severely outdated and in need of full replacement. The existing station is a major opportunity to improve accessibility for persons with disabilities. Additionally, parking near the station is inadequate and hard to access making passengers walk to a location a quarter mile east of the station. In addition to being inconvenient, the logistics of the public lot requires passengers to walk through busy streets to reach the station and presents a challenge for those who may be mobility impaired.

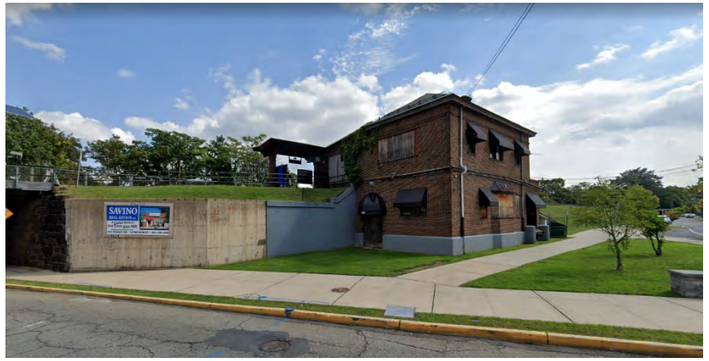
If funded, this project would construct a new Lyndhurst Station east of the existing station to provide adequate accessibility to and from the existing parking lot. The new station would have accessible high-level platforms and station enclosures on the eastbound and westbound tracks, elevators, sheltered walkways, and heated waiting areas. Ultimately, the new station would provide customers with a safer, more accessible, and overall enhanced experience.

***ESTIMATED PROJECT COSTS (2020 Dollars):**

$28 Million

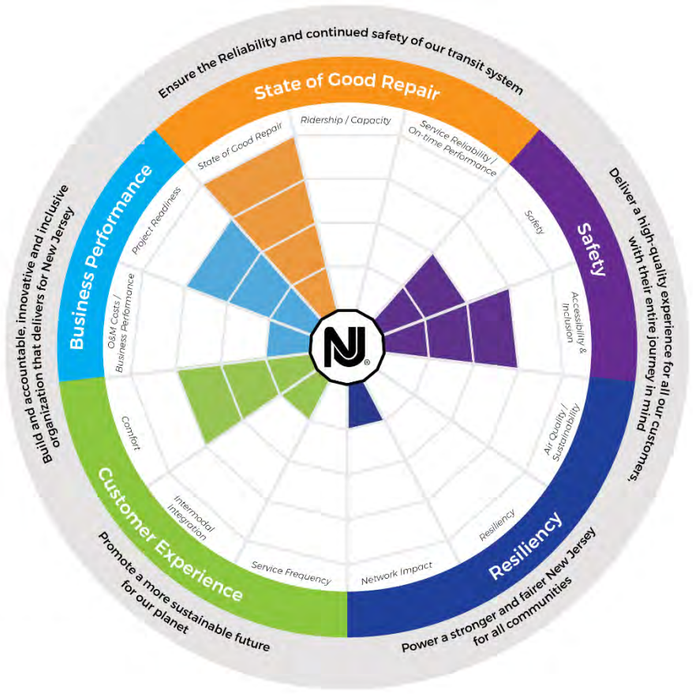
** Year 1 includes funds already spent on design phase activities; Total project cost indicates total cost over span of the project, not the funded or unfunded amount*

Existing: Station Condition



Proposed: New Station





Value to Customers

- Increases accessibility for passengers
- Enhances comfort for customers waiting at station
- Improves access to and from parking lot

Value to State

- Greater opportunity to drive transit-oriented development (TOD) opportunities
- A more interconnected and accessible network

PROJECT SHEET LYNDHURST STATION

ESTIMATED TOTAL PROJECT COSTS

$28M

Comfort
New station enclosures, sheltered walkways, and heated waiting areas would enhance customer comfort

Safety
Improved access to platforms and to and from station parking lot would make the station safer for all customers

STRATEGIC GOALS MET

Deliver a high-quality experience for all our customers, with their entire journey in mind

Ensure the reliability and continued safety of our transit system

State of Good Repair
Upgrading station infrastructure would reduce frequency and cost of maintenance

Accessibility and Inclusion
New high-level platforms, walkways, and elevators would improve accessibility for all customers

*The new Lyndhurst Station would **enhance state of good repair**, **accessibility**, **comfort**, and **safety**.*

Description

The Roselle Park Station is an elevated platform station located in Roselle Park that serves NJ TRANSIT's Raritan Valley Line. The station, built circa 1967, is obsolete, structurally deficient, and in need of both structural and "customer facing" work. Necessary work includes full platform replacement, repairs to access stairs, as well as cleaning and painting work. Although the station features an elevated platform, the station is a major opportunity to improve the system's accessibility as stairs must be used to access the platform from the station building and parking lot.

If funded, this project would address the noted structural and cosmetic deficiencies to rehabilitate the station and bring it to a state of good repair, extending its overall service life. In addition, an elevator would be installed to improve overall accessibility to the platform. Enhanced signage and communications would be incorporated to provide customers with station information and rail service status.

***ESTIMATED PROJECT COST (2020 Dollars):**

$23 Million

**Estimates are based upon concept for design*

Value to Customers

- Increases accessibility for passengers

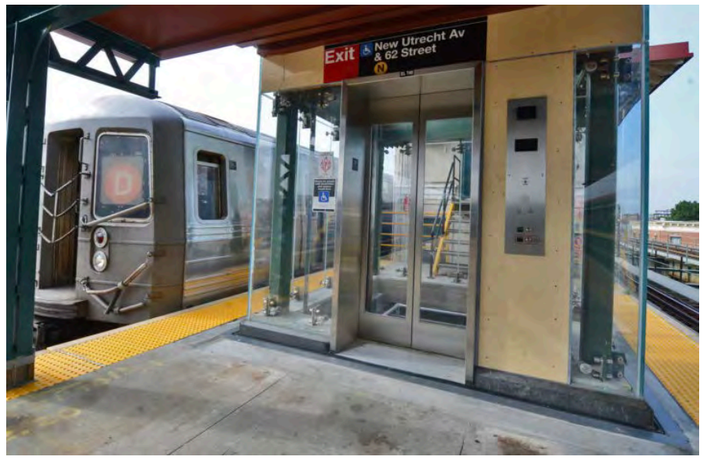
Value to State

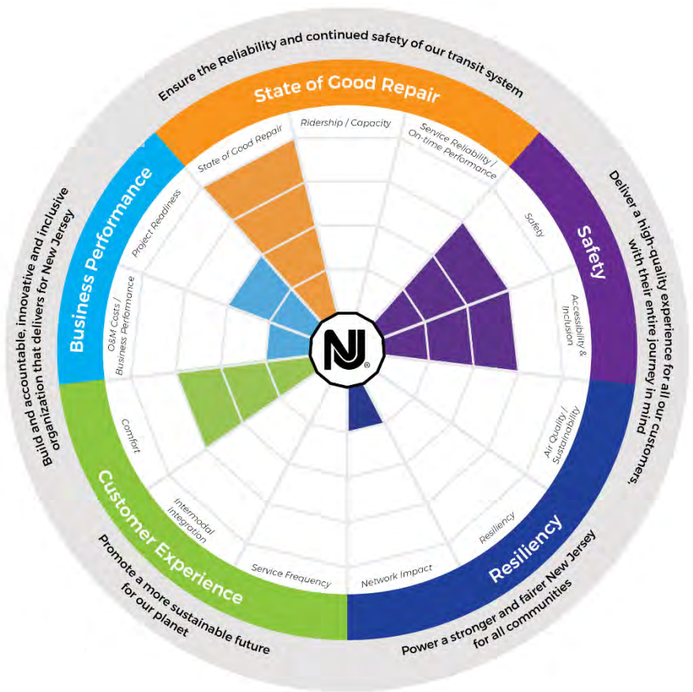
- Complies with regulations

Existing: Station Condition



Proposed: Platform Elevator







Existing Issues

1 Existing stairs to access platform are deteriorated. They are also the only means of accessing the platform and are not ADA accessible.	4 Deteriorated maintenance stairs are severely deteriorated and need to be replaced.
2 Station building is outdated and in need of both functional and cosmetic repairs.	5 Concrete underside of station platform is severely spalled with exposed rebar, which warrants full replacement.
3 Temporary platform repairs from previous work should be replaced with new platforms	6 Concrete platform substructure is severely spalled with exposed rebar, which warrants repair or replacement.

1 Deteriorated Stairs/ADA Issue



2 Obsolete Station Building



3 Temporary Platform Repairs (Typical)



4 Deteriorated Maintenance Stairs



5 Deteriorated Platform Concrete (Typical)



6 Deteriorated Platform Substructure (Typical)



PROJECT SHEET ROSELLE PARK STATION IMPROVEMENTS

ESTIMATED TOTAL PROJECT COSTS

$23M

Comfort
A renovated station building and enhanced signage and communications systems would improve customer comfort

Safety
Platform reconstruction, repairs, elevator installation, and improved lighting would enhance customer safety

State of Good Repair
Platform reconstruction, repairs, and customer facing upgrades would extend the station's service life

Accessibility and Inclusion
Elevator installation, platform reconstruction, and repairs would improve accessibility for all customers

STRATEGIC GOALS MET

Deliver a high-quality experience for all our customers, with their entire journey in mind

Ensure the reliability and continued safety of our transit system

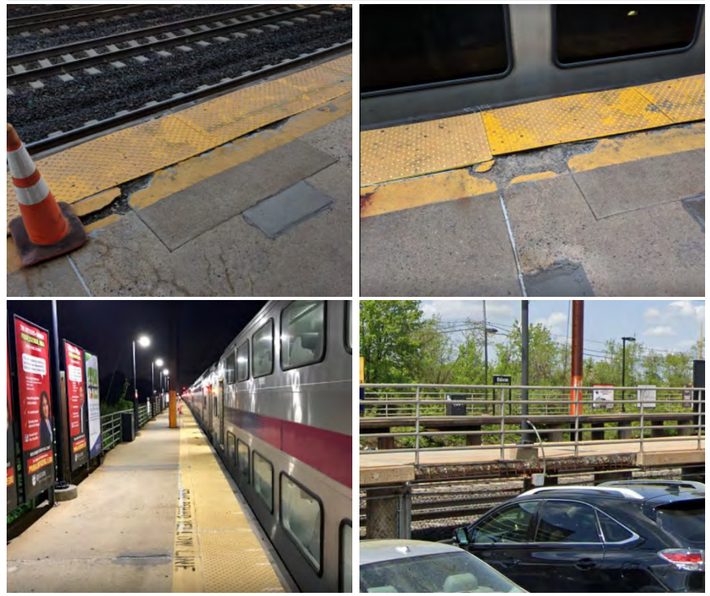
*The project would **bring Roselle Park Station to a state of good repair** and **improve access**, **comfort**, and **safety**.*

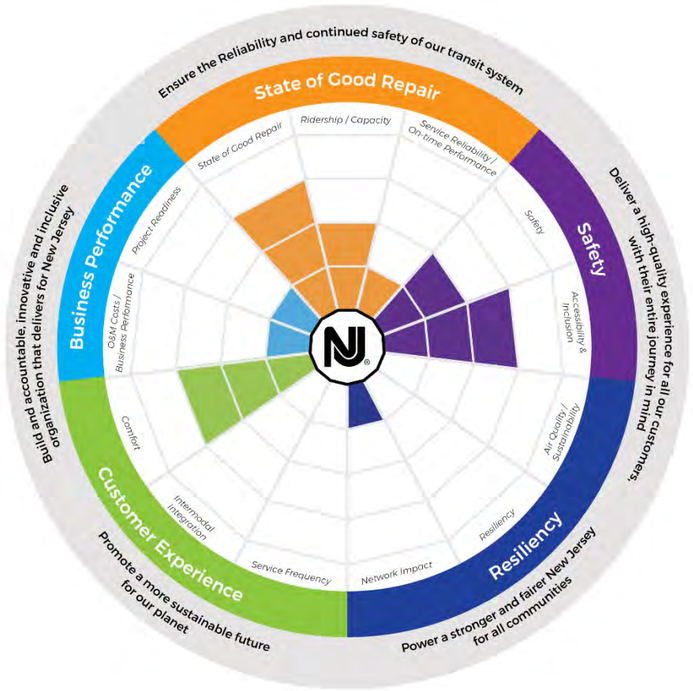
Description

Edison Station is elevated platform station that serves NJ TRANSIT and Amtrak's Northeast Corridor (NEC). This heavily used station, which supports approximately 2,773 passenger boardings per weekday, must support a 12-car trainset. However, the current platforms are too short to accommodate this long train length. As a result, not all cars of a train can fit on the station platform, making it more challenging and time consuming for passengers to board and deboard trains. However, extension of the existing platform is currently prevented by an existing freight turnout switch to the west, and an undergrade bridge to the east.

If funded, this project would relocate the existing freight turnout switch to the east of the station to facilitate platform extension to the west by approximately 425 feet. The extension would allow an entire 12-car trainset to fit at the station, decreasing dwell times, and facilitating necessary passenger boardings. This would ultimately increase rail operation efficiency and service speed. Additionally, the existing platform would be replaced to extend its useful service life, mitigate future maintenance, and improve safety.

Existing: Station Conditions





***ESTIMATED PROJECT COSTS (2020 Dollars):**

$36 Million

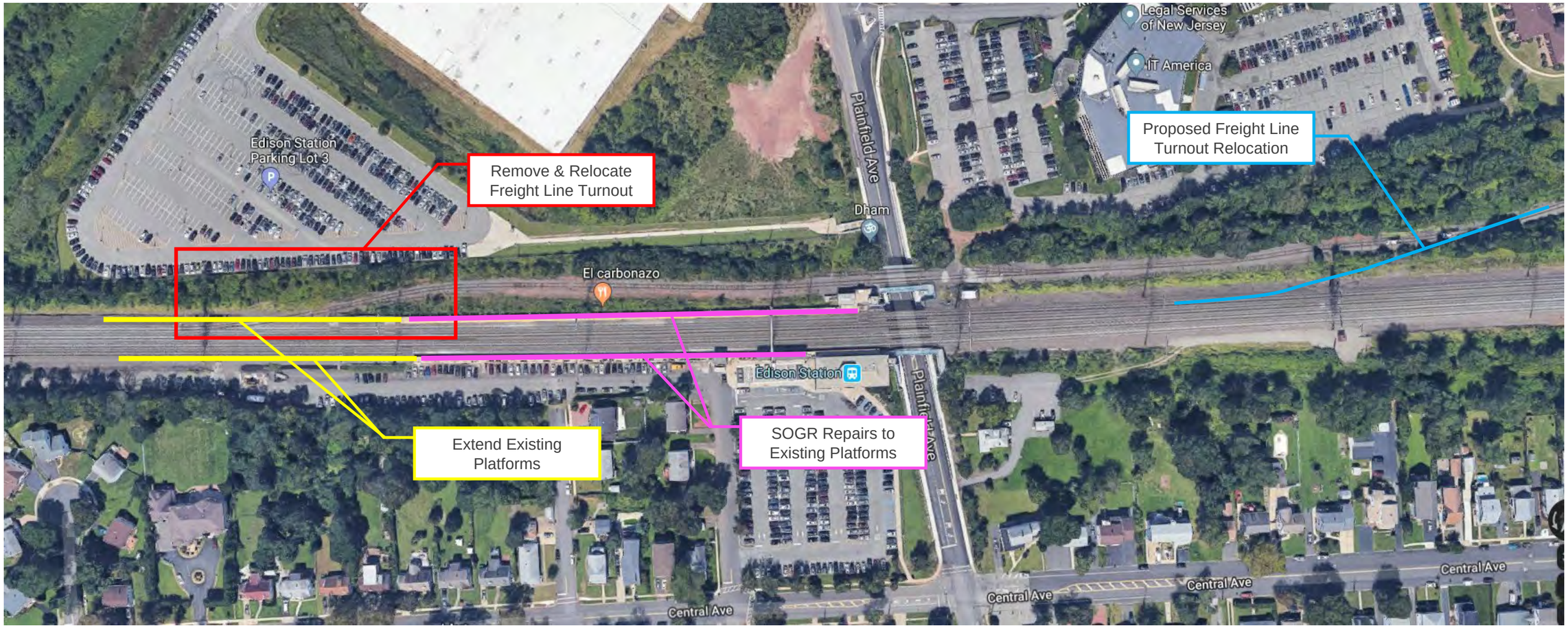
**Estimates are based upon concept for design*

Value to Customers

- Facilitates passenger boarding and deboarding
- Increases on-time performance

Value to State

- Decreases dwell times and increase on time performance


Edison Station
Parking Lot 3
Remove & Relocate
Freight Line Turnout
Plainfield Ave
Legal Services
of New Jersey
IT America
Proposed Freight Line
Turnout Relocation
Dham
El carbonazo
Edison Station
Extend Existing
Platforms
SOGR Repairs to
Existing Platforms
Central Ave
Central Ave
Central Ave
Central Ave

PROJECT SHEET EDISON STATION IMPROVEMENTS

ESTIMATED TOTAL PROJECT COSTS

$36M

Comfort
An extended platform would ease boarding and deboarding and reduce dwell times to improve comfort

Safety
Extending the platform to ease boarding and deboarding of trains would improve customer safety at the station

STRATEGIC GOALS MET

Deliver a high-quality experience for all our customers, with their entire journey in mind

Ensure the reliability and continued safety of our transit system

State of Good Repair
Platform reconstruction, repairs, and painting would extend service life

Service Reliability/On-Time Performance
Constructing extended platform would reduce dwell times and improve on-time performance

*The **reconstructed platforms**, additional repairs, and painting would **bring the station to a state of good repair**.*

Description

Elizabeth Station is an elevated platform station which services NJ TRANSIT and Amtrak's Northeast Corridor (NEC). This heavily used station, which supports approximately 3,500 passenger boardings per weekday, must support a 12-car trainset. However, the current platforms are too short to accommodate such a long train length. As a result, not all cars can fit on the station platform, which makes it more challenging and time consuming for passengers to board and deboard the train. In addition, there is an opportunity to improve accessibility at the station. Several additional upgrades are required to bring the station into a state of good repair.

If funded, the project would reconstruct two longer length, high-level concrete passenger platforms to better accommodate full-length NJ TRANSIT trains. These platforms would be fully accessible, reduce dwell times, facilitate timely passenger boardings, and increase service speed. New station buildings with new elevators, stairs, ticketing offices, operational office spaces, and retail spaces would also be constructed. The station rehabilitation project would also accommodate a proposed future fifth track along the NEC planned to be built by Amtrak.

ESTIMATED PROJECT COSTS (2020 Dollars):

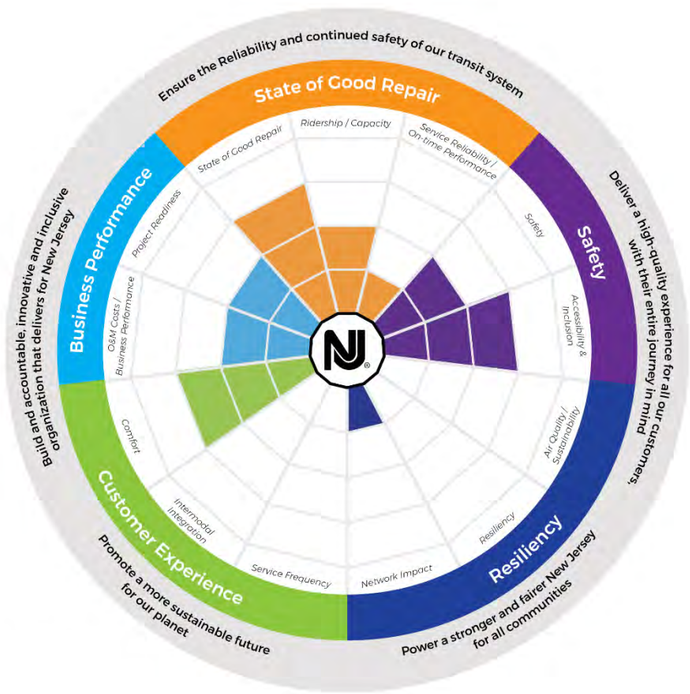
$54 Million

Existing: Station Conditions



Proposed: New Station





Value to Customers

- Facilitate passenger boarding and deboarding
- Increases on-time performance
- Enhances experience for transit riders

Value to State

- A more accessible transportation network
- Decreases dwell times and increase on-time performance

PROJECT SHEET ELIZABETH STATION IMPROVEMENTS

ESTIMATED TOTAL PROJECT COSTS

$54M

Comfort
Improved platforms, new station buildings, and reduced dwell times would enhance customer comfort

Service Reliability/On-Time Performance
Longer platforms would reduce dwell times and improve on-time performance

State of Good Repair
Platform reconstruction and rehabilitation would extend service life

Accessibility and Inclusion
Addition of new extended high-level platforms, elevators, and stairs would improve accessibility for all customers

STRATEGIC GOALS MET

Deliver a high-quality experience for all our customers, with their entire journey in mind

Ensure the reliability and continued safety of our transit system

*Station rehabilitation would **enhance state of good repair**, **accessibility**, **comfort**, and **on-time performance**.*

Description

The Jersey Avenue Station in New Brunswick is owned by NJ TRANSIT and services the Northeast Corridor (NEC). Unlike the rest of the stations on the NEC, the existing Jersey Avenue station requires access enhancements. In addition, the inbound platform is located on a spur behind the outbound tracks, preventing trains from Trenton and Princeton from servicing the station. Inbound trains must originate on the spur and cross all NEC tracks to get on to Inbound Track 1. Given the amount of trains on the NEC, there are limited schedule openings to facilitate this cross over movement. Furthermore, any delays of these trains results in stack up delays on the NEC as well as the North Jersey Coast Line entering at Elizabeth.

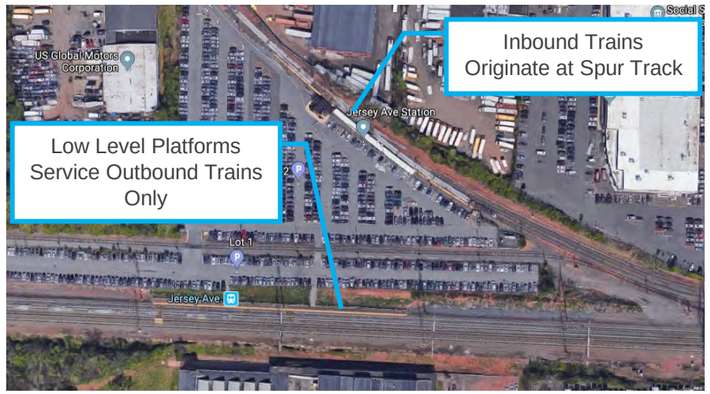
If funded, this project would include the construction of a new Jersey Avenue station relocated on the main NEC tracks. The new station would have accessible high-level platforms and enclosures for both eastbound and westbound tracks. An accessible pedestrian overpass would also be built to allow customers to reach both platforms. Ultimately, the new station would provide customers with a safer and more accessible, commuting experience with reduced delays.

***ESTIMATED PROJECT COSTS (2020 Dollars):**

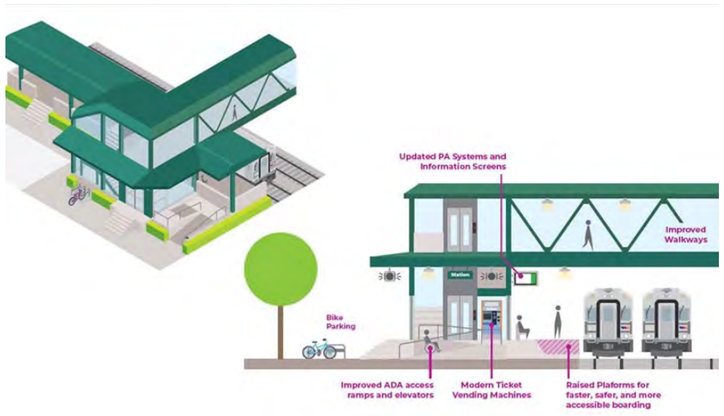
$238 Million

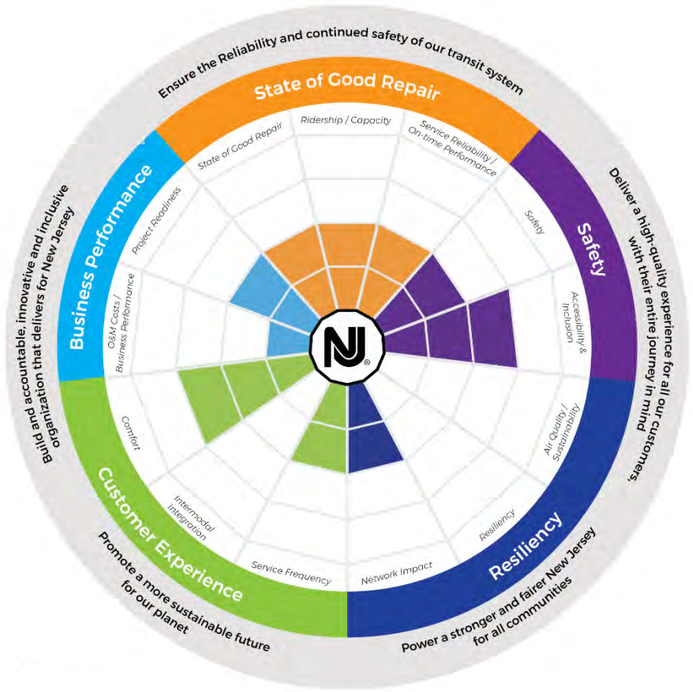
**Estimates are based upon concept for design*

Existing: Station Configuration



Proposed: New Station





Value to Customers

- Easier access to facility
- Enhanced comfort for customers waiting at station

Value to State

- A more accessible transportation network

PROJECT SHEET JERSEY AVENUE STATION

ESTIMATED TOTAL PROJECT COSTS

$238M

Comfort
New station amenities would improve customer comfort

Accessibility and Inclusion
Accessible high-level platforms, enclosures, and a pedestrian overpass would improve accessibility for all customers

State of Good Repair
Constructing a new station would reduce maintenance frequency

Service Reliability/On-Time Performance
Locating the new station on the main NEC tracks would reduce delay risk

STRATEGIC GOALS MET

Deliver a high-quality experience for all our customers, with their entire journey in mind

Ensure the reliability and continued safety of our transit system

*A new Jersey Avenue station would **add capacity to meet ridership growth** and **improve service reliability, comfort**, and **accessibility**.*

Description

Metuchen Station serves NJ TRANSIT and Amtrak's Northeast Corridor (NEC). This heavily used station, supporting approximately 3,528 passenger boardings per weekday, must support a 12-car trainset. However, the current platforms are too short to accommodate this long train length. As a result, not all cars of a train can fit on the station platform, making it more challenging and time consuming for passengers to board and deboard the train.

If funded, this project would extend the existing platforms approximately 360 feet east. The extension would allow an entire train set (12-cars) to fit at the station, decreasing dwell times, and facilitating necessary passenger boardings. This would ultimately increase rail operation efficiency and service speed. Additionally, existing platform replacement would extend its useful service life, enhance safety, and mitigate future maintenance concerns.

***ESTIMATED PROJECT COSTS (2020 Dollars):**

$31 Million

**Estimates are based upon concept for design*

Value to Customers

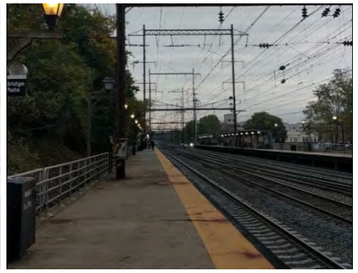
- Facilitates passenger boarding and deboarding
- Increases on-time performance (OTP)

Value to State

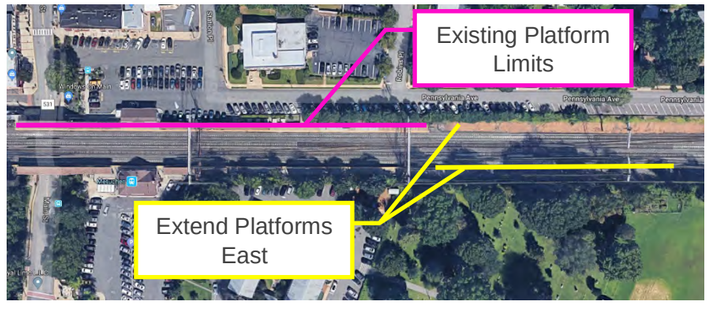
- Decreases dwell times and increase OTP

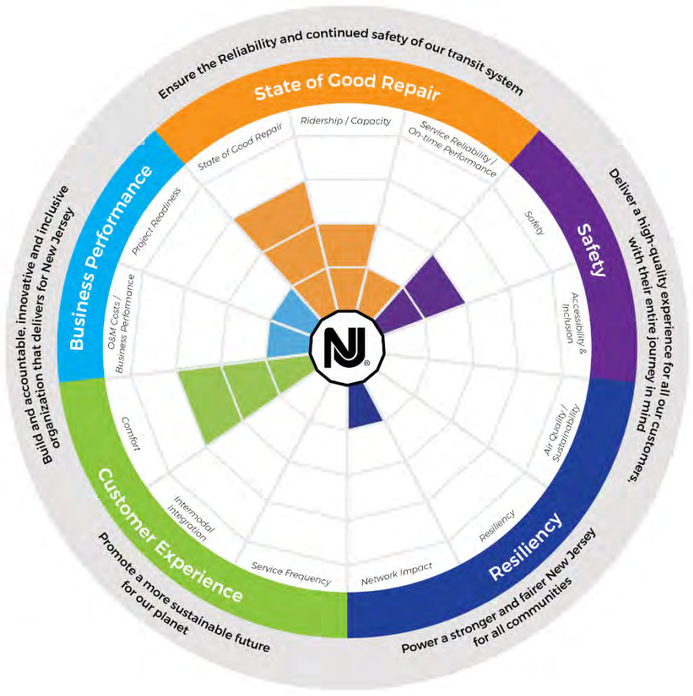
Existing: Station Conditions





Proposed: Platform Extension





PROJECT SHEET METUCHEN STATION IMPROVEMENTS

ESTIMATED TOTAL PROJECT COSTS

$31M

Comfort
Extended platforms would ease boarding and deboarding and reduce dwell times to improve customer comfort

Safety
Extending platforms to ease boarding and deboarding of trains would improve customer safety at the station

State of Good Repair
Platform reconstruction and repairs would extend service life of station

Service Reliability/On-Time Performance
Extending platforms would decrease dwell times and improve on-time performance

STRATEGIC GOALS MET

Deliver a high-quality experience for all our customers, with their entire journey in mind

Ensure the reliability and continued safety of our transit system

*The new longer platforms would **improve on-time performance**, **safety**, **comfort** and **bring the station into a state of good repair**.*

Description

The New Brunswick Station is a station located in New Brunswick, and serves both NJ TRANSIT and Amtrak's Northeast Corridor (NEC). This heavily used station, which supports approximately 4,457 passenger boardings per weekday, must support a 12-car trainset. However, the current platforms are too short to accommodate such a long train length. As a result, not all cars can fit on the station platform, and this makes it more challenging and time consuming for passengers to board and deboard the train. The station is in need of rehabilitation.

If funded, this project would extend the existing platforms to allow the entire 12-car trainset to fit at the station, which would ultimately decrease dwell times, facilitate passenger boardings, and increase service speed. Additionally, the existing platforms would be replaced and upgrades would be made to the existing station, including rehabilitating or replacing the elevators and escalators, installing new lighting and windows at the station, upgrading the HVAC system, and renovating the waiting room. The upgrades would provide a better experience for NJ TRANSIT customers and help mitigate future maintenance needs.

ESTIMATED PROJECT COSTS (2020 Dollars):

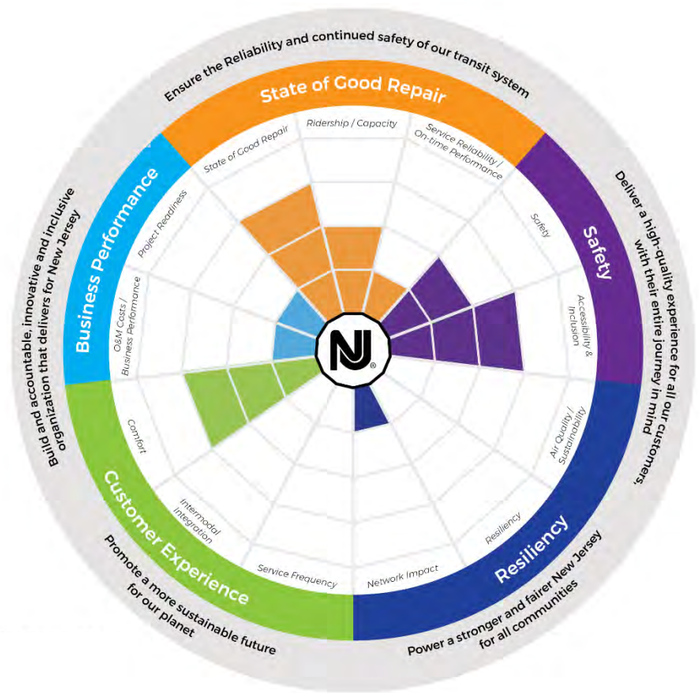
$13 Million

Existing: Station Conditions









Value to Customers

- Facilitates passenger boarding and deboarding
- Increases on-time performance
- Provides enhanced amenities

Value to State

- Decreases dwell times
- Increases on-time performance (OTP)

PROJECT SHEET NEW BRUNSWICK STATION IMPROVEMENTS

ESTIMATED TOTAL PROJECT COSTS

$13M

Accessibility and Inclusion
Repairs and upgrades to platforms, elevators, and escalators would improve accessibility for all customers

Comfort
Upgrading station amenities and easing boardings and deboardings would improve customer comfort

State of Good Repair
Station rehabilitation would extend service life and decrease maintenance

Service Reliability/On-Time Performance
Extending platforms would decrease dwell times and improve on-time performance

STRATEGIC GOALS MET

Deliver a high-quality experience for all our customers, with their entire journey in mind

Ensure the reliability and continued safety of our transit system

*Station improvements would **enhance state of good repair**, **on-time performance**, **accessibility**, and **comfort**.*

Description

The North Elizabeth Station is located in Elizabeth and services NJ TRANSIT and Amtrak's Northeast Corridor (NEC). The facility is currently obsolete, structurally deficient, and needs both structural and customer facing renewal.

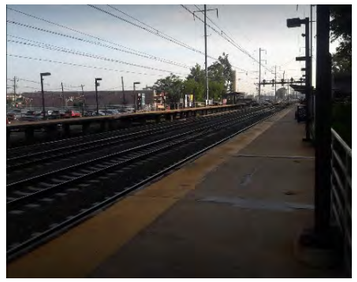
If funded, this project would address the structural and cosmetic deficiencies and repair the station as needed to bring it to a state of good repair. Necessary work includes fully replacing the platform and canopies; rehabilitating the existing railing; and improving lighting and security at the station. This would ultimately extend the station's useful service life and mitigate future maintenance expenses. Additionally, the project would simultaneously provide an enhanced experience for customers using the station.

ESTIMATED PROJECT COSTS (2020 Dollars):

$32 Million

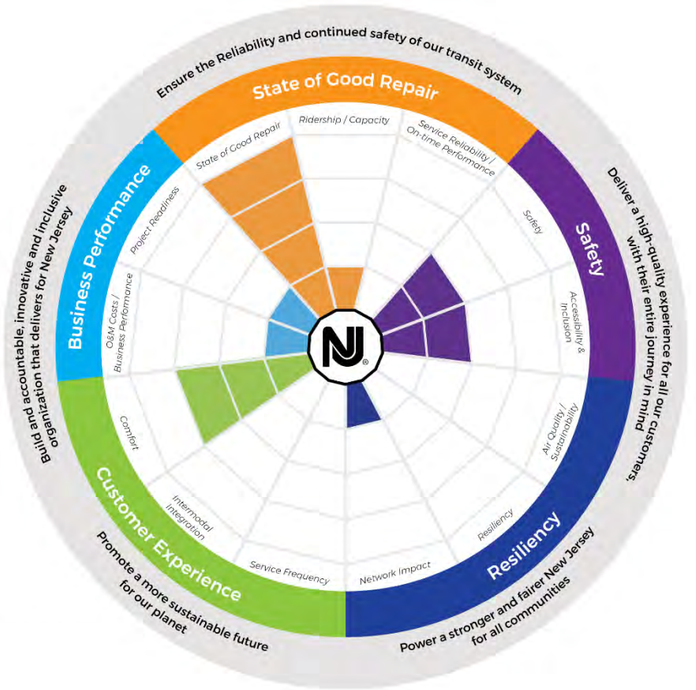
Existing: Station Conditions











Value to Customers

- Provides enhanced experience for customers

Value to State

- Replaces aging assets that may require higher maintenance costs

PROJECT SHEET NORTH ELIZABETH STATION IMPROVEMENTS

ESTIMATED TOTAL PROJECT COSTS

$32M

Comfort
Station improvements and necessary repairs would enhance customer comfort

Safety
Completing necessary repairs would improve customer safety

STRATEGIC GOALS MET

Deliver a high-quality experience for all our customers, with their entire journey in mind

Ensure the reliability and continued safety of our transit system

State of Good Repair
Platform reconstruction and repairs would extend service life and reduce maintenance

Accessibility and Inclusion
Replacing the platform, rehabilitating railings, and improving lighting would improve accessibility for all customers

*Station improvements would enhance **state of good repair**, **accessibility**, **comfort**, and **safety**.*

Description

The North Brunswick Station is a proposed new station on the Northeast Corridor (NEC). The station would be part of the overall enhancement planned for the NEC that includes Delco Lead, Midline loop, and the Jersey Avenue Station replacement.

If funded, the new station would be in the proposed Main Street North Brunswick development area between the Midline Loop project and the Jersey Avenue station rehabilitation. The project would include construction of new high-level inbound side platform, a new high-level island outbound platform, elevators, a pedestrian bridge, station house, and parking. The new station would feature new accessibility features and would provide customers with a key additional point of entry into the NEC as well as more convenient access to the North Brunswick area. Collectively, the capital projects in this area would substantially improve service along the NEC, while increasing system capacity and access to keep pace with projected ridership growth.

ESTIMATED PROJECT COSTS (2020 Dollars):

$160 Million

Value to Customers

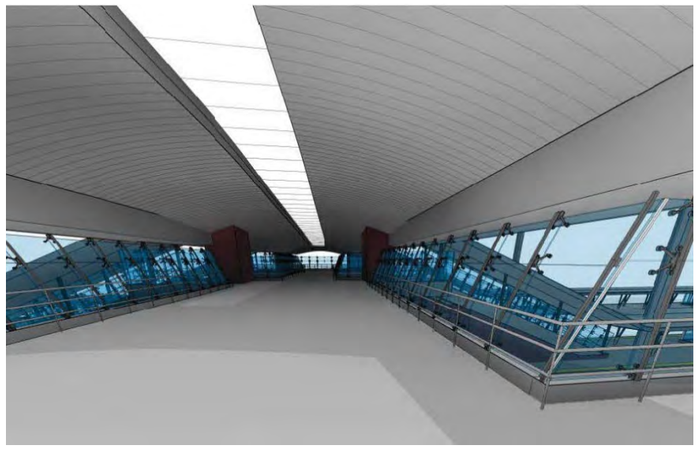
- Increases access for passengers
- Increases options for entry into NEC and access to surrounding area
- Enhances comfort for customers utilizing new, modern station

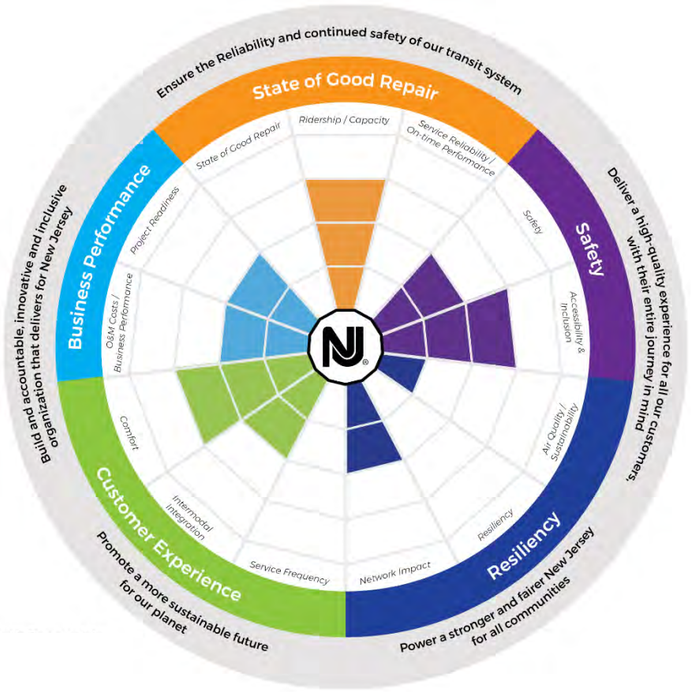
Value to State

- Creates additional point of entry for increased revenue streams and potentially reduces overcrowding at adjacent stations

Proposed: New Station







PROJECT SHEET NORTH BRUNSWICK STATION

ESTIMATED TOTAL PROJECT COSTS

$160M

Accessibility and Inclusion
The new station would be accessible for all customers

Comfort
Station amenities would enhance customer comfort and the addition of the station would decrease overcrowding at adjacent stations

Ridership/Capacity
Constructing a new station would accommodate growing ridership along the NEC and in North Brunswick

O&M Costs/Business Performance
New station would create additional point of entry to the NEC

STRATEGIC GOALS MET

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Ensure the reliability and continued safety of our transit system

The new North Brunswick Station would ***improve and expand service along the Northeast Corridor****.*

Description

The Roseville Cut is a section of track that lies below the adjacent roadways and between two retaining walls just west of the Newark Broad Street Station. These tracks service NJ TRANSIT's entire ridership west of Newark Broad Street Station. There are various issues associated with this section of track: 1) the interlockings lack adequate lighting, which require safety enhancements; 2) there is missing and/or broken safety fencing along the perimeter at the street level, which also and allows debris from the sidewalk to foul the catenary system and tracks below; 3) poor drainage and frequent flooding within the cut interferes with track signals and causes delays; 4) congested site conditions are challenging for personnel to work within and typically require premium pay to perform maintenance or emergency work; 5) undersized rail sections in this area are subject to frequent rail breakage resulting from corrosive effects of extreme weather and flooding; and 6) the wall is deteriorating and creates a safety hazard.

If funded, this project would address the noted issues with the installation of new lighting at the interlocking; replacement of existing metal fencing and installation of new non-climbable protective fencing along adjacent sidewalks; installation of an adequate drainage system; replacement of the substandard rail sections within the project limits; and repair of the existing wall. Ultimately, addressing these issues would better protect NJ TRANSIT employees and the public, and will significantly mitigate service delays and reduce overall maintenance costs.

ESTIMATED PROJECT COSTS (2020 Dollars):

$111 Million

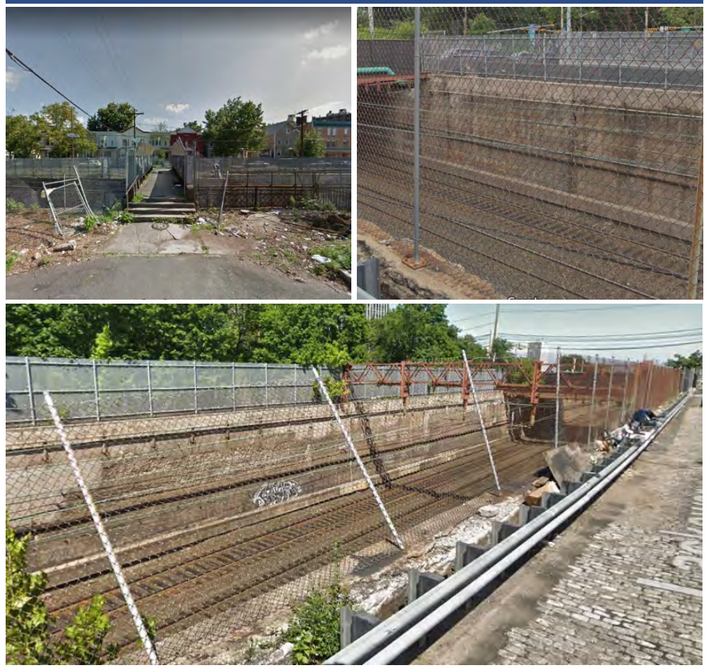
Value to Customers

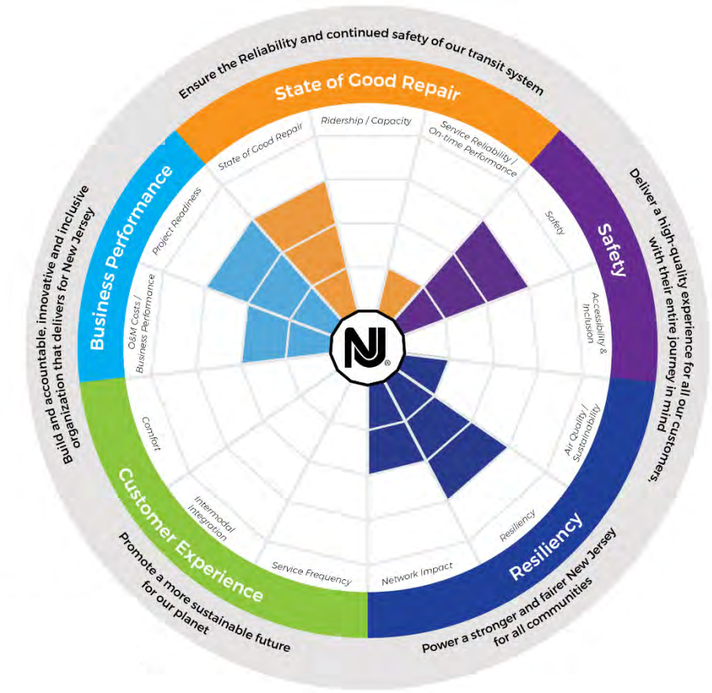
- Improves reliability by upgrading the section of rail

Value to State

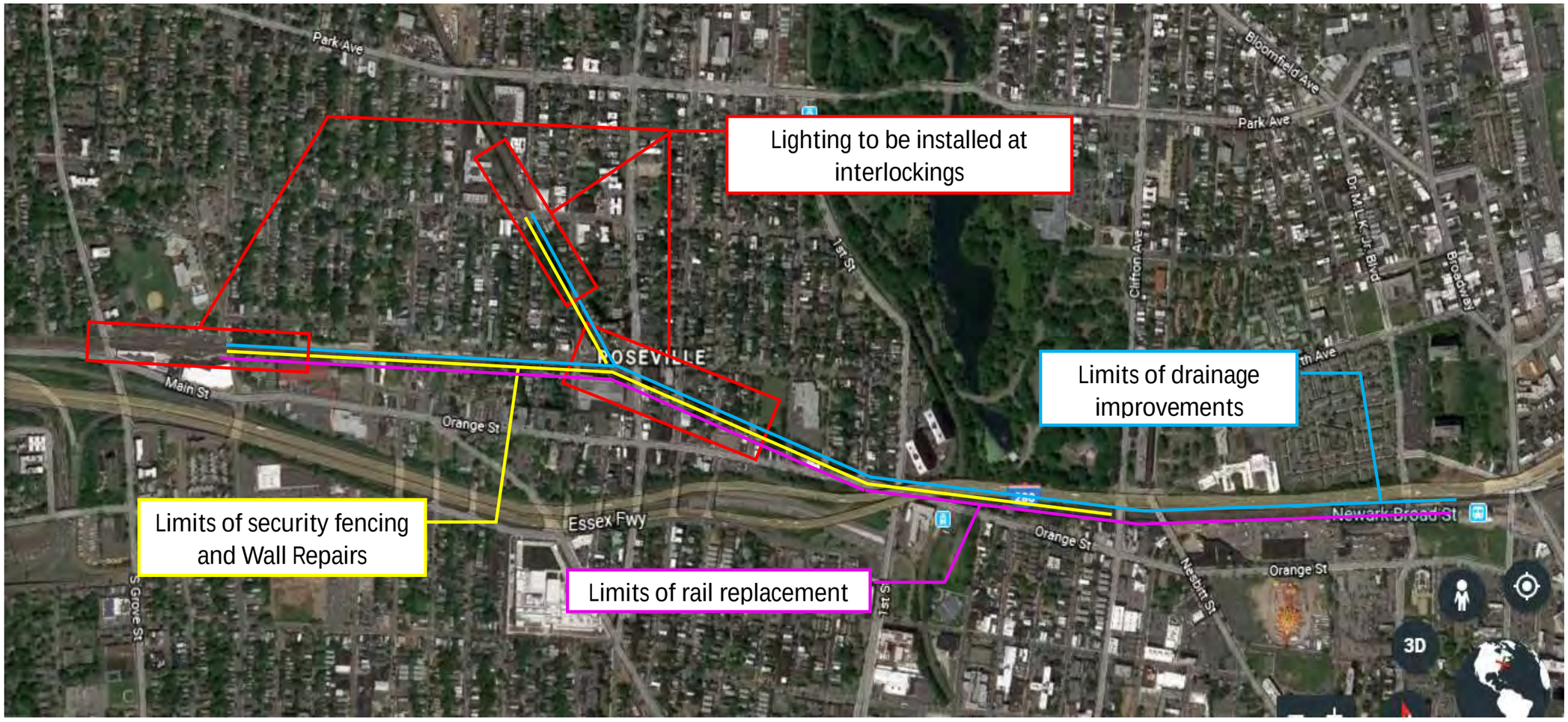
- Increases safety and service reliability
- Reduces maintenance frequency, providing more efficient use of public funds

Existing: Cut, Fencing, and Rail Conditions





Project Sheet | **Roseville Cut Improvements**



PROJECT SHEET ROSEVILLE CUT IMPROVEMENTS

ESTIMATED TOTAL PROJECT COSTS

$111M

O&M Costs/Business Performance
With reduced interlock conflicts, there would be reduced operational delays and reduced maintenance costs

Network Impact
Improvements to drainage infrastructure would reduce falsely triggered signals and the subsequent delays

Safety
Improved lighting at interlocking and protective street level fencing for pedestrians would improve safety

State of Good Repair
Drainage improvements would mitigate frequent flooding from regular rain events

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Deliver a high-quality experience for all our customers, with their entire journey in mind

Ensure the reliability and continued safety of our transit system

*The project would **better protect customers and employees,** bring the rail to a **state of good repair**, and **reduce delays and service outages**.*

Description

The Morris & Essex (M&E) Line services nearly 60,000 NJ Transit passengers a day between Hackettstown, Hoboken, and Penn Station NY. West of Morristown Station on the M&E Line is an existing unused rail yard, formally referred to as the Morristown Yard. This yard is located below the main tracks and is accessed by a 3,000-foot yard lead track that diverts trains from the main eastbound track just west of the station. However, it can only be accessed by trains traveling westbound and there is currently no interlocking to allow westbound trains to switch onto the eastbound track without significantly impacting railroad traffic. Furthermore, the yard and part of the lead track are in a floodplain, making them a poor option for long term train storage.

If funded, this project would install an interlocking east of Morristown Station to allow westbound trains to more effectively access the yard lead and enter Morristown Yard. This would also eliminate the need for trains terminating at Morristown Station to travel an additional 8 miles west to Dover Yard in order to turn back east. Additionally, the existing yard tracks and yard lead would be raised above the flood plain to allow for resilient short term and long-term train storage. Providing storage and turning capabilities at Morristown Yard would allow increase train frequency and capacity on the M&E Line while also providing additional storing options for NJ TRANSIT trains.

***ESTIMATED PROJECT COSTS (2020 Dollars):**

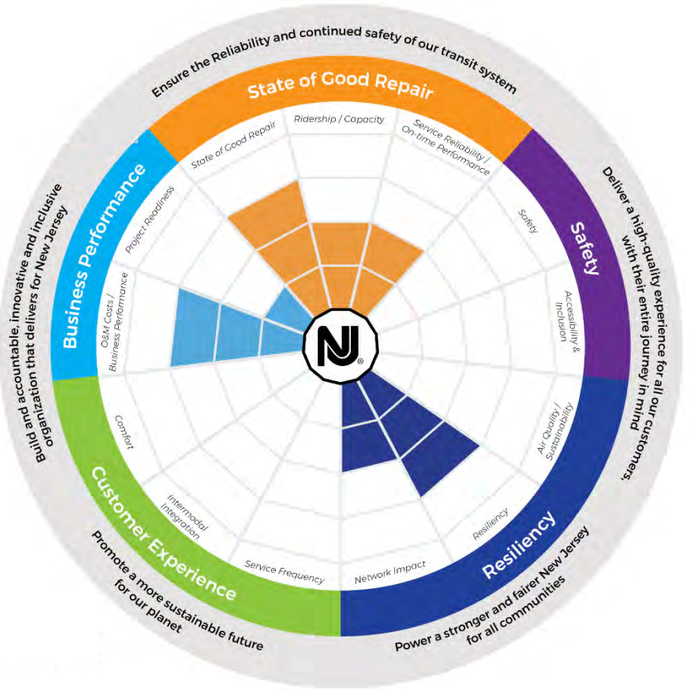
$148 Million

**Estimates are based upon concept for design*

Existing: Morristown Yard







Value to Customers

- Increases number of train time slots
- Provides more reliable service
- Increases OTP

Value to State

- Lowers operating costs, which allows for more efficient use of public funds
- Provides resilient infrastructure to prevent damage to existing revenue fleet during extreme events

PROJECT SHEET MORRISTOWN YARD AND POCKET TRACK

ESTIMATED TOTAL PROJECT COSTS

$148M

O&M Costs/Business Performance
Increasing capacity on the Morris & Essex line, while minimizing unnecessary travel time for trains going out of service, would improve business performance

Service Reliability/On-Time Performance
Additional storage and turning capabilities at the yard would increase train frequency and on-time performance of trains on the Morris & Essex line

Resiliency
Raising the yard lead, tracks, and storage above the flood plain would reduce flooding risk

State of Good Repair
Replacing the obsolete yard lead track and upgrading the rail yard would improve state of good repair

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Ensure the reliability and continued safety of our transit system

*The project would provide **better yard access** resulting in **increased capacity and frequency** and **improved on-time performance along the Morris & Essex line**.*

Description

County Yard and Delco Lead located in New Brunswick, is an obsolete and undersized rail yard facility used to store trains along the Northeast Corridor (NEC). The existing yard consists of three electrified tracks with storage capacity for 40 rail cars (four 10-car trainsets) and an undersized Service and Inspection (S&I) facility. Overflow NEC trains are currently stored at either the Morrisville Yard or the Meadowlands Maintenance Complex (MMC). However, storing trains at either alternative facility is impractical because the MMC floods frequently, and Morrisville logistics make it costly and inefficient requiring trains to travel to the western end of the NEC for storage. Additionally, severe flooding can cut off access between Morrisville Yard and Trenton.

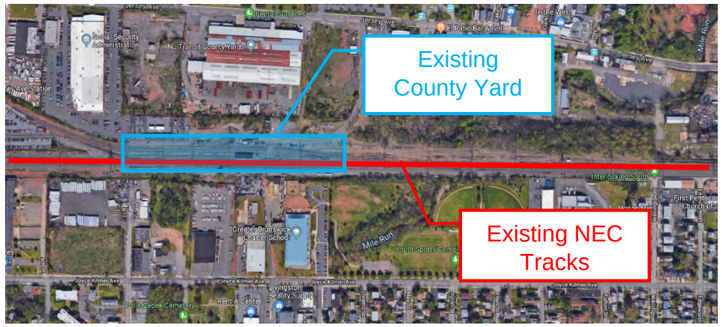
The Delco Lead and County Yard Expansion is a multifaceted project that would address the operations, storage, and resiliency needs along the NEC. The first two phases would include the construction of a new S&I facility, which would contain crew quarters and equipment storage space; and the expansion of County Yard, which would contain five tracks with the capacity to store 120 rail cars in an area resilient against flooding. The final phase is the construction of a new Delco Lead track that would extend 3.5 miles south and have the capacity to store an additional 288 rail cars. This new track would meet up with the proposed Midline Loop Project in North Brunswick. Ultimately, the creation of a robust, more centrally located storage and inspection facility as part of the Delco Lead and County Yard Expansion would significantly improve NJ TRANSIT's operational efficiency while reducing costs. It would also substantially enhance the agency's ability to provide timely and reliable service to its customers, especially following extreme weather events.

***ESTIMATED PROJECT COSTS (2020 Dollars):**

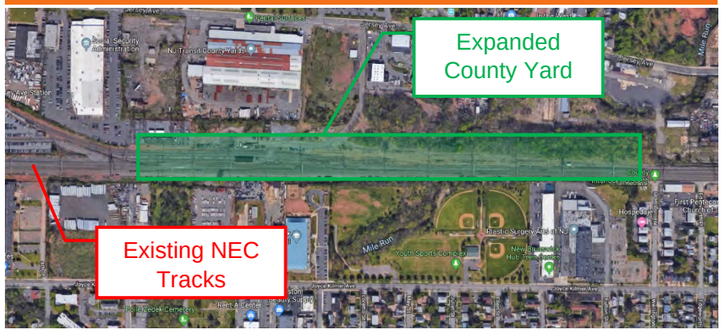
$381 Million

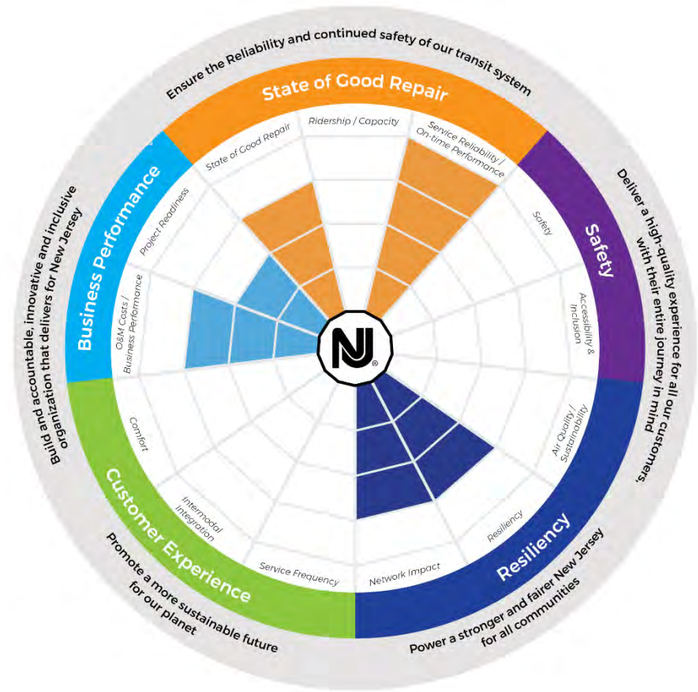
** Total estimated 2020 project cost indicates total cost over span of the project and includes funds already spent.*

Existing: County Yard



Proposed: Expanded County Yard





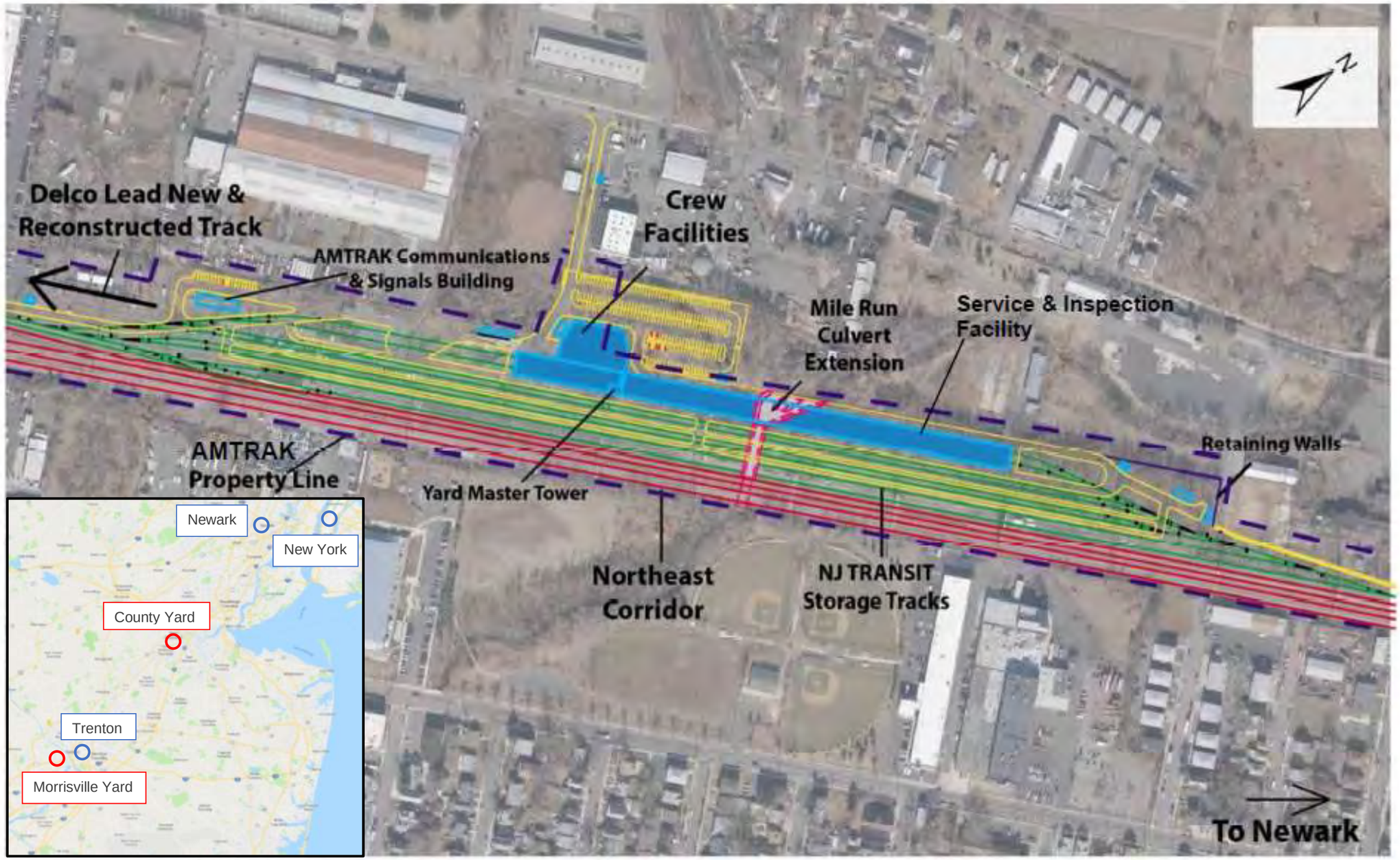
Value to Customers

- Reduces train delays following extreme weather events

Value to State

- Lowers operating cost, which allows for more efficient use of public funds
- Provides resilient infrastructure to prevent damage to existing revenue fleet during extreme events

Project Sheet | **Delco Lead and County Yard Expansion**



PROJECT SHEET DELCO LEAD AND COUNTY YARD EXPANSION

ESTIMATED TOTAL PROJECT COSTS

***$381M**

**TOTAL ESTIMATED 2020 PROJECT COST INDICATES TOTAL COST OVER SPAN OF THE PROJECT AND INCLUDES FUNDS ALREADY SPENT*

O&M Costs/Business Performance
The project would reduce train down-time and ensure NJ TRANSIT can respond quickly to unforeseen challenges

Service Reliability/On-Time Performance
The new track would significantly enhance the reliability and service delivery of the NJ TRANSIT rail network while providing additional storage in an area not prone to flooding

Network Impact
Congestion would decrease by reducing movements of trains stored at remote locations

State of Good Repair
Replacing the obsolete Delco Lead track and building a new Service & Inspection Facility would improve state of good repair

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Ensure the reliability and continued safety of our transit system

*A new Delco Lead would extend 3.5 miles south, **store 288 additional cars**, and **include a new Service & Inspection Facility**.*

Description

NJ TRANSIT operates 15 rail yards throughout the state and along various lines. These yards play a vital role in NJ TRANSIT's ability to provide safe, efficient, and reliable service to its customers. At the same time, these facilities are essential in the Agency's compliance with federal regulations. Each facility is used daily to store, inspect, and maintain the agency's rail fleet. These yards also play a key role as turning tracks to allow trains to change direction on a rail line, which is essential to facilitate efficient rail operations. Much of the existing infrastructure at the yards, including inspection pits, fuel facilities, lighting, and personnel facilities, has exceeded its recommended service life and need to be rehabilitated or completely replaced. Furthermore, many of these yards are to too small to handle the service and inspection needs of the expanding fleet, resulting in decreased efficiency and higher operational costs.

If funded, the Small Yards Rehabilitation Program would prioritize equipment replacement and facility rehabilitation at 11 of the 15 yards, which are considered NJ TRANSIT's "small" yards. These upgrades would restore the maintenance facilities to a state of good repair while providing both expanded capacity and capability for servicing the growing NJ TRANSIT rail fleet. It is also vital that the infrastructure issues at the yards are addressed, as rail maintenance functions are mandated by the FRA, and efficient routine preventative maintenance is essential to reducing delays due to equipment problems. Furthermore, logistical improvements would be implemented at each location to streamline the movement of trains within the yards, which will ultimately increase overall efficiency and mitigate potential delays.

***ESTIMATED PROJECT COSTS (2020 Dollars):**

$449 Million

**Estimates are based upon concept for design*

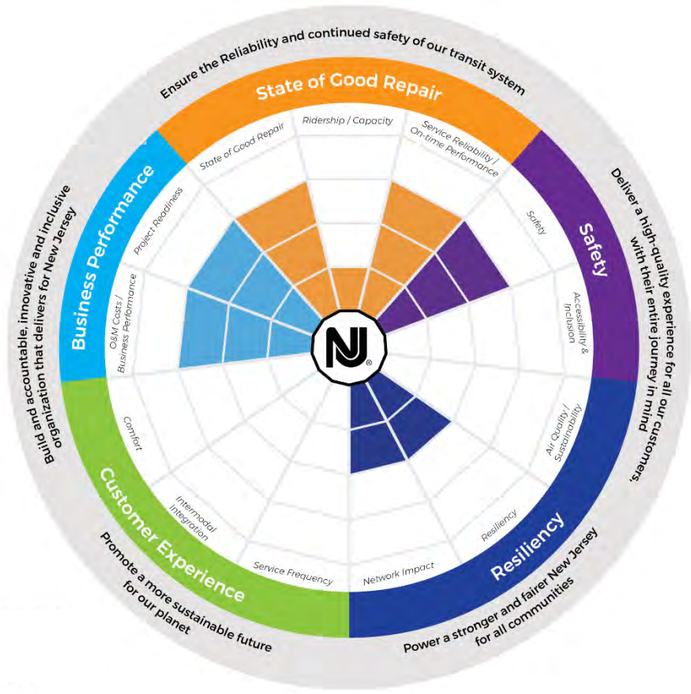
Existing: Bay Head and Port Morris Rail Yards



Bay Head Rail Yard



Port Morris Rail Yard



Value to Customers

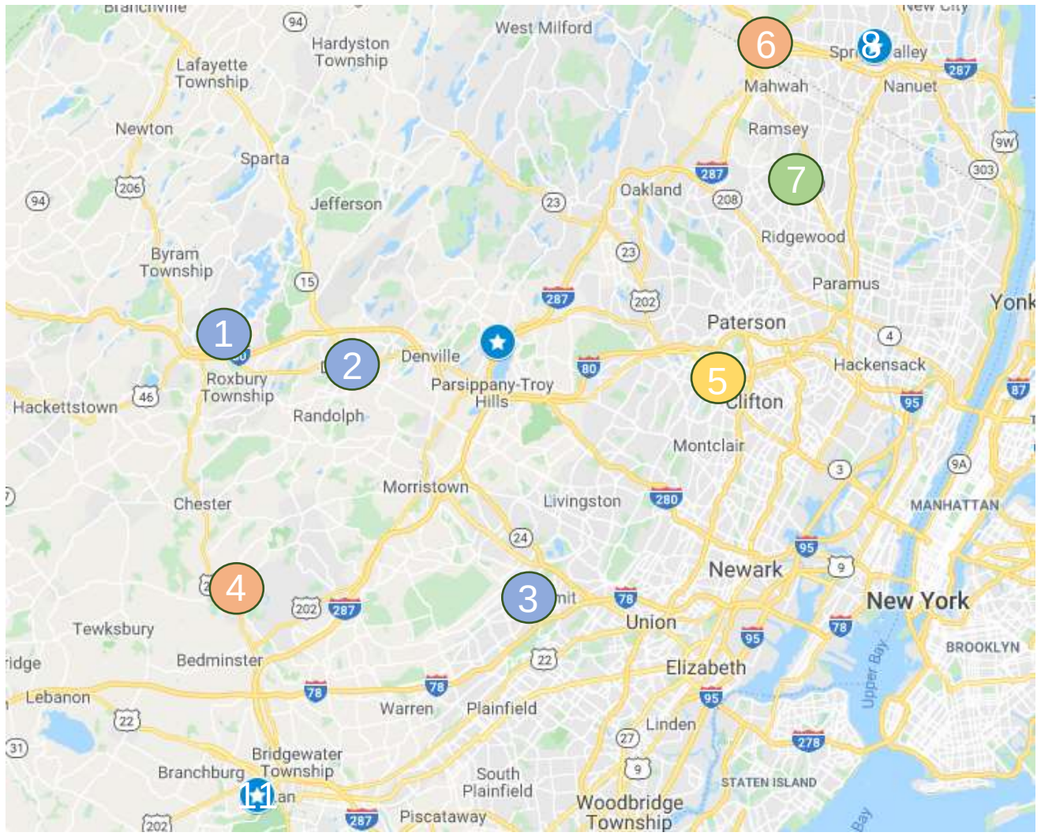
- Increases equipment reliability
- Reduces delays associated with equipment failures

Value to State

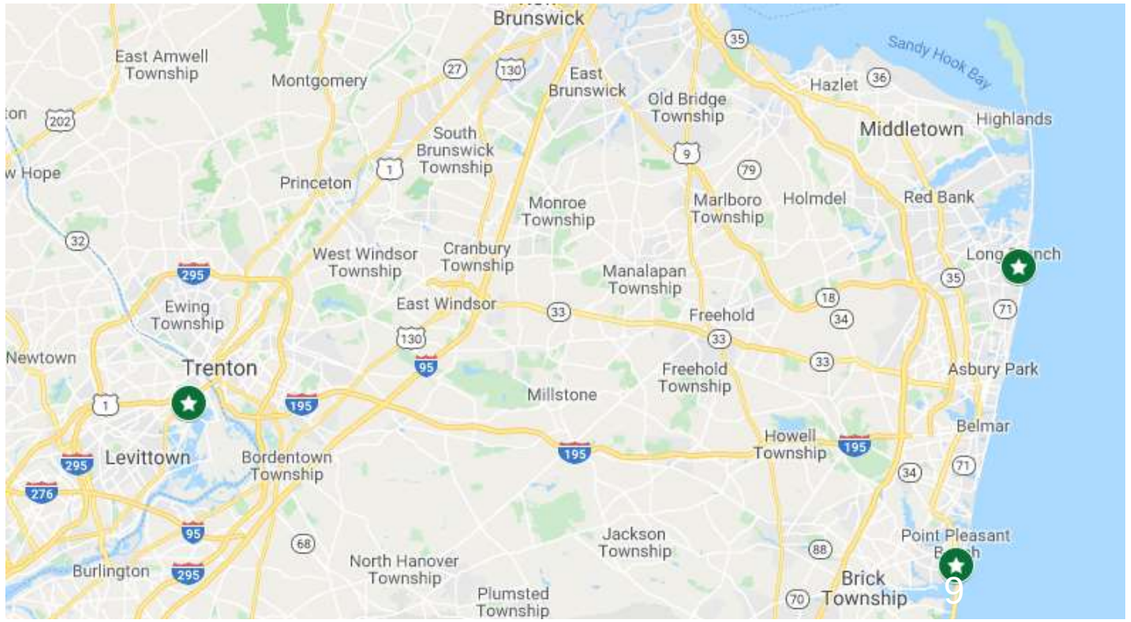
- Lowers operating costs hence more efficient use of public funds
- Reduces in potential injuries associated with increase on-site maintenance work
- Increases equipment maintenance resulting in reduced life cycle costs and recovery costs from equipment breakdown
- Facilitates compliance with FRA regulations

Project Sheet | **Small Yards Rehabilitation Program**

Northern Yards



Southern Yards



LEGEND

Phase	Start Year	Yards
1	2021	Waldwick
2	2024	Suffern; Gladstone
3	2027	Long Branch; Great Notch
4**	TBD	Port Morris; Dover; Summit; Woodbine; Bayhead; Raritan

*** Work for remaining yards to be completed in subsequent phases and years that are still to be determined (TBD)*

	Yard	Durations (yrs)		Major Scope Items(1))		
		Design	Constr.	Pedestal Pit	S&I /Mech. Facility	Personnel Facility
1	Port Morris	2	3		✓	
2	Dover	2	3		✓	
3	Summit(1)	1	1			
4	Gladstone	1	1			✓
5	Great Notch	1	2	✓		
6	Suffern	1	2	✓		✓
7	Waldwick	1	2	✓		
8	Woodbine	1	1			✓
9	Bayhead	1	2		✓	
10	Long Branch	1	2	✓		
11	Raritan	1	1			✓

(1) Only major scope items are tabulated. Minor scope items include but are not limited to: new fuel pads; improved lighting; new equipment; new nice vision cameras; wayside power upgrades; MEP upgrades; new sand towers

PROJECT SHEET SMALL YARDS REHABILITATION PROGRAM

ESTIMATED TOTAL PROJECT COSTS

$449M

O&M Costs/Business Performance
Upgrades would reduce maintenance costs and increase operational capacity and efficiency

Service Reliability/On-Time Performance
Better serviced trains would result in better on-time performance and more reliable operations

Network Impact
Upgrades to maintenance equipment would ensure smoother rail operations with fewer equipment failures

State of Good Repair
Upgrading and replacing maintenance equipment would improve state of good repair for both the yards and train coaches

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Deliver a high-quality experience for all our customers, with their entire journey in mind

Ensure the reliability and continued safety of our transit system

*Restore maintenance facilities to a state of good repair and **expand capacity and capabilities for a growing rail fleet**.*

Description

The Gladstone line services NJ TRANSIT passengers between Gladstone and Summit, where it then merges into the Morristown Line and continues east towards Hoboken and New York Penn Station. The Gladstone line only operates with a single track, which requires inbound and outbound trains to coordinate their operations. These operations rely heavily on the use of siding track to allow the opposing train to pass. Bernardsville Station and Stirling Station are approximately six miles apart with the only two siding tracks between them located at the stations. This is a significant distance to travel between siding tracks, which greatly reduces the number of trains that can run along the line.

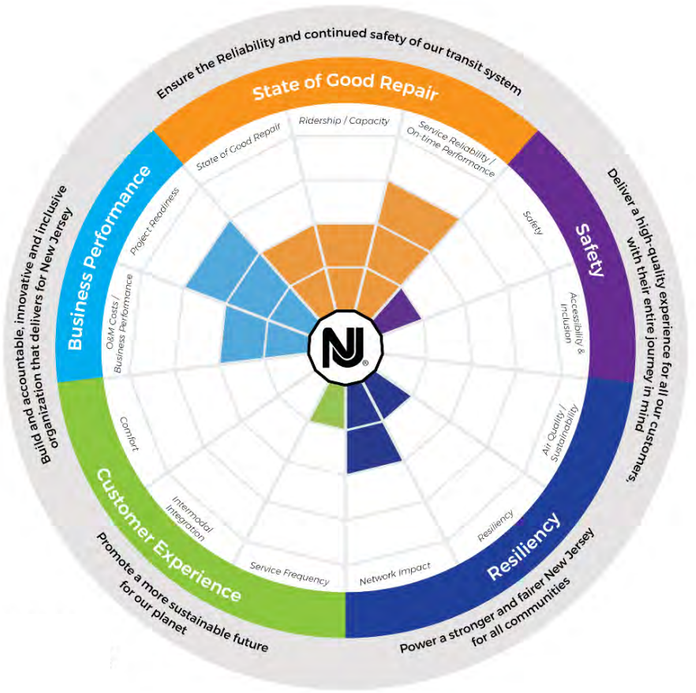
If funded, this project would modify the existing Lyons siding located east of Lyons Station so that it can be used by passenger rail. The existing Lyons siding can only be used by maintenance equipment because it is not controlled, meaning it has no signals and the switch to get into the siding is manually controlled. Converting this to a controlled siding would allow more inbound and outbound trains on the Gladstone Line and would provide greater flexibility of operation on the single track, which would ultimately mitigate train delays and provide a more reliable commute for NJ TRANSIT customers.

ESTIMATED PROJECT COSTS (2020 Dollars):

$11 Million

Existing: Lyons Siding





Value to Customers

- Reduces train delays from bi-directional travel on a single track, and reduces headways

Value to State

- Increases On-Time-Performance (OTP), safety, and service reliability, which will bolster public perception of the Authority

PROJECT SHEET MODIFY LYONS SIDING ON GLADSTONE LINE

ESTIMATED TOTAL PROJECT COSTS

$11M

O&M Costs/Business Performance
Converted siding would increase the capacity of the line and passenger revenue, while decreasing delays

Service Reliability/On-Time Performance
Conversion to a controlled siding would provide a more reliable commute for customers

Network Impact
Converted siding would allow more inbound and outbound trains with enhanced operational flexibility

State of Good Repair
Modernized equipment and track siding would lower overall age of assets and optimize operations

STRATEGIC GOALS MET

Deliver a high-quality experience for all our customers, with their entire journey in mind

Ensure the reliability and continued safety of our transit system

*Converting to a controlled siding would **allow for more trains on the line**, **greater flexibility**, and **mitigate delays**.*

Description

The Montclair-Boonton line services an average of 18,800 passengers per weekday between New York Penn Station and Mount Olive. Most of the line operates with two tracks to allow inbound trains and outbound trains to operate on separate tracks. Just east of Montclair State University Station, however, the two tracks merge into a single track which continues west to Denville Station. This requires inbound and outbound trains to coordinate their operations; these trains rely heavily on the use of siding track to allow the opposing train to pass. They also rely on rail yards for anticipated layovers in addition to providing storage. The existing siding track and rail yard west of Boonton Station is obsolete and in need of replacement.

If funded, this project would replace the existing Boonton rail yard and siding track with new and additional track, interlockings, and signals just west of Boonton Station. This would allow more inbound and outbound trains on the Montclair-Boonton Line and will provide greater operational flexibility on the single track, which would ultimately mitigate train delays and provide a more reliable commute for NJ TRANSIT customers.

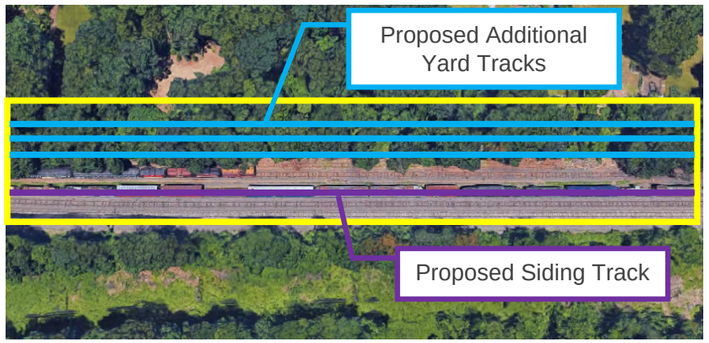
ESTIMATED PROJECT COSTS (2020 Dollars):

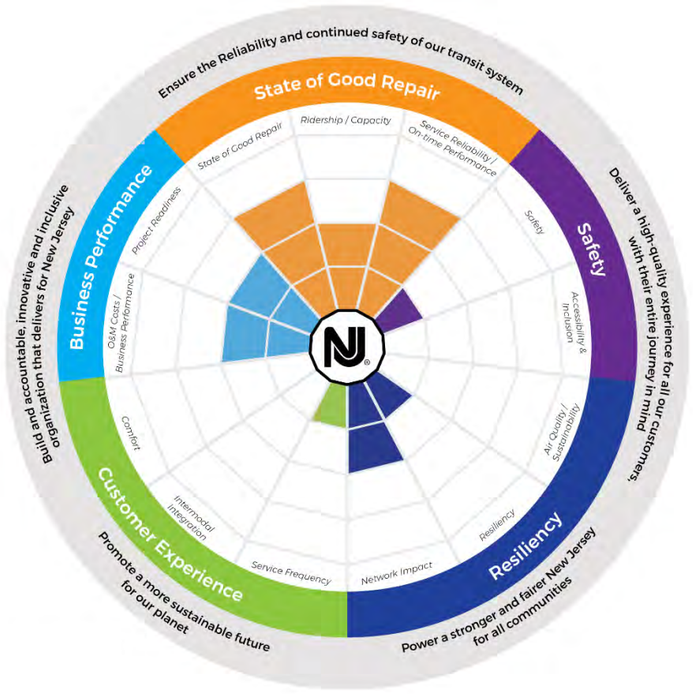
$40 Million

Existing: Boonton Yard



Proposed: New Boonton Yard





Value to Customers

- Reduce train delays from bi-directional travel on a single track, and reduces headways

Value to State

- Increases On-Time-Performance (OTP), safety, and service reliability, which will bolster public perception of the Authority

PROJECT SHEET NEW BOONTON YARD

ESTIMATED TOTAL PROJECT COSTS

$40M

Ridership/Capacity
Adding additional track, interlockings, and signals would increase capacity on Montclair-Boonton Line

O&M Costs/Business Performance
Line capacity increases and reduced operational delays would improve business performance

State of Good Repair
Replacing yard, siding track, interlocking, and signals would extend service life

Service Reliability/On-Time Performance
Improvements would reduce delays and improve operational flexibility to respond to service disruptions

STRATEGIC GOALS MET

Deliver a high-quality experience for all our customers, with their entire journey in mind

Ensure the reliability and continued safety of our transit system

Replacing the yard would ***enhance state of good repair***, ***reliability***, ***capacity***, *and* ***business performance***.

Description

The Northeast Corridor (NEC) is NJ TRANSIT's most heavily used rail line and serves over 122,000 passengers on an average weekday, which makes up nearly 39% of total ridership. There currently is a major operational challenge on the corridor in New Brunswick at the existing Jersey Avenue Station. Eastbound trains originating at the station must move from the outbound Track 4 across all the NEC tracks to the inbound Track 1. This move requires use of the County Yard Interlocking just east of the station. Given the amount of NJ TRANSIT and Amtrak trains on the NEC, there are limited schedule windows to permit these train movements. Thus, delays with Jersey Avenue departures results in stack-up delays along the entire NEC as well along the North Jersey Coast Line (NJCL) which enters NEC territory near Rahway.

If funded, this project would include installing a fifth track (Track 5) along the NEC in North Brunswick, which would be an extension of the proposed Delco Lead track. The proposed Delco Lead track must be installed before the Midline Loop can become operational. The new Track 5 would continue onto a new viaduct structure that loops over the NEC right-of-way and enters back onto inbound Track 1. This track and flyover would eliminate the need for eastbound trains from Jersey Avenue Station to occupy the interlocking while moving across the NEC from Track 4 to Track 1. The Midline Loop project would have substantial operational benefits for both NJ TRANSIT and Amtrak, as it would mitigate operational delays for both agencies, improve on-time performances, reduce congestion, and provide much-needed capacity augmentation. Its operational benefits would also be magnified by the proposed North Brunswick Station and new Jersey Avenue Station projects.

***ESTIMATED PROJECT COSTS (2020 Dollars):**

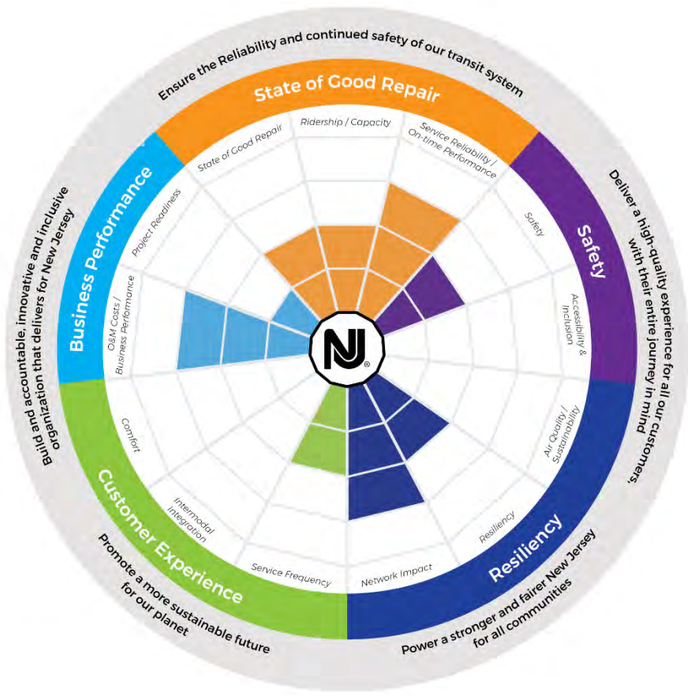
$306 Million

**Estimates are based upon concept for design*

Existing: Northeast Corridor



Proposed: Midline Loop Viaduct



Value to Customers

- Increases on-time-performance (OTP)
- Creates more train time slot openings
- Decreases delays caused by conflicts at the interlocking

Value to State

- Increases OTP and service reliability
- Lowers operating cost, which allows for more efficient use of public funds

PROJECT SHEET MIDLINE LOOP

ESTIMATED TOTAL PROJECT COSTS

$306M

Service Reliability/On-time Performance
Delays and congestion along NEC would be significantly reduced as train movements on the interlocking would bypass Tracks 1-4

O&M Costs/Business Performance
Operational conflicts with Amtrak and NJ TRANSIT would be eliminated, allowing for more regular and reliable service along NEC

Network Impact
An additional fifth track would eliminate conflicts with the interlocking for NJ TRANSIT and Amtrak

Ridership/Capacity
The project would create more capacity due to an increased number of time slots for trains

STRATEGIC GOALS MET

Deliver a high-quality experience for all our customers, with their entire journey in mind

Ensure the reliability and continued safety of our transit system

*Midline Loop would **mitigate operational delays**, **reduce congestion**, and **improve on-time performance** on NEC.*

Description

The Raritan Valley Line (RVL) extends from its western terminus in High Bridge eastward, and joins the Conrail-owned Lehigh Line at Aldene, NJ (near Cranford). Then continues on Conrail's Lehigh Line into Newark, where it enters the Amtrak-owned Northeast Corridor (NEC) approximately two miles west of Newark Penn Station. At a location known as Hunter Interlocking, eastbound trains on the RVL connect to the NEC on Track 4 (outbound) and must either cross over all of the existing NEC tracks at grade to reach inbound Track 1, or travel against the normal flow of rail traffic along Track 4 to reach Newark Penn Station. These complex movements create conflicts along the main stretch of the NEC between Newark Penn Station and Newark Airport Station, typically resulting in delays for the RVL trains as they wait for an open slot to enter the corridor.

If funded, the proposed Hunter Flyover project would mitigate these issues by constructing a structure over the NEC that will carry the RVL eastbound trains onto inbound Track 1, thereby eliminating the necessity to cross the NEC main tracks at grade. Elimination of crossover movements would substantially mitigate delays on both the RVL and NEC and increase train on-time performance (OTP). In addition, this operational improvement would support future growth of RVL service.

***ESTIMATED PROJECT COSTS (2020 Dollars):**

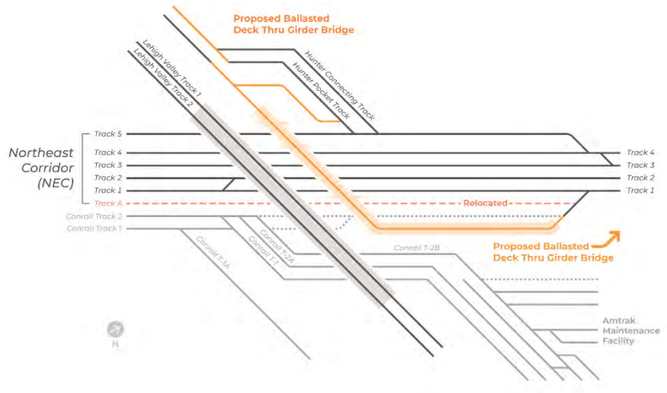
$300 Million

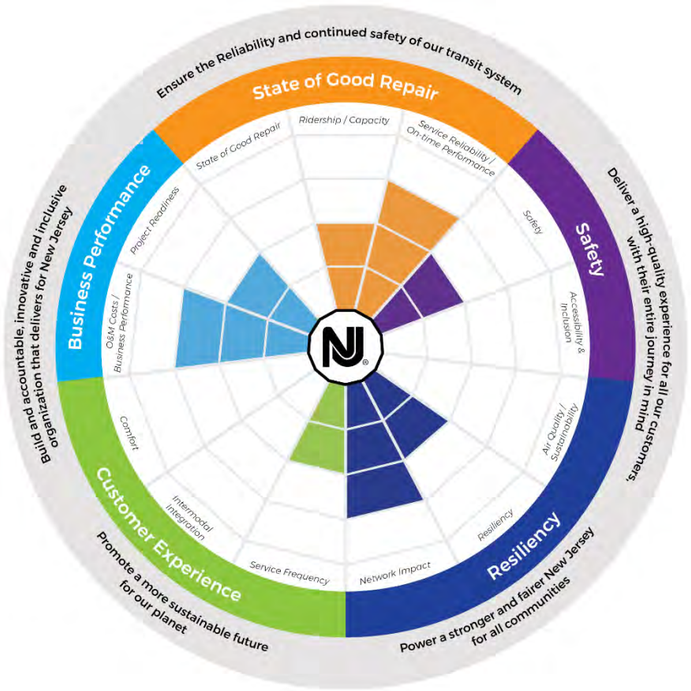
**Cost includes Track A work*

Existing: RVL Merge with NEC



Proposed:





Value to Customers

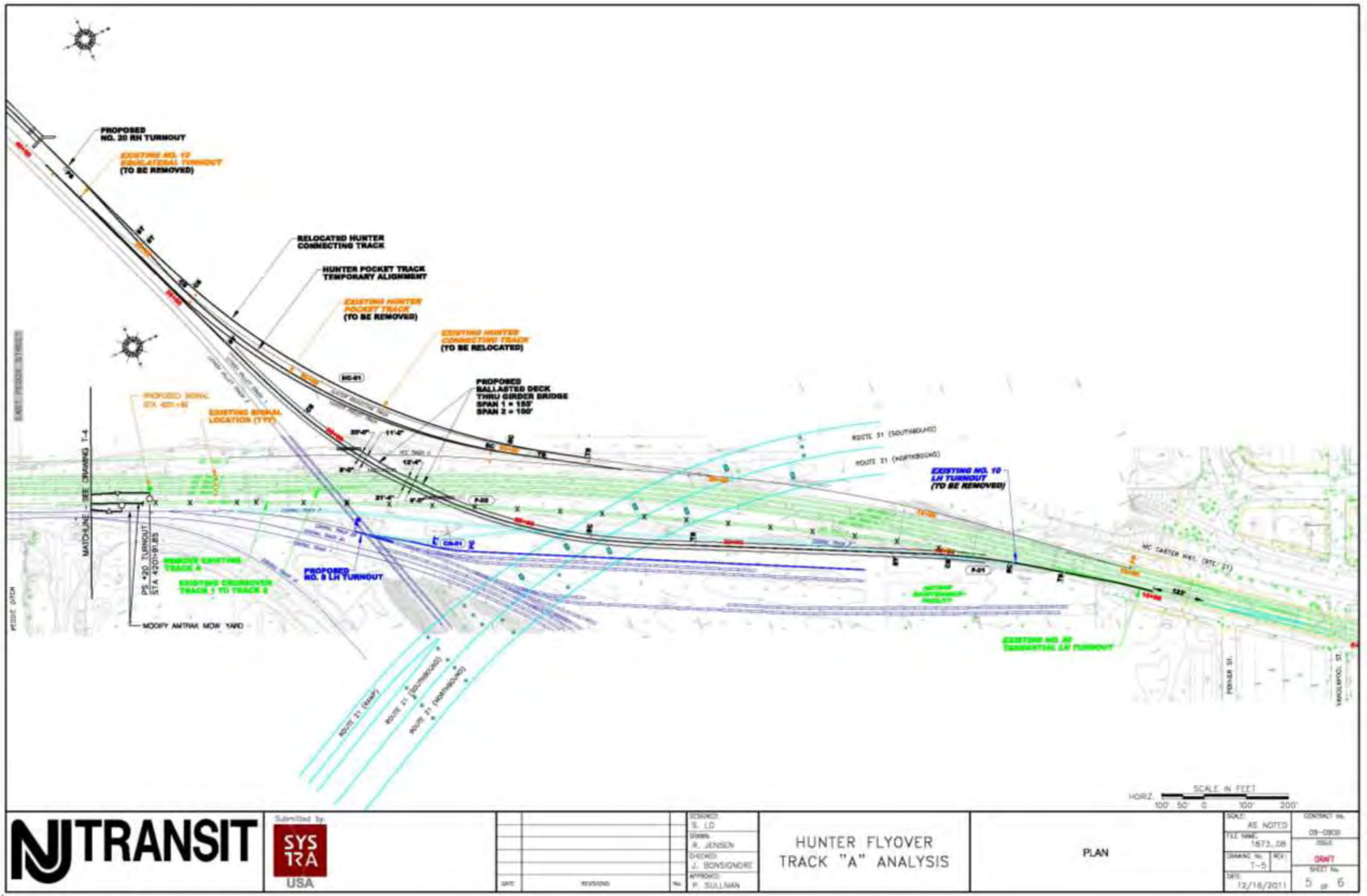
- Reduces train delays
- Enables more reliable service and increased on-time performance

Value to State

- Minimizes revenue loss from service disruptions
- Provides for future revenue growth by supporting future growth of RVL

NJTRANSIT The Way To Go.

Project Sheet | **Hunter Flyover**



PROJECT SHEET HUNTER FLYOVER

ESTIMATED TOTAL PROJECT COSTS

$300M

Network Impact
The new flyover would mitigate delays on the Raritan Valley Line and NEC and is a vital link in restoring direct NYC service from the Raritan Valley Line

Safety
The new flyover would eliminate movements across the NEC tracks to improve worker safety

Service Reliability/On-Time Performance
The new flyover would mitigate delays

O&M Costs/Business Performance
More efficient train movements would increase capacity and revenue potential

STRATEGIC GOALS MET

Deliver a high-quality experience for all our customers, with their entire journey in mind

Ensure the reliability and continued safety of our transit system

*Elimination of these movements would **substantially mitigate delays** and **increase train on-time performance**.*

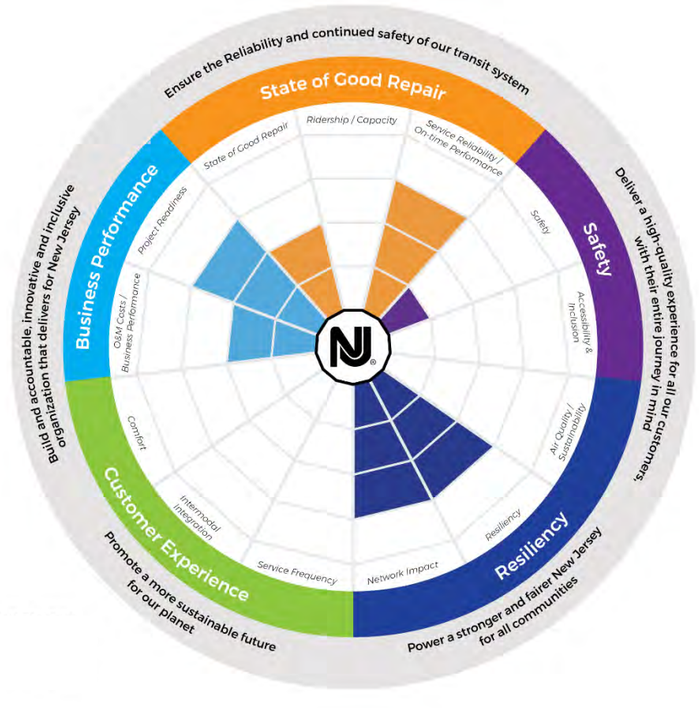
Description

NJ TRANSIT operates on seven rail lines, three of which use overhead catenary systems to power their locomotives: Morris & Essex, Montclair-Boonton, and the North Jersey Coast Line. The electric traction (ET) substations located in various sections along each electrified line are responsible for providing power to the catenary systems. The substations convert electric power supplied by power utility companies into a form that is usable by the catenary system. NJ TRANSIT is responsible for maintaining these substations and ensuring they remain in a state of good repair so that they can continue to provide reliable train service to their customers. A malfunctioning substation can result in loss of train power and massive delays.

In this project, NJ TRANSIT would seek to enter into an agreement with the Public Service Electric & Gas Company (PSE&G) to inspect and assess 16 of NJ TRANSIT's substations. The plan includes first having PSE&G inspect a single substation in order to develop an effective strategy for inspecting the remaining 15 substations. This would allow PSE&G to more efficiently and effectively assess each substation and provide NJ TRANSIT with the data to properly maintain its infrastructure. This project would ultimately improve rail reliability by ensuring its infrastructure remains in a consistent state of good repair.

Existing: Mason Substation





ESTIMATED PROJECT COSTS (2020 Dollars):

$9 Million

Value to Customers

- Reduces train delays from power disruptions associated with substation malfunctions

Value to State

- Increases service reliability and on-time performance
- Lowers operating cost, including unscheduled maintenance and overtime, which allows for more efficient use of public funds

PROJECT SHEET RAIL ELECTRIC TRACTION SUBSTATION ASSESSMENT

ESTIMATED TOTAL PROJECT COSTS

$9M

Service Reliability
More reliable substation performance would enable trains to run on a more consistent schedule

State of Good Repair
This program would ensure that rail substations are maintained well and serviced regularly

Resiliency
Regular monitoring and servicing of substations would ensure that trains are able to run reliably during all types of weather events

Network Impact
Rail lines across the system would benefit from this program

STRATEGIC GOALS MET

Deliver a high-quality experience for all our customers, with their entire journey in mind

Ensure the reliability and continued safety of our transit system

*This project would more **effectively and efficiently assess each substation** and provide NJ TRANSIT with the data to **properly maintain the infrastructure**.*

Description

The North Jersey Coast Line (NJCL) services approximately 22,800 NJ TRANSIT customers daily between Bay Head and New York Penn Station. The Aberdeen Substation, located just east of the Aberdeen-Matawan Station, is responsible for providing power to the track signal system between Aberdeen and Graw, which is the location where the NJCL enters the Northeast Corridor (NEC). A malfunction at the substation and/or with the signal system can result in an out-of-service condition for this corresponding stretch of track which spans approximately 14 miles. Given the lack of system redundancy at this location, there are increased susceptibility of service disruptions along this stretch of track.

If funded, this project would construct a new signal substation at the Graw Interlocking where the NJCL enters the NEC. The proposed substation would provide signal power west towards Aberdeen to add redundancy and limit the stretch of track that relies on a single substation for signal power. This much needed redundancy to the signal system between Aberdeen and Graw would mitigate the risk of loss of track operations due to signal system or substation malfunction. Ultimately, this project would decrease operational delays and improve reliability along the NJCL.

ESTIMATED PROJECT COSTS (2020 Dollars):

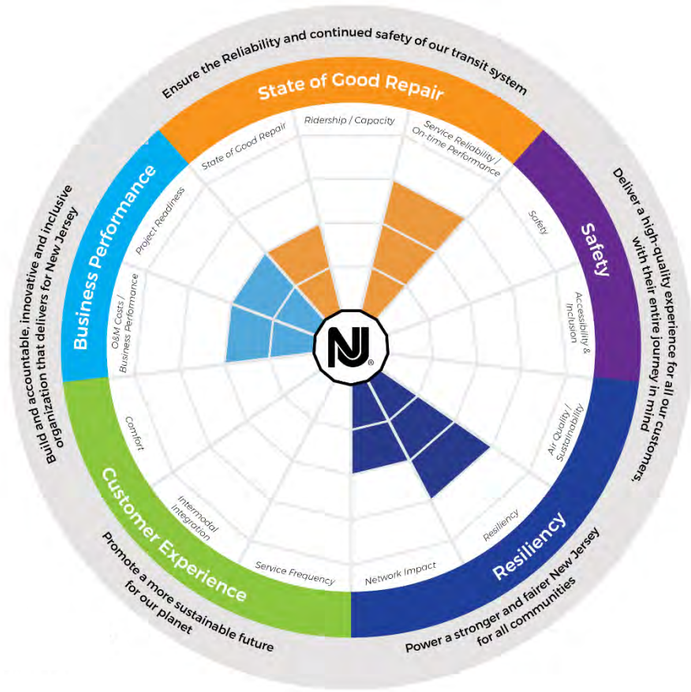
$20 Million

Existing: NJCL Entering NEC at Graw



Proposed: Signal Substation





Value to Customers

- Provides more reliable service

Value to State

- Lowers costs associated with recurring service outages, which allows for more efficient use of public funds

PROJECT SHEET NEW GRAW SIGNAL SUBSTATION

ESTIMATED TOTAL PROJECT COSTS

$20M

O&M Costs/Business Performance
Added redundancy to the signal system would reduce pressure and maintenance costs on the stretch of track that relies on a single substation

Service Reliability
Reduced risk of a track operations failure would increase service reliability

State of Good Repair
Limit the stretch of track that relies on a single substation for signal power

Resiliency
Add redundancy to the signal system to mitigate the risk of track operations failure due to a signal system or substation malfunction

STRATEGIC GOALS MET

Deliver a high-quality experience for all our customers, with their entire journey in mind

Ensure the reliability and continued safety of our transit system

*The substation would **provide signal power** west towards Aberdeen to **add redundancy** and limit the track that relies on a single substation for signal power.*

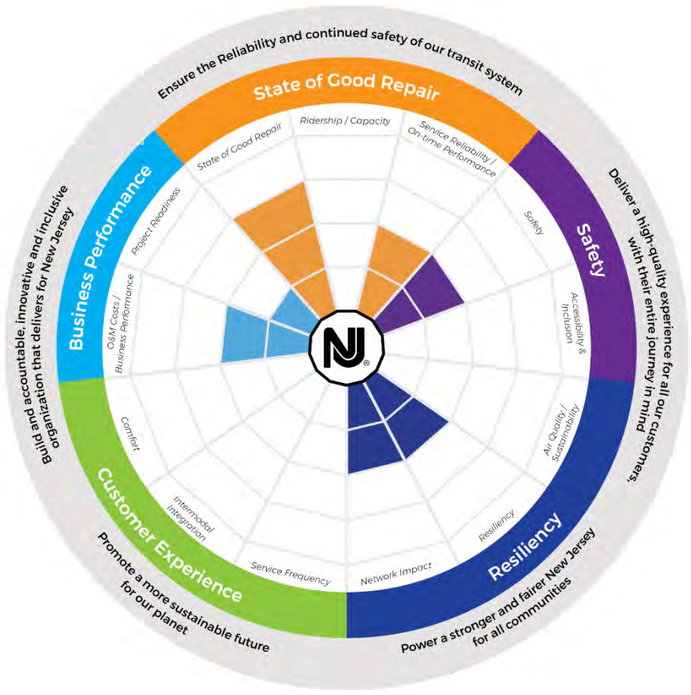
Description

The Main-Bergen County Line services approximately 31,450 NJ Transit passengers a day between Suffern, NY and Hoboken, NJ. Just north of Suffern Station is the Suffern Substation, which is located underneath the access ramp for Interstate 87 and is part of Suffern Yard. This substation is responsible for providing power to trains parked in the yard, track switch heaters, brake air compressors and heaters, property lights, and the crew quarters. However, the existing substation has sustained considerable damage from ice and snow containing road salt being dropped on the switch gear. This condition is compromising the reliability of the equipment and the safety of NJ TRANSIT employees. In addition to switch gear damage, the current substation location is between a steep cliff and support pillars for the highway ramp, making it impossible to bring in any equipment to service the substation.

If funded, this project would replace the existing substation and move it north towards the existing Suffern Yard. This would put it in an area free of overheard roadways and support structures, which would prevent deterioration from snow, ice, and debris falling on the substation. This relocation would also improve access to the substation for maintenance crews and equipment. Additionally, the substation building would also function as a crew quarters for relevant NJ TRANSIT maintenance personnel. Ultimately, replacement and relocation of the Suffern Substation would mitigate substation maintenance concerns, improve worker safety, and increase service reliability.

Proposed: New Substation





ESTIMATED PROJECT COSTS (2020 Dollars):

$21 Million

Value to Customers

- Provides more reliable service
- Increases equipment reliability

Value to State

- Lowers maintenance costs, which allows for more efficient use of public funds
  Reduces in potential injuries associated maintenance work under overhead roadway

PROJECT SHEET SUFFERN SUBSTATION AND CREW QUARTERS

ESTIMATED TOTAL PROJECT COSTS

$21M

O&M Costs/Business Performance
Placing the new substation in a safer location would decrease maintenance and operations costs

Service Reliability/On-Time Performance
The new substation would be more reliable and decrease delays affecting the rail line and equipment due to the old substation's unreliable power supply

Safety
Relocating the substation away from the roadway would improve the safety of all personnel using the substation

State of Good Repair
Replacing the outdated substation and protecting the new substation from harmful weather would improve state of good repair

STRATEGIC GOALS MET

Deliver a high-quality experience for all our customers, with their entire journey in mind

Ensure the reliability and continued safety of our transit system

Replacement and relocation of the substation would ***mitigate substation maintenance concerns, improve worker safety, and increase service reliability****.*

Description

The Gladstone Branch runs single track service between Gladstone and Summit and is an extension of the Morris and Essex (M&E) Line. Currently, there are wood poles along the Gladstone Branch right-of-way that support the catenary and signal lines for approximately 22 miles. These poles are frequently damaged during strong wind events and disrupt the track catenary and signal systems. Any disruption to service on this branch is felt throughout the entire line because it only runs a single track.

If funded, this project would replace the existing obsolete wood poles with stronger steel poles. The steel poles would withstand stronger winds and prevent widespread line outages during extreme events. Additionally, steel poles provide a much longer service life than wood, which would reduce maintenance expenses. Ultimately, replacement of the existing wood poles with stronger steel poles would allow the NJ TRANSIT to provide more reliable service to its customers along the Gladstone Branch while lowering costs.

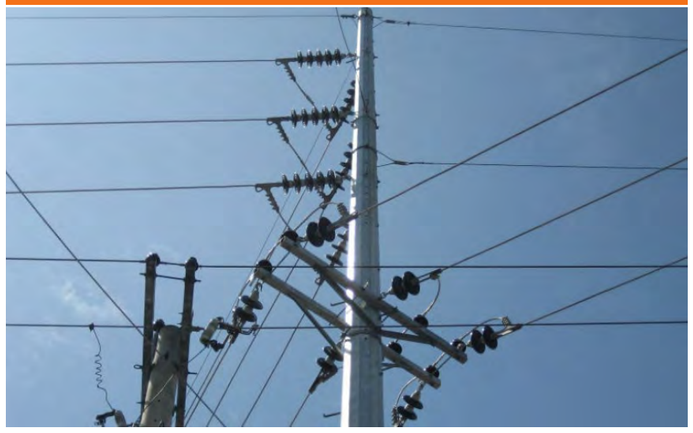
ESTIMATED PROJECT COSTS (2020 Dollars):

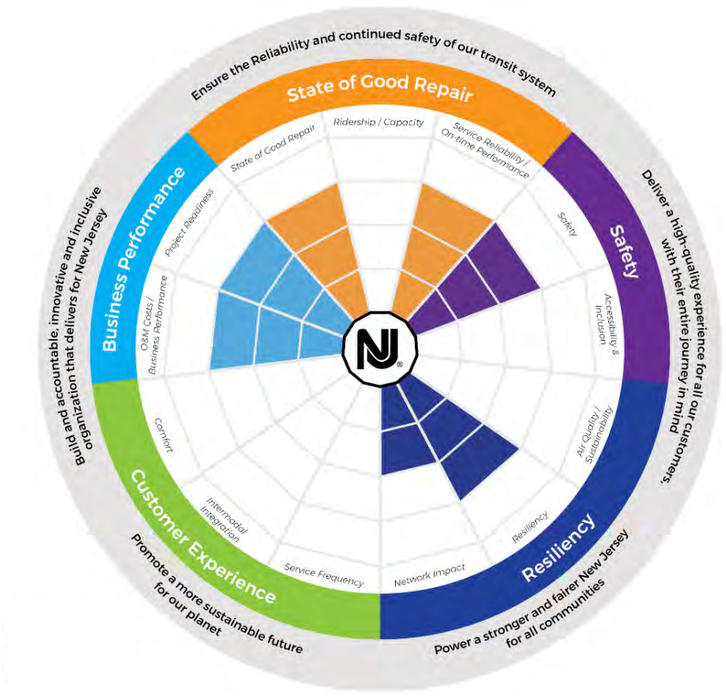
$81 Million

Existing: Wood Poles



Proposed: Steel Poles





Value to Customers

- Provides more reliable service
- Increases OTP

Value to State

- Lowers costs associated with maintaining existing wood poles, which allows for more efficient use of public funds
- Provides resilient infrastructure to prevent damage to signal and catenary systems during extreme wind events

PROJECT SHEET WOOD TO STEEL POLE CONVERSION ON GLADSTONE BRANCH

ESTIMATED TOTAL PROJECT COSTS

$81M

Resiliency
New steel poles would be able to withstand strong wind events

Safety
Stronger steel poles would decrease the risk of poles falling during extreme wind events

O&M Costs/Business Performance
Replacing outdated wood poles with steel poles would reduce maintenance costs and reduce revenue loss from delays associated with downed poles

State of Good Repair
Replacing wood poles with steel poles that have a longer service life would improve state of good repair

STRATEGIC GOALS MET

Deliver a high-quality experience for all our customers, with their entire journey in mind

Ensure the reliability and continued safety of our transit system

Replacing obsolete wood poles with stronger steel poles would allow NJ TRANSIT to ***provide more reliable service to customers along the Gladstone Branch***.

Description

NJ TRANSIT currently has no formal central inventory facility or system to manage electric traction (ET) components. Equipment is either stored outside along the rail right-of-way or in shipping containers placed wherever space is available throughout electrified railroad territory. A lack of a central storage facility makes it challenging for NJ TRANSIT to procure ET equipment in both adequate quantities and timely manner. Furthermore, ET inventory is exposed to the elements in ad-hoc storage units scattered throughout the system.

If funded, a centralized inventory control facility where materials could be securely stored and inventoried after procurement would allow for quick sourcing from an organized stock and speed up deployment in times of scheduled maintenance, as well as when there is equipment failure or an emergency. The facility would be expected to include up to 75,000 square feet of indoor warehouse storage and 90,000 square-feet of yard storage to house and protect approximately $40 million worth of inventory. Key facility features would include two operable cranes and large garage doors to simplify equipment movement within the site and to allow rapid load-out of service vehicles with replacement equipment to quickly restore service where or when failures may occur.

***ESTIMATED PROJECT COSTS (2020 Dollars):**

$26 Million

**Estimates are based upon concept for design*

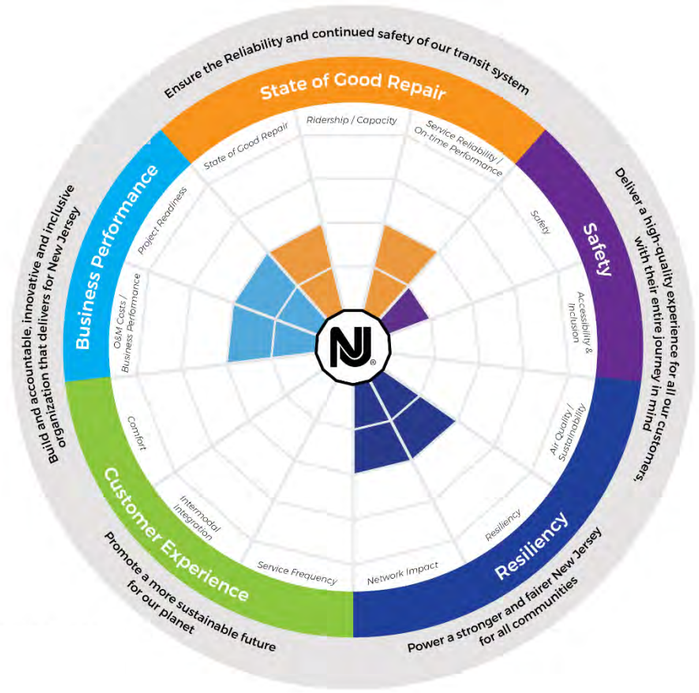
Existing: Example of Shipping Container Storage Site





Proposed: Warehouse Style Storage With Overhead Crane





Value to Customers

- Increases on-time-performance (OTP), safety and service reliability
- Reduces service outages

Value to State

- Increases efficiency of ET maintenance operations
- Increases return on investment (ROI) for use of equipment protected during storage
- Lowers operating costs

PROJECT SHEET ELECTRIC TRACTION STORAGE FACILITY

ESTIMATED TOTAL PROJECT COSTS

$26M

O&M Costs/Business Performance
A centralized inventory would allow for quicker emergency deployment and reduced warehouse operating costs

State of Good Repair
A modern storage facility would better equip the agency to implement repairs and improve service life

Network Impact
A centralized facility would allow for stockpiling of critical components for preventative maintenance; eliminating failures before they occur

Resiliency
New facility would allow for rapid recovery from extreme weather events or service emergencies

STRATEGIC GOALS MET

Promote a more sustainable future for our planet

Ensure the reliability and continued safety of our transit system

*Centralized inventory would allow **quick sourcing from organized stock** and **reduce down time** in emergencies and outages.*

Description

To provide a resilient energy supply for a targeted portion of rail infrastructure, NJ TRANSIT would construct a first-of-its-kind electrical microgrid capable of supplying highly reliable power during storms or other times when the centralized power grid is compromised. The NJ TRANSITGRID project received a Record of Decision from the Federal Transit Administration in April 2020. NJ TRANSIT is considering ways to better incorporate renewable energy and storage as part of the project's continued development, in alignment with the State's Energy Master Plan.

NJ TRANSIT currently relies on a regional grid managed by Pennsylvania-New Jersey-Maryland Interconnection (PJM) to provide electricity for its traction power system. This creates a dependency on a single power supply and distribution system, which is vulnerable to power outages during natural and man-made extreme events. Vulnerability of the existing system was realized in 2012, when Superstorm Sandy caused widespread power outages that disrupted NJ TRANSIT service and operations for several days.

If funded, the proposed facility would operate 24/7 and be sized to handle limited operations on the Northeast Corridor between New York's Penn Station and NJ TRANSIT's Jersey Avenue Station in New Brunswick; the Morris & Essex line between Hoboken Terminal and Maplewood Station; and the Hudson-Bergen Light Rail (HBLR) Transit System. The project would also provide power to the signal system on a portion of the Main Line.

The NJ TRANSITGRID project involves constructing a microgrid central facility (MCF) and creating a distributed generation system. In addition to providing emergency backup power, these resources would also allow NJ TRANSIT to participate in peak "shaving" practices, which would help lower the cost of electricity provided by the regional grid. Also, a nanogrid would be installed to provide emergency power for the HBLR.

NJ TRANSITGRID would maintain and enhance mobility and regional security in the event of a power outage caused by extreme weather or another unforeseen emergency conditions, minimize disruptions to the regional workforce and economy, enhance electric grid reliability by providing additional sources of efficient power, and minimize pollutants by utilizing clean energy technologies. As design is ongoing, a portion of the project would also incorporate distributed energy, renewable energy (solar panels and flywheels), and other technologies to provide power to key NJ TRANSIT stations, maintenance facilities, bus garages, and other buildings.

Existing: Decommissioned Coal-Powered Hudson Generating Station



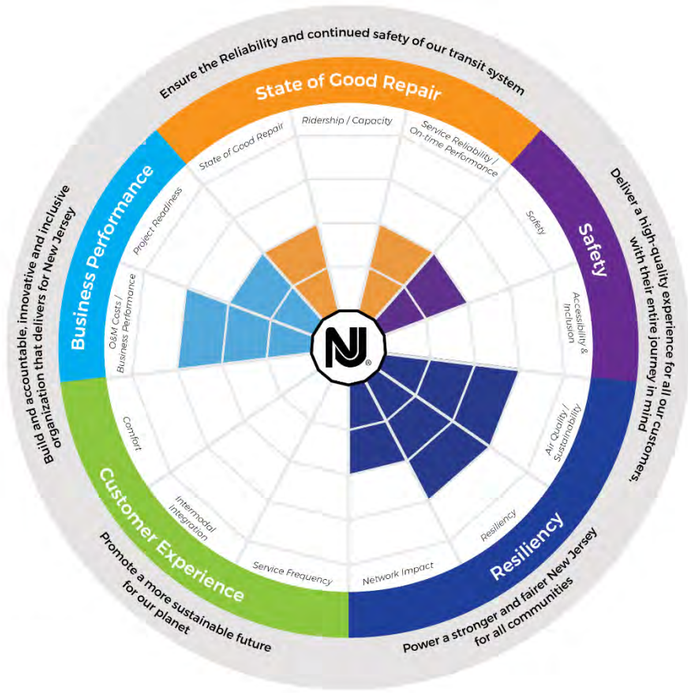
Proposed: Microgrid Central Facility (MCF)



***ESTIMATED PROJECT COSTS (2020 Dollars):**

$577.4 Million

** Year 1 includes funds already spent on design phase activities*



Value to Customers

- Reduces train delays following power outages
- Establishes more reliable service

Value to State

- Lowers operating cost by providing more efficient power distribution
- Minimizes revenue loss from service disruptions
- Generates revenue through sale of power to outside entities
- Reduces greenhouse gases (GHG)
- Advances the State's alternative energy goals

Project Sheet | **NJ TRANSITGRID**



Figure ES-2: Proposed NJ TRANSITGRID Project Location

NJ TRANSITGRID TRACTION POWER SYSTEM

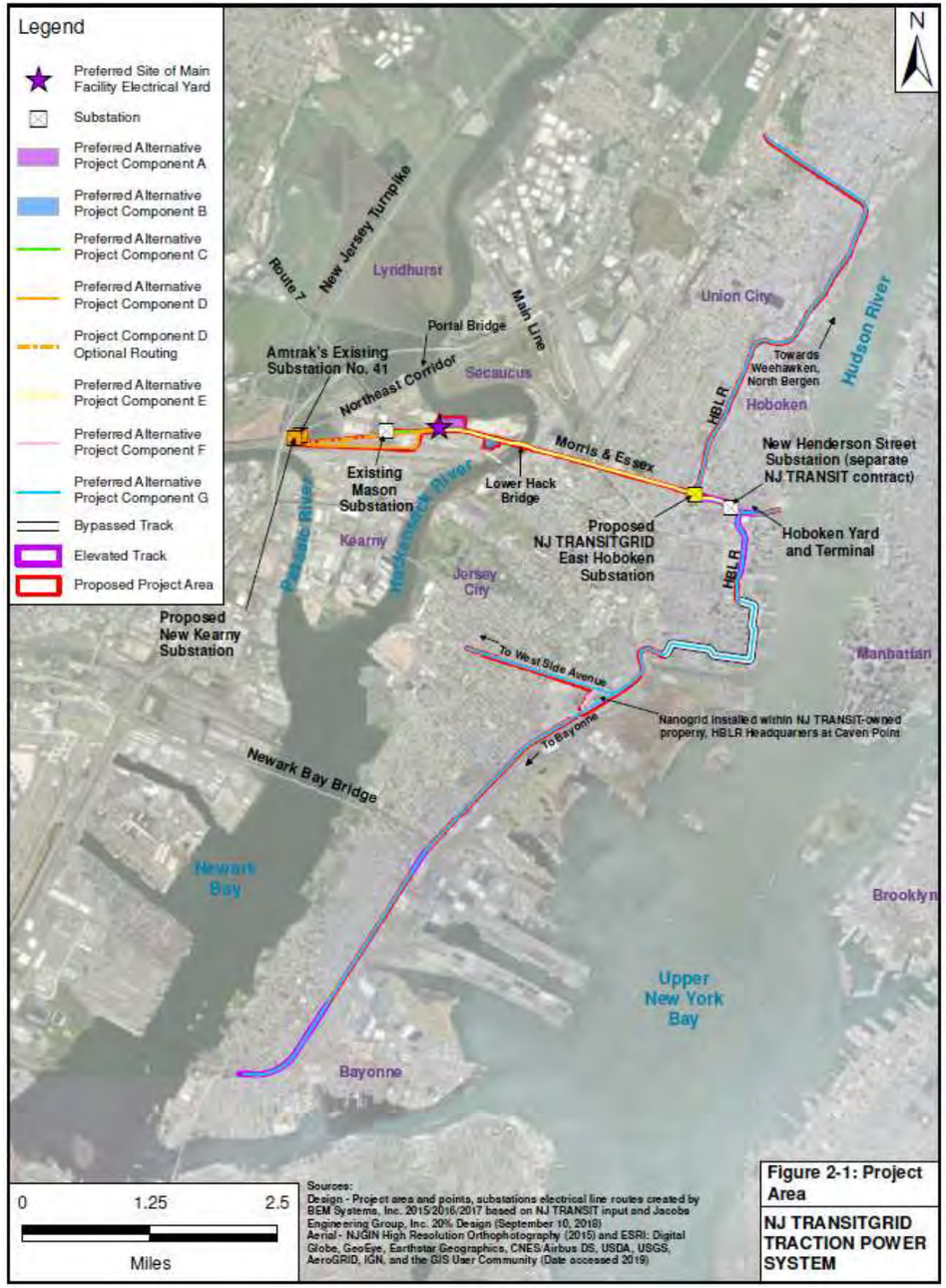


Figure 2-1: Project Area

NJ TRANSITGRID TRACTION POWER SYSTEM

PROJECT SHEET NJ TRANSITGRID

ESTIMATED TOTAL PROJECT COSTS

$577.4M

O&M Costs/Business Performance
NJ TRANSITGRID would provide efficient power and lessen service outages

Service Reliability/On-Time Performance
A backup power source would increase service reliability and eliminate long disruptions during extreme weather events

Resiliency
NJ TRANSITGRID would provide a backup power source during extreme weather events

Network Impact
Reliable backup power source would lessen disruptions and keep service running across the transit network during extreme weather events

STRATEGIC GOALS MET

Promote a more sustainable future for our planet

Ensure the reliability and continued safety of our transit system

NJ TRANSITGRID would ***enhance resilience*** *to and* ***preserve service during extreme weather events****.*

Description

A railway's signaling system is a critical component in providing safe and reliable train service. NJ TRANSIT has staff dedicated to maintaining these signals and making sure they function properly at all times. To perform this function, NJ TRANSIT provides crew quarters for the maintenance crews at critical locations along all its rail lines. These crew quarters, however, often need repair or require full replacement. The existing crew quarters servicing the Essay Interlocking is being removed as a result of the Raritan River Bridge Replacement Project and will need to be replaced with a new facility. Additionally, the crew quarters located at Kingsland Station is in need of rehabilitation.

If funded, a new crew quarters would be constructed near the existing Essay Interlocking on the North Jersey Coast Line and the existing crew quarters at Kingsland Station will be rehabilitated. These upgraded facilities would provide adequate office and administration space for six personnel and would allow them to work more safely and efficiently. Basic amenities such as lockers and bathrooms would also be provided. The reconstruction of the crew facility at Essay would need to be coordinated with the Raritan River Bridge Replacement Project.

ESTIMATED PROJECT COSTS (2020 Dollars):

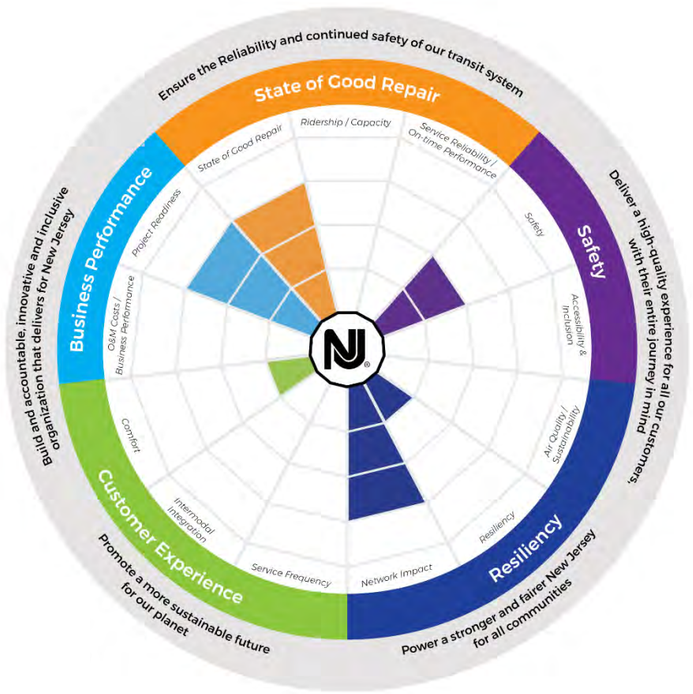
$11 Million

Existing: Lyndhurst Signal Crew Quarters



Proposed: Modular Office Building





Value to Customers

- Provides new facilities for maintenance workers improving workforce efficiency

Value to State

- Reduces maintenance requirements for outdated facility

PROJECT SHEET NEW SIGNAL CREW FACILITIES

ESTIMATED TOTAL PROJECT COSTS

$11M

Safety
The new facilities would improve employee safety and provide more protections against extreme weather events

Resiliency
The new facilities would be more resilient to extreme weather events

State of Good Repair
Outdated facilities would be replaced and rehabilitated

Network Impact
New signaling facilities would help ensure service across the entire rail network runs smoothly

STRATEGIC GOALS MET

Deliver a high-quality experience for all our customers, with their entire journey in mind

Ensure the reliability and continued safety of our transit system

*A new signal headquarters would **benefit the rail network** and **improve state of good repair** and **safety**.*

Description

The Rail Operations Center (ROC) located in Kearny, NJ supports NJ TRANSIT's train and power dispatch operations and is its central command and control center for all train movements along its rail lines. Currently, there is no auxiliary facility to provide redundancy for operations, especially if the main facility is temporarily inaccessible or out of service. Additionally, as NJ TRANSIT continues to grow and more operations staff are needed, the current facility will not be able support the growing staff size.

If funded, this project would construct a new rail operations dispatch center just south of Paterson Station on the Main Line. The new resilient facility would provide redundancy to train and power dispatch operations by providing a second operations center and provide additional space for NJ TRANSIT personnel. Additionally, the proposed facility would serve as the HQ for Access Link and act as the training center for all NJ TRANSIT disciplines, including a separate structure for catenary work and fall protection adjacent to the proposed dispatch center. An attached garage would be constructed to provide adequate parking for both employees and visitors. Furthermore, the building would include space to store a 90-day stockpile of personal protective equipment (PPE) that could be easily accessed and distributed in the event of an emergency.

ESTIMATED PROJECT COSTS (2020 Dollars):

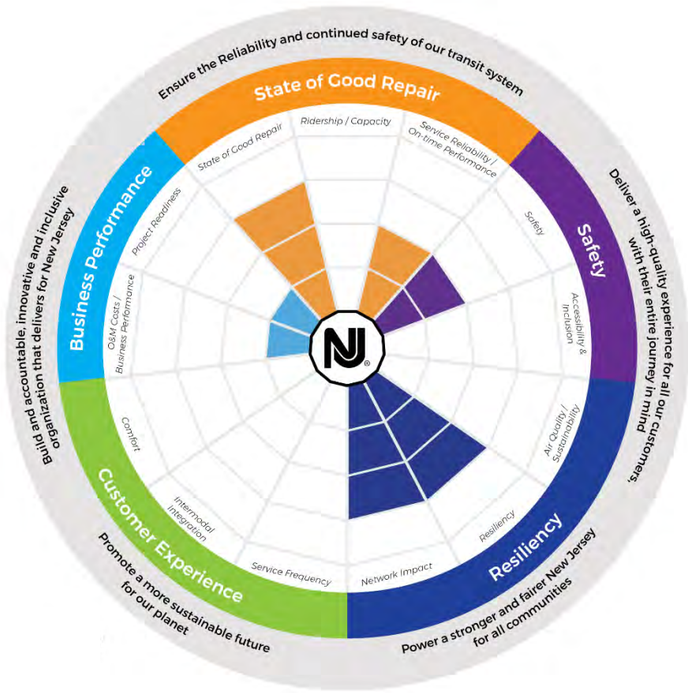
$131 Million

Existing: NJ TRANSIT Lot



Proposed: New Facility





Value to Customers

- Reduces potential for service disruptions
- Provides more reliable service

Value to State

- Minimizes revenue loss from service disruptions

PROJECT SHEET AUXILIARY TRANSIT OPERATIONS FACILITY

ESTIMATED TOTAL PROJECT COSTS

$131M

Resiliency
The new facility would provide backup operations in case of an extreme weather event or emergency

Service Reliability/On-Time Performance
The new facility would improve service reliability and on-time performance

Network Impact
If an emergency event impacts the rail system, the network would have a backup command

State of Good Repair
Upgrading to a new facility would ensure operations of dispatch commands in emergency situations

STRATEGIC GOALS MET

Deliver a high-quality experience for all our customers, with their entire journey in mind

Ensure the reliability and continued safety of our transit system

*A new facility would **provide resiliency and redundancy** for train and power dispatch operations by providing a **second operations center** and additional space for personnel.*

Description

The Red Bank Yard, located just south of Red Bank Station, uses temporary trailers to support administration offices for the supervisory staff at Red Bank. These trailers are small, outdated, and do not provide the appropriate space or functionality needed for supervisors to perform their daily tasks. Furthermore, there is inadequate parking space for personnel.

If funded, this project would construct a new crew quarters at the Red Bank yard on the existing NJ TRANSIT right of way. The facility would be built to provide adequate office and administration space for 30 personnel and allow them to work more safely and efficiently. Additionally, a new parking lot would be built to support the additional staff.

ESTIMATED PROJECT COSTS (2020 Dollars):

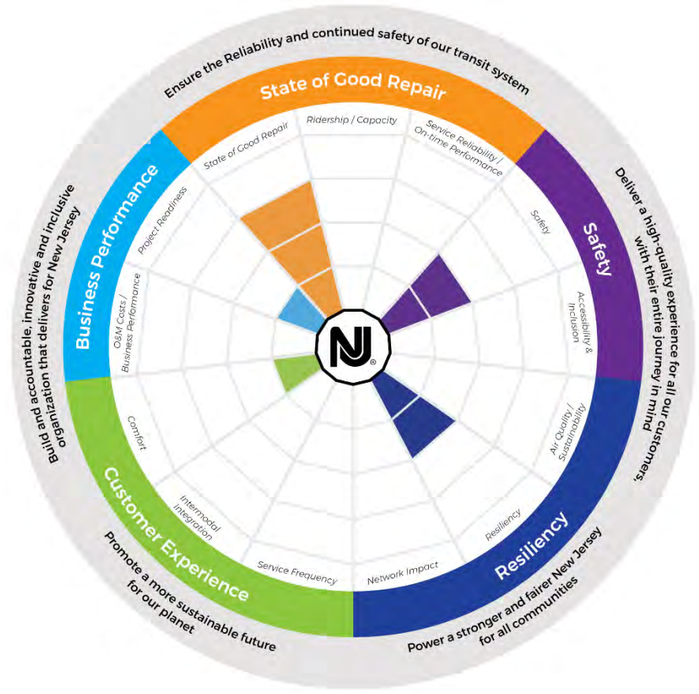
$7 Million

Existing: Red Bank Crew Quarters



Proposed: Modular Office Building





Value to Customers

- Provides more reliable service

Value to State

- Reduces maintenance requirement for obsolete facility

PROJECT SHEET RED BANK CREW QUARTERS REPLACEMENT

ESTIMATED TOTAL PROJECT COSTS

$7M

Resiliency
The new facility would be more resilient to extreme weather events

State of Good Repair
The current crew quarters is obsolete and would be replaced with a new and more reliable facility

Safety
Constructing a new facility would improve employee safety and provide more protections against extreme weather events

STRATEGIC GOALS MET

Deliver a high-quality experience for all our customers, with their entire journey in mind

Ensure the reliability and continued safety of our transit system

*New crew quarters would **improve employee safety** and **efficiency**.*

Description

The Wood-Ridge Maintenance-of-Way (MOW) Facility in Wood-Ridge, NJ is located along the Bergen County Line just north of NJ TRANSIT's Westmont Station. This facility is used to house the equipment and personnel responsible for maintaining the railroad, which includes the tracks and signal systems. However, the existing facility will soon be unable to support the equipment and staff necessary to keep up with growing maintenance needs. This is a critical issue because maintaining the railway is paramount in providing reliable service to customers.

If funded, this project would construct a new MOW facility in Clifton, NJ along NJ TRANSIT's Main Line. The new site would be approximately 28 acres and will be large enough to support additional MOW equipment, as well as provide adequate administrative space for the growing staff. Additionally, more space would be provided for parking and storing MOW equipment. Replacing the existing obsolete MOW facility with a larger, more modern MOW facility would allow NJ TRANSIT to better address the maintenance needs of the railway and provide a more consistent and reliable service to customers.

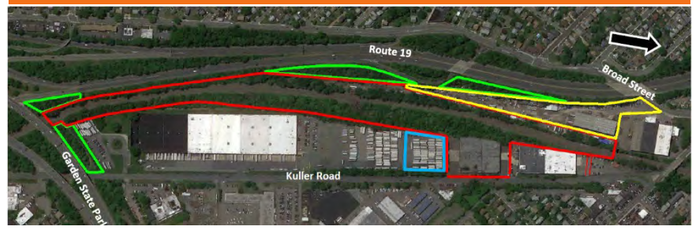
ESTIMATED PROJECT COSTS (2020 Dollars):

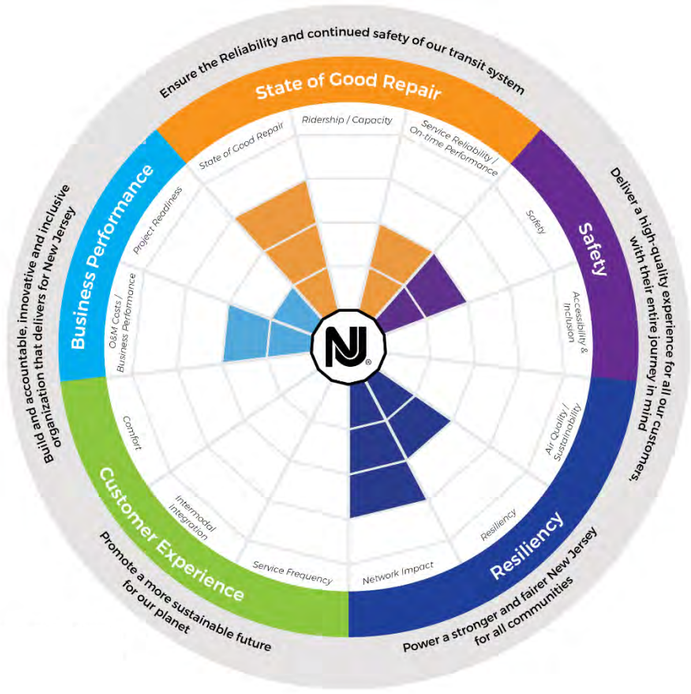
$40 Million

Existing: Wood-Ridge MOW Facility



Proposed: New Facility Location





Value to Customers

- Increases OTP and service reliability
- Reduces service outages

Value to State

- Minimizes revenue loss from service disruptions

PROJECT SHEET NORTHERN MOW FACILITY

ESTIMATED TOTAL PROJECT COSTS

$40M

Network Impact
The new facility would improve equipment storage and space for administrative operations along the Main Line

State of Good Repair
Upgrading to a larger facility equipped with additional storage space would improve state of good repair

Service Reliability
The new facility would decrease service delays due to maintenance issues and increase reliability

O&M Costs/Business Performance
Less frequent service disruptions due to improved maintenance would reduce operations and maintenance costs

STRATEGIC GOALS MET

Deliver a high-quality experience for all our customers, with their entire journey in mind

Ensure the reliability and continued safety of our transit system

A new larger facility would allow NJ TRANSIT to ***better address the maintenance needs*** *of the railway and* ***provide more reliable service to customers****.*

Description

The Bergen Tunnels are two parallel tubes that carry four railroad tracks under Jersey City connecting NJ TRANSIT multiple rail branches to Hoboken Terminal. These tunnels are essential infrastructure that provide a vital, necessary link in the NJ TRANSIT network. Given the age of the structures, they must be carefully maintained to ensure they remain operational and in a state of good repair. In 2001, the north tube was rehabilitated to extend its overall service life, however, due to funding issues, work was not completed on the south tube. Currently, the south tube suffers from severe water leakage that forms large icicles during winter months, requiring daily maintenance crews to remove them from the ceiling. The tunnels also lack adequate lighting and life safety systems such as extinguishers, emergency phones and sprinkler systems. Given the age of the structures coupled with the excessive leakage, the track and track beds frequently deteriorate and require increased maintenance.

If funded, this project would rehabilitate the Bergen Tunnels South Tube, bring the remaining tunnel infrastructure to a state of good repair, providing safety enhancements with the introduction of additional safety systems required by the NJ TRANSIT Tunnel Safety Committee. It would feature new sealing and waterproofing to mitigate leakage, which would prevent ice from forming while improving the tunnel's durability. These efforts would ultimately increase the tunnel's service life while drastically reducing maintenance costs associated with daily ice removals, as well as frequent track bed repairs. Furthermore, enhanced safety systems and lighting would improve overall safety for those who use the tunnels, including NJ TRANSIT personnel.

ESTIMATED PROJECT COSTS (2020 Dollars):

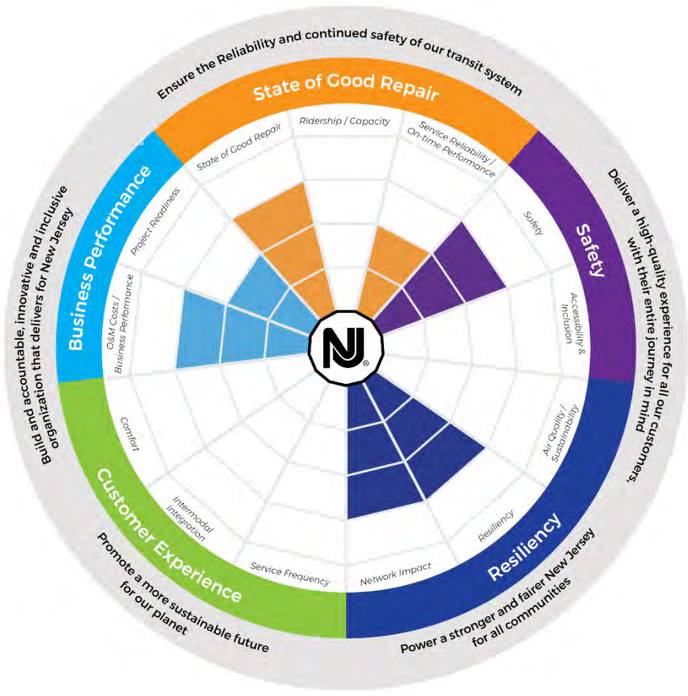
$155 Million

Existing: Bergen Tunnels



Proposed: Rehabilitation





Value to Customers

- Increases on-time performance (OTP), safety and service reliability
- Reduces train delays associated with tunnel maintenance

Value to State

- Lowers operating cost, including unscheduled maintenance and overtime, which allows for more efficient use of public funds

PROJECT SHEET BERGEN TUNNEL SOUTH TUBE REHABILITATION

ESTIMATED TOTAL PROJECT COSTS

$155M

Resiliency
Rehabilitation features waterproofing and new sealing to mitigate leaks and improve durability

O&M Costs/Business Performance
Reduce maintenance costs associated with ice removals and track bed repairs

State of Good Repair
Increase tunnel's service life and bring the remaining tunnel infrastructure to a state of good repair

Safety
Enhanced lighting and safety systems required by the NJ TRANSIT Tunnel Safety Committee

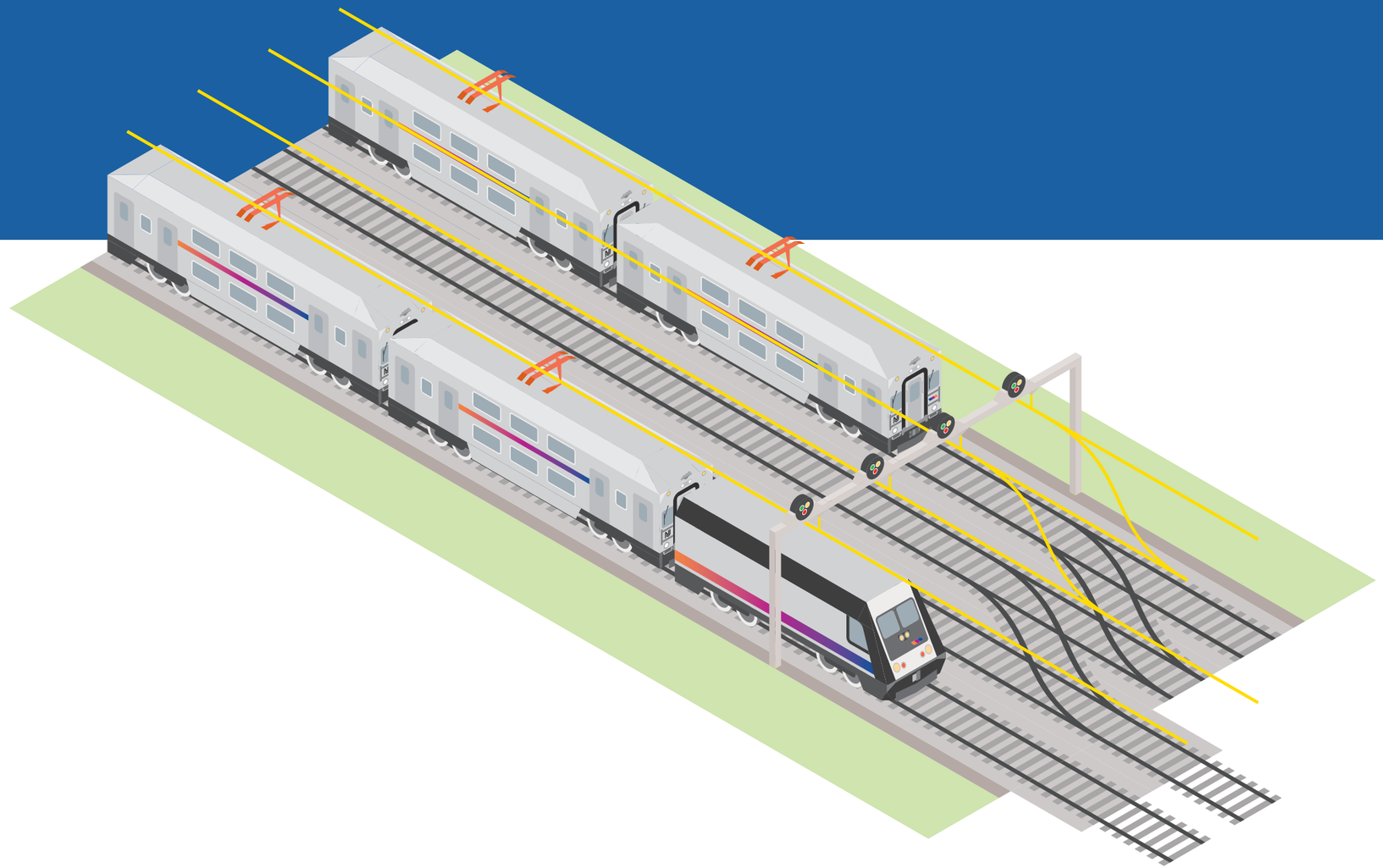
STRATEGIC GOALS MET

Deliver a high-quality experience for all our customers, with their entire journey in mind

Ensure the reliability and continued safety of our transit system

Rehabilitating the Bergen Tunnels South Tube, would ***bring the remaining tunnel infrastructure to a state of good repair and provide safety enhancements***.

Rail Expansion



NJTRANSIT
The Way To Go.

Description

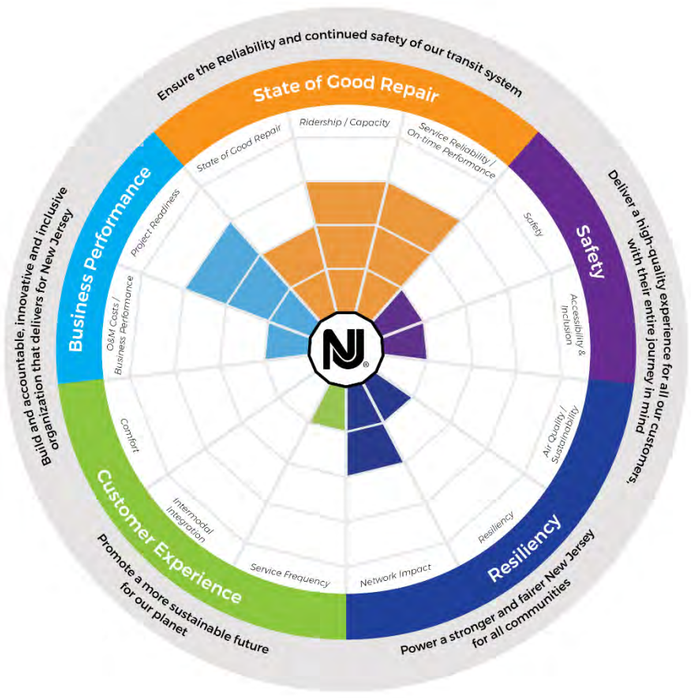
The NJ TRANSIT Main Line services an average of 31,450 passengers per day between Suffern, NY and Hoboken Terminal, and is one of the most heavily used NJ TRANSIT rail lines. Working east to west from Hoboken, the two-track Main Line and two-track Bergen County Line merge into three tracks at Ridgewood Junction. The line then operates on three tracks from Ridgewood to Waldwick but reduces to two tracks from Waldwick to Suffern. This two track section west of Waldwick limits the Main Line's capacity and prevents express trains from passing through occupied stations.

If funded, this project would continue the third track (Track 3) west from Waldwick to Suffern to provide additional capacity along the Main Line. Extension of Track 3 would require widening of multiple existing bridges, increased vertical clearance for the bridge over Route 202, the closing of various grade crossings, and the construction of new bridges over four existing highways. Additionally, all five existing stations along the limits of the proposed third track would require modifications, which include new, accessible high-level platforms and pedestrian tunnels to accommodate the additional track. The existing interlocking at Suffern and Waldwick would also be upgraded to allow trains to efficiently switch between the three tracks. Ultimately, this project would provide the capacity enhancement necessary to keep pace with ridership growth and provide a more reliable experience for Main Line and Bergen County Line customers.

This work would be coordinated with the proposed WC Interlocking project, which will extend Track 3 into Waldwick Yard.

Existing: Track Configuration





ESTIMATED PROJECT COSTS (2020 Dollars):

$619 Million

Value to Customers

- Reduces train delays from train conflicts and increase on-time performance (OTP)
- Decreases scheduled train time

Value to State

- Increases OTP, safety, and service reliability
- Increases lines capacity and revenue

PROJECT SHEET THIRD TRACK BETWEEN WALDWICK AND SUFFERN

ESTIMATED TOTAL PROJECT COSTS

$619M

Network Impact
Addition of a third track would improve overall Main Line service and positively impact the surrounding rail network

Service Reliability/On-Time Performance
Addition of a third track would enhance service capacity and reliability

Ridership/Capacity
A third track would support ridership growth by enhancing capacity for service

State of Good Repair
Upgrading existing interlockings and stations would improve overall state of good repair

STRATEGIC GOALS MET

Deliver a high-quality experience for all our customers, with their entire journey in mind

Ensure the reliability and continued safety of our transit system

*A third track would provide **capacity enhancements necessary to keep pace with ridership growth** with more reliable service.*

Description

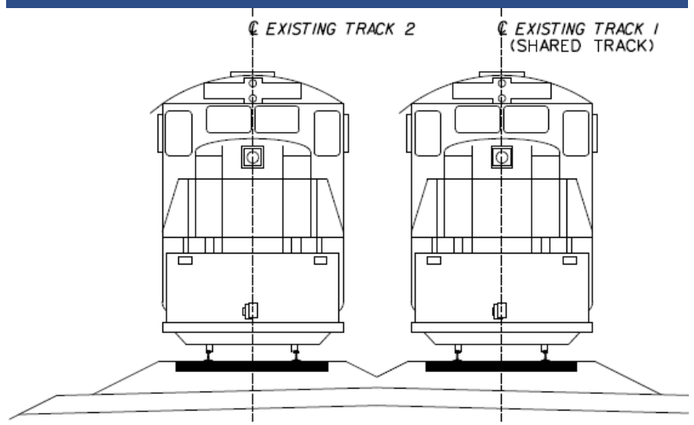
The Raritan Valley Line (RVL) connects High Bridge with Newark Penn Station to facilitate commutes to and from NYC. At the Aldene interlocking east of Cranford Station, the RVL merges with the Lehigh Valley Line, which is also used by Conrail. This line carries two tracks that continue to Newark Interlocking just before the RVL enters the NEC. However, these two tracks are shared by both NJ TRANSIT passenger trains and Conrail freight trains, which limits the capacity of the RVL and presents logistical issues because freight and passenger trains can occupy both tracks at any time.

If funded, this project would add two additional tracks to the Lehigh Line between the Aldene and Newark Interlockings: a proposed Track 3 would be constructed north of existing Track 1, and a proposed Track 4 would be constructed south of existing Track 2 (ideally for freight). Track 1 and 2 would be the NJ TRANSIT tracks to use existing station platforms and avoid increased freight clearance limitations to platform edges and prevent any interferences between the two train entities. Additionally, platforms would be needed at Roselle Park Station and Union Station to accommodate the additional Track 3. Ultimately, providing additional tracks along the Lehigh Line would increase the capacity of the RVL and reduce scheduled commute times by mitigating the need to coordinate passenger trains with Conrail freight trains.

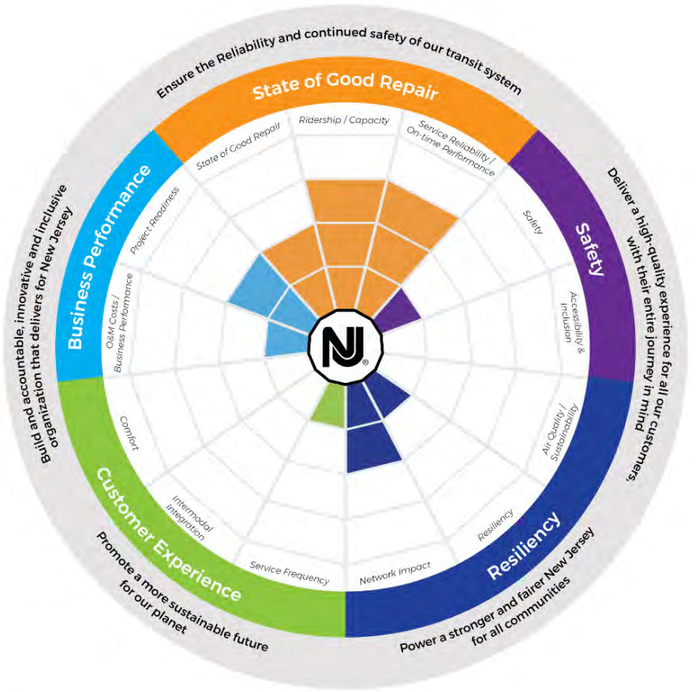
ESTIMATED PROJECT COSTS (2020 Dollars):

$752 Million

Existing: Track Configuration







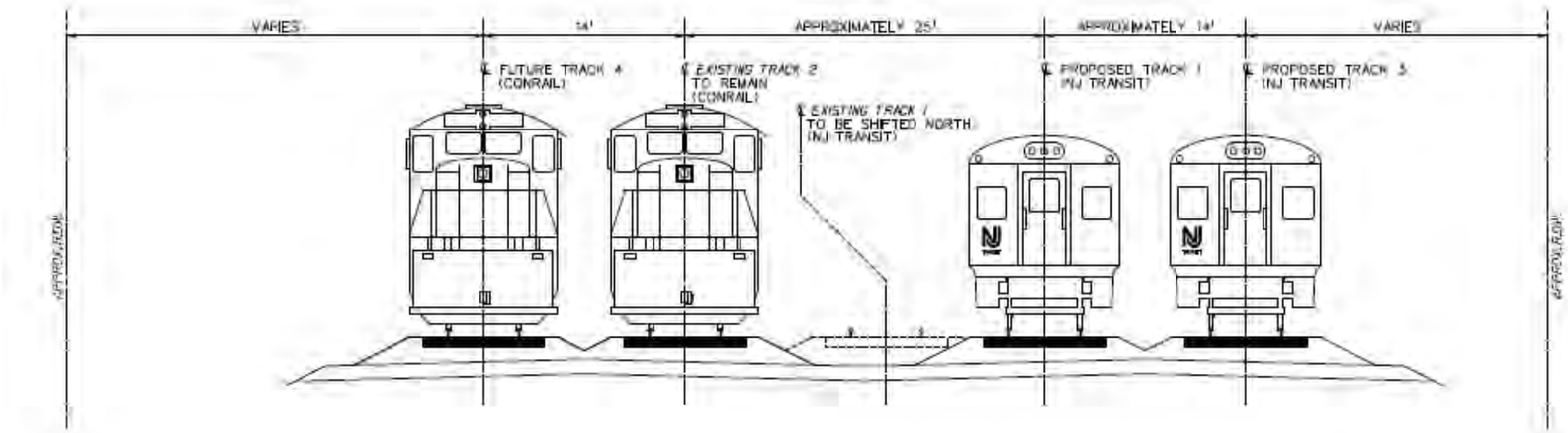
Value to Customers

- Decrease in scheduled train times
- Provides more reliable service and increases on-time performance

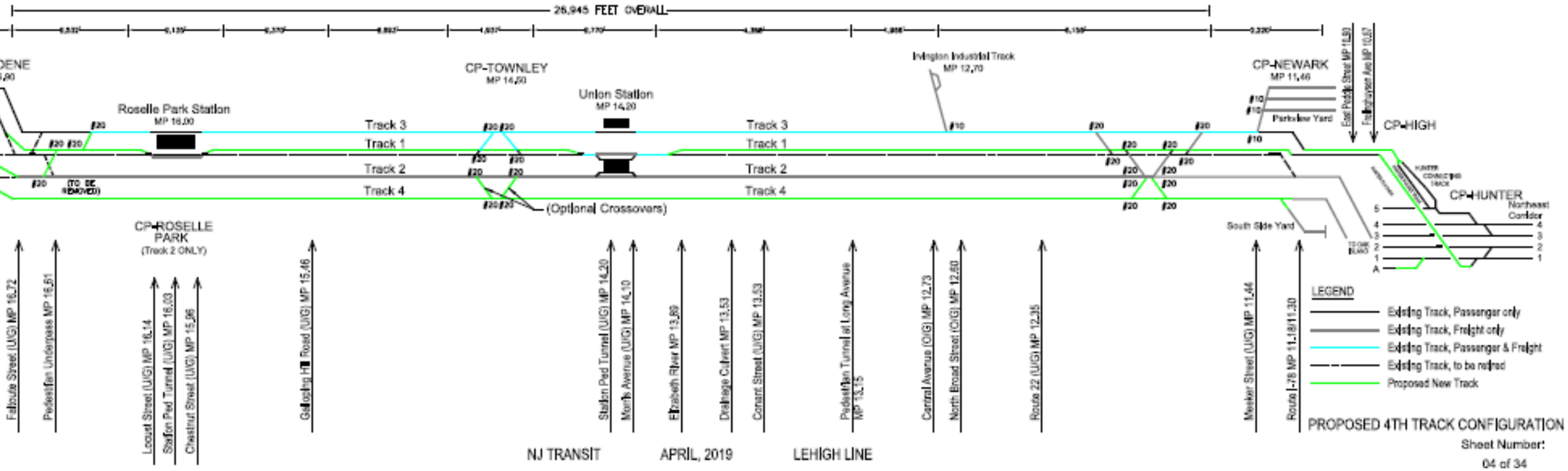
Value to State

- Increases in RVL capacity

Project Sheet | **Lehigh Third and Fourth Tracks**



TYPICAL – FUTURE FOUR TRACK SECTION (LOOKING WEST)



PROJECT SHEET LEHIGH THIRD AND FOURTH TRACKS

ESTIMATED TOTAL PROJECT COSTS

$752M

State of Good Repair
Constructing two new tracks would allow NJ TRANSIT to implement current technologies

Network Impact
Adding two new tracks would positively impact Raritan Valley Line service by eliminating conflicts with freight trains and ease commutes to/from NYC along the NEC

STRATEGIC GOALS MET

Deliver a high-quality experience for all our customers, with their entire journey in mind

Ensure the reliability and continued safety of our transit system

Ridership/Capacity
Adding two new tracks would increase capacity on the Raritan Valley Line

Service Reliability/On-Time Performance
The new tracks would limit conflicts with freight and reduce delays and scheduled travel times

Providing additional tracks would ***increase capacity of the Raritan Valley Line*** *as well as* ***reduce delays and travel times****.*

Description

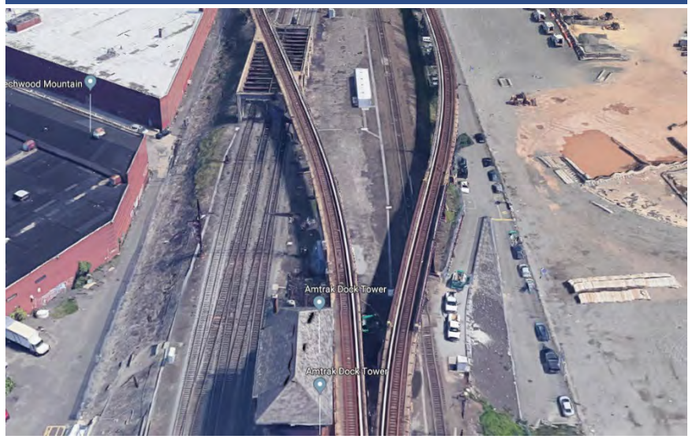
The Eastbound Waterfront Connector (EWC), built in 1991, is a single track that links Newark Penn Station with Hoboken Terminal. This track is used to carry trains both eastbound toward Hoboken and westbound toward Newark Penn Station, and is primarily used by NJCL trains that travel between Hoboken and Bay Head. However, the trains traveling westbound must make an at-grade crossing over two NEC tracks at the Dock Interlocking to enter Newark Penn Station on the appropriate westbound track. This complex movement creates conflicts with NEC trains traveling to and from New York and often results in delays for NJCL trains as they wait for an open slot to enter the corridor.

If funded, the proposed Westbound Waterfront Connector would overcome this challenge. A flyover track would be constructed across PATH Track G and the Center Street Industrial Track (CSIT) to connect the M&E Line Track 2 with Amtrak's NEC Track 4. This would allow westbound NJCL trains to enter the NEC Track 4 without having to cross at-grade between NEC tracks 2 and 3 at the Dock Interlocking. Eliminating this at-grade movement would not only mitigate delays on the NJCL, but it would also increase the capacity of the NJCL, RVL, and NEC.

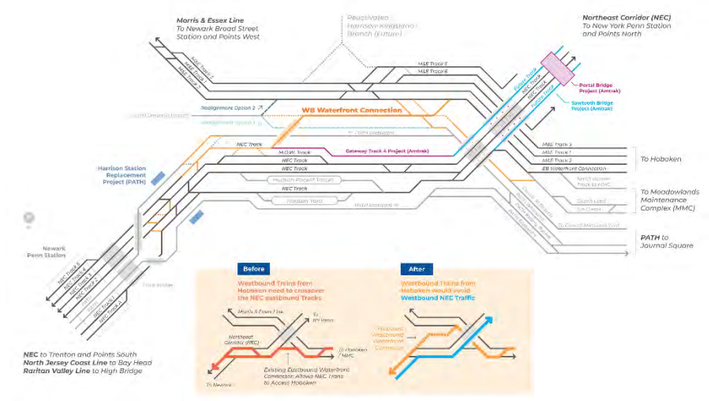
ESTIMATED PROJECT COSTS (2020 Dollars):

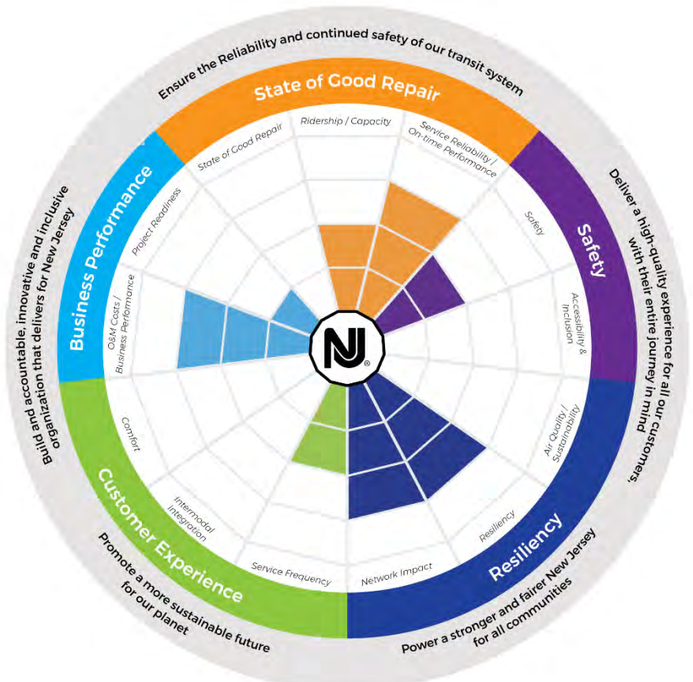
$474 Million

Existing: Dock Interlocking



Proposed: WB Waterfront Connection





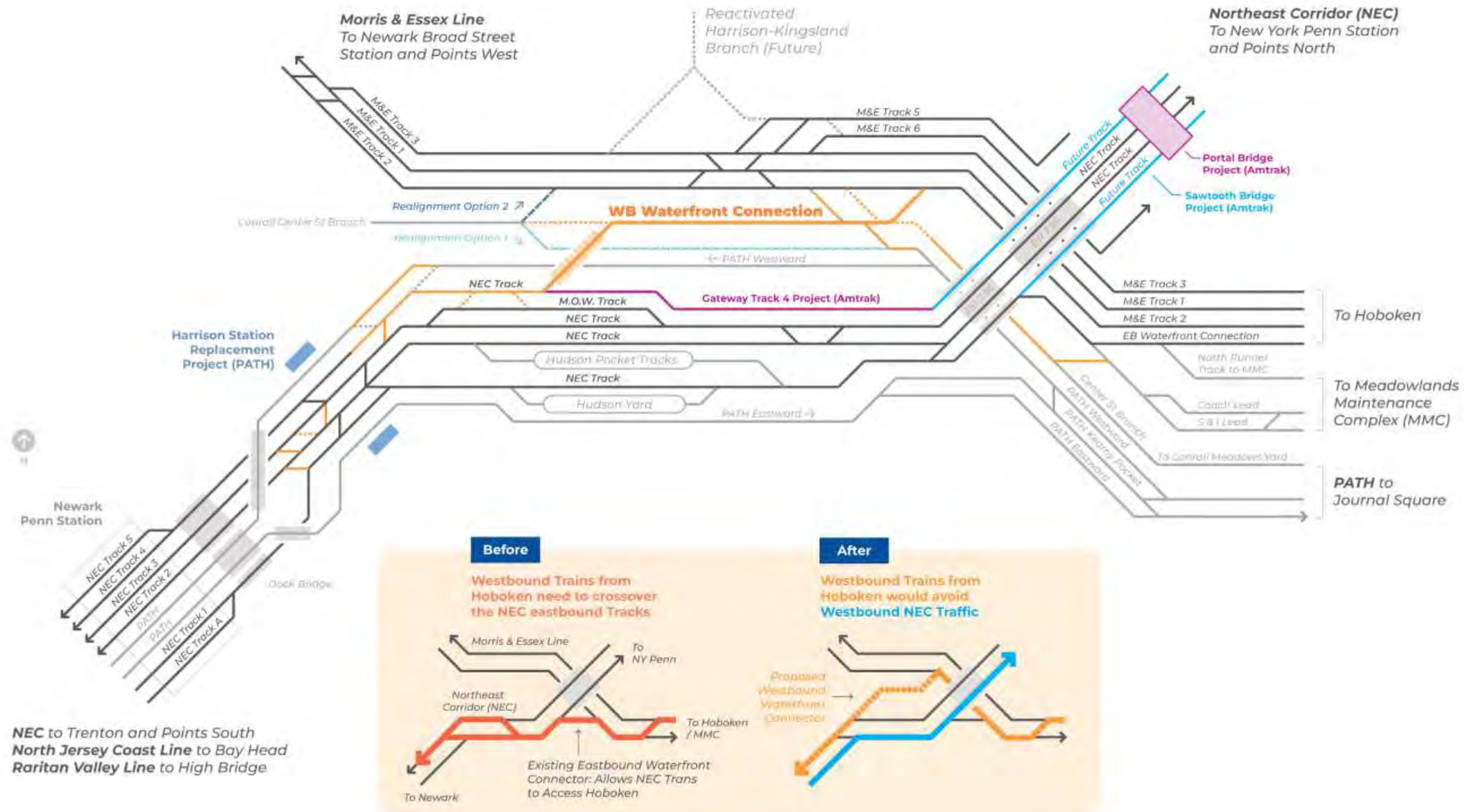
Value to Customers

- Reduces train delays
- Provides more reliable service and increased OTP

Value to State

- Minimizes revenue loss from service disruptions
- Increases revenue service

Project Sheet | **Westbound Waterfront Connector**



PROJECT SHEET WESTBOUND WATERFRONT CONNECTOR

ESTIMATED TOTAL PROJECT COSTS

$474M

O&M Costs/Business Performance
Fewer service disruptions and delays would increase revenue service on three different rail lines

Service Reliability/On-Time Performance
The connector would enable trains to operate with less delays and better on-time performance

Safety
Reduced risk of train conflicts due to less complicated train movements

Network Impact
Three rail lines would benefit from reducing delays between Newark Penn Station and Hoboken

STRATEGIC GOALS MET

Deliver a high-quality experience for all our customers, with their entire journey in mind

Ensure the reliability and continued safety of our transit system

Eliminating the at-grade movement ***would mitigate delays and increase capacity****.*

Regional Transit Projects



NJTRANSIT
The Way To Go.

Description

The existing Portal Bridge is a ±960-foot long structure which carries the Northeast Corridor (NEC) over the Hackensack River between Newark Penn Station and Secaucus Junction. The existing movable, swing span bridge was constructed in 1910, is 110-years old, and has exceeded its originally intended service life. Due to its age and frequency of use, the movable bridge is costly and difficult to maintain and experiences frequent breakdowns. The two-track bridge creates a bottleneck between the four-track territories to the east and west and requires train speed reductions of 30% which contributes to a decrease in rail service reliability. Given its low vertical clearance to the river, frequent bridge openings are required to accommodate marine traffic. Also, mechanical component malfunctions often cause the bridge to be open for extended periods of time, resulting in frequent, lengthy delays of rail service on the NEC. Additionally, the existing bridge does not have enough capacity to accommodate anticipated future demand.

If funded, this project would replace the existing bridge with a higher, more reliable, double track fixed bridge on a new alignment to the north of the existing bridge. The increased vertical profile would eliminate interruptions to rail service due to required bridge openings. The new north bridge would also eliminate speed restrictions, thereby improving rail operation and capacity across the span. A second, two-track southern bridge, Portal South, is contemplated separately as part of the overall Gateway Program, which when complete would substantially increase operational capacity along this critical length of the NEC.

***ESTIMATED PROJECT COSTS (2020 Dollars):**

$1.873 Billion

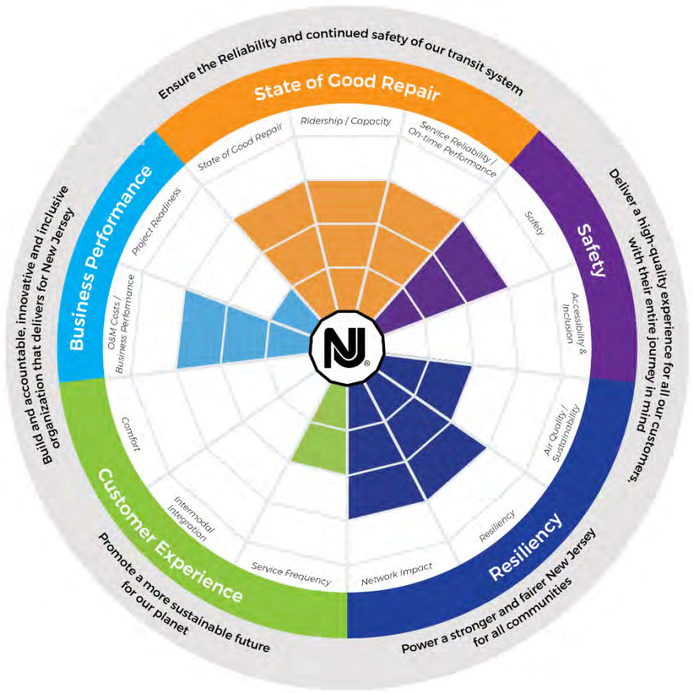
** Total estimated 2020 project cost indicates total cost over span of the project and includes funds already spent.*

Existing: Portal Bridge



Proposed: New Bridge





Value to Customers

- Increases on-time performance (OTP), safety, and service reliability
- Accommodates NEC ridership growth 2009-2019

Value to State

- Lowers operating expenses to enable more efficient use of public funds
- Reduces potential injuries by decreasing on-site maintenance work
- Increases return on investment (ROI) from increased ridership

PROJECT SHEET PORTAL BRIDGE REPLACEMENT (PORTAL NORTH)

ESTIMATED TOTAL PROJECT COSTS

***$1.873B**

**TOTAL ESTIMATED 2020 PROJECT COST INDICATES TOTAL COST OVER SPAN OF THE PROJECT AND INCLUDES FUNDS ALREADY SPENT*

O&M Costs/Business Performance
Track outages would be reduced, and costly maintenance and manual bridge opening would no longer be needed

Service Reliability/On-Time Performance
The new bridge would vastly improve reliability and allow for further service improvements

Ridership/Capacity
A double track fixed bridge would accommodate more trains and ridership growth

Network Impact
Delays resulting from bridge openings and speed restrictions would be eliminated along a critical portion of the NEC

STRATEGIC GOALS MET

Deliver a high-quality experience for all our customers, with their entire journey in mind

Ensure the reliability and continued safety of our transit system

*The project would **eliminate interruptions to rail service** due to bridge openings and speed restrictions to **improve rail operation and capacity**.*

Description

The existing Portal Bridge carries the Northeast Corridor over the Hackensack River between Newark Penn Station and Secaucus Junction. The existing movable, swing span bridge was constructed in 1910 (109-years old) and has exceeded its originally intended service life. Due to its age and frequency of use given, the movable bridge is costly and difficult to maintain. The existing two-track bridge creates a bottleneck between the four-track territories to the east and west, conflicts with marine traffic, and restricts operating speeds by 30% which all contribute to reductions in service reliability. Recurring bridge openings coupled with mechanical component malfunctions cause the bridge to be open for long periods of time, resulting in frequent, lengthy delays on the corridor. The existing double track bridge does not have enough capacity to accommodate current demand on the corridor. While the new two track Portal North bridge will have expanded capacity providing higher allowable trains speeds, future demand must include an additional two tracks of capacity to keep pace with growth trends.

If funded, Portal South Bridge would provide two additional tracks across the Hackensack River, matching the four-track territories to the east and west, substantially increasing operational capacity along this critical length of the Northeast Corridor. Unlike proposed Portal North Bridge, Amtrak Acela service would not need to be supported on the new south crossing. As a result, several structure alternatives could be feasible for a proposed Portal South Bridge, including a movable span along the existing right of way, providing an opportunity for reduced approach work and significant cost savings. This project would be a key component of the Gateway Capacity Enhancement Program.

ESTIMATED PROJECT COSTS (2020 Dollars):

$431 Million

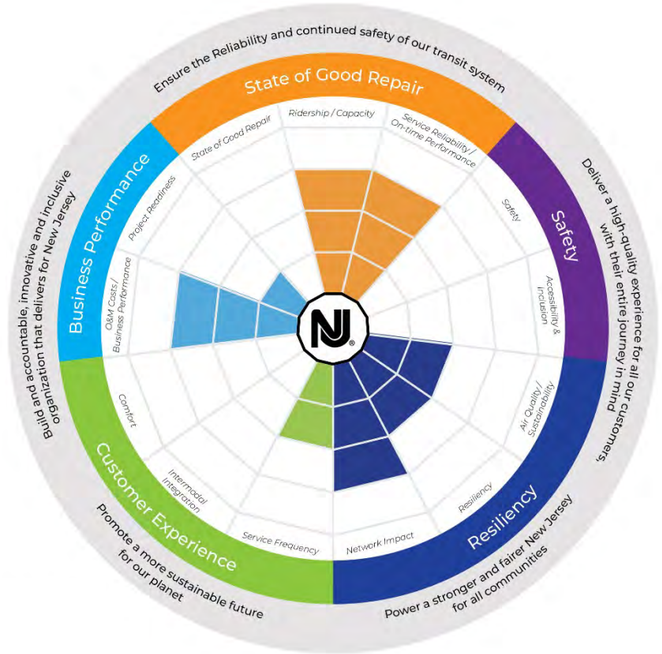
Future Portal North Bridge



Proposed: New Portal South Crossing Adjacent to Portal North Bridge



*Similar to Raritan River Bridge



Value to Customers

- Increased on-time-performance (OTP), safety, and service reliability

Value to State

- Lowers operating expenses and uses public funds efficiently
- Reduces potential injuries associated with increased on-site maintenance work
- Increases return on investment (ROI) from increased ridership

PROJECT SHEET PORTAL BRIDGE CAPACITY ENHANCEMENT (PORTAL SOUTH)

ESTIMATED TOTAL PROJECT COSTS

$431M

O&M Costs/Business Performance
Resulting increase in line capacity and redundancy would decrease operating expenses and allow for increased ridership

Network Impact
The new bridge would improve operations by relieving congestion and increasing capacity along a critically important portion of the NEC

Ridership/Capacity
Double track bridge would increase line capacity to accommodate more trains and ridership growth

Service Reliability/On-Time Performance
New bridge would be operationally redundant to reduce delays and make service more reliable

STRATEGIC GOALS MET

Deliver a high-quality experience for all our customers, with their entire journey in mind

Ensure the reliability and continued safety of our transit system

*Portal South would **increase line capacity and improve operations** along the NEC.*

Description

New York Penn Station serves as a major rail hub for the Long Island Rail Road, Amtrak and NJ TRANSIT. As the busiest terminal station for NJ TRANSIT rail operations, Penn Station New York services Northeast Corridor, North Jersey Coast, Raritan Valley (limited), Morris and Essex, Gladstone, and Montclair Boonton Lines. During peak periods, NJ TRANSIT typically operates on 12 of the terminal's 21 tracks, sharing platform space with Amtrak.

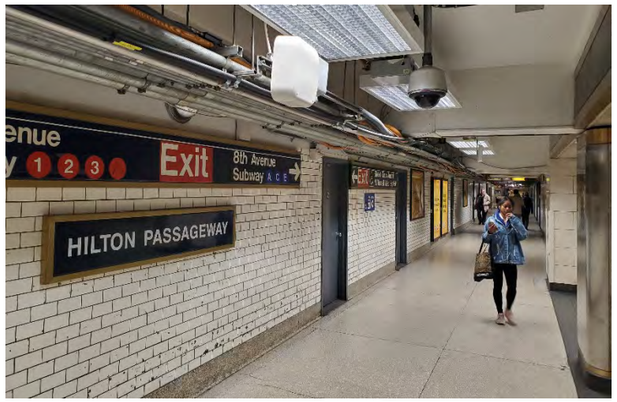
There are serious vertical access and egress issues between platforms which serve NJ TRANSIT trains and station concourse levels. These issues are exacerbated by limited access points within the station and by current separation between the main East and West End concourses. This project would extend the existing Central Concourse to allow for more vertical access to existing train platforms serving NJ TRANSIT, improve the existing Hilton Corridor so it better connects between vertical access points to platforms, and improve signage and wayfinding to facilitate the safe and efficient movement of passengers and visitors. A new accessible entrance between the extended concourse and the street level would be created. These enhancements target commuter safety and convenience to increase capacity and improve passenger experience.

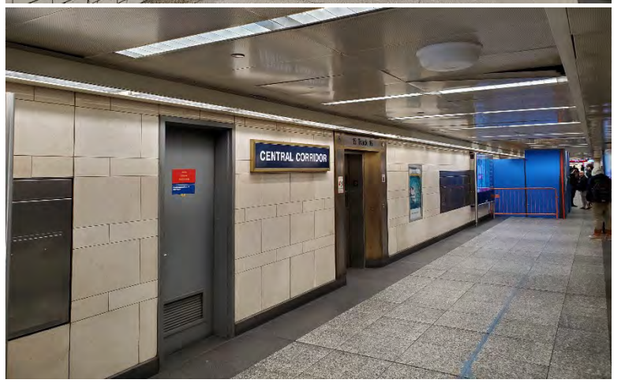
***ESTIMATED PROJECT COSTS (2020 Dollars):**

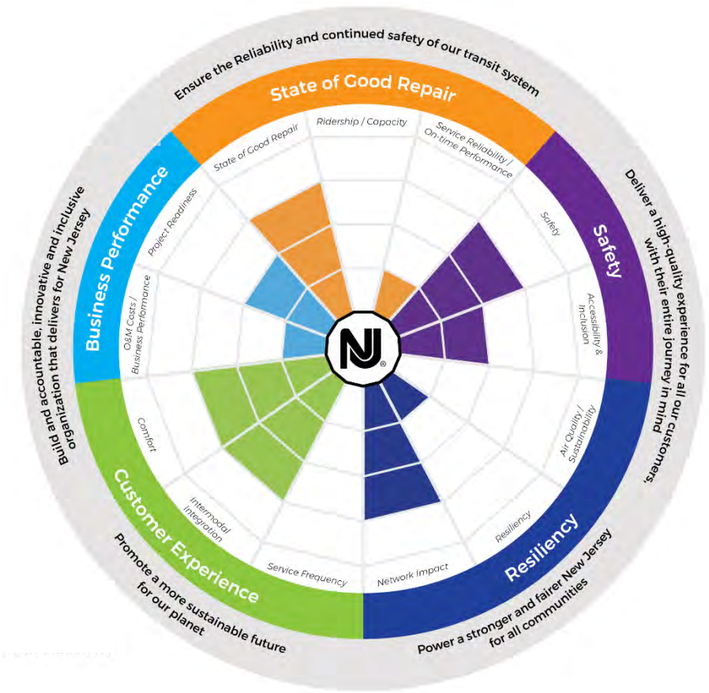
$340 Million

**Estimates are based upon concept for design*

Existing Station Corridors







Value to Customers

- Enhances travel experience with new facilities
- Improves signage and communications to relay station information and rail service status
- Streamlines passenger movement between station and platforms

Value to State

- Increase safety of passengers by reduction of overcrowding on station platforms
- Reduces delays associated with slower passenger egress

PROJECT SHEET PENN STATION NEW YORK - NJ TRANSIT ACCESS IMPROVEMENTS

ESTIMATED TOTAL PROJECT COSTS

$340M

Comfort
New platform access points, signage, and wayfinding would streamline and enhance customer movements

Safety
Platform congestion would be reduced by adding new vertical access and egress points, signage, and wayfinding

Network Impact
Improving access to platforms at NJ TRANSIT's biggest terminal station would reduce delays

State of Good Repair
Building new infrastructure would reduce regular customer access disruptions and increase capacity

STRATEGIC GOALS MET

Deliver a high-quality experience for all our customers, with their entire journey in mind

Ensure the reliability and continued safety of our transit system

*Access improvements at Penn Station New York would **enhance travel experience**, **increase safety**, and **reduce delays**.*

Description

Hoboken Terminal is one of NJ TRANSIT's major transportation hubs, serving over 17,000 passengers on an average weekday with its rail service alone. The terminal also supports bus and light rail passengers, while providing access to PATH trains and ferries to and from New York City.

The Hoboken Terminal and Yard Resilient Redevelopment Project would be a three phased approach to address many of the state of good repair and resiliency challenges that the Terminal faces. At the same times, the redevelopment project would provide opportunities for increasing capacity for rail, bus, light rail, and ferry service. In addition, the redevelopment project would provide opportunities for improving overall operation and passenger flow between the various transportation modes. The capacity improvements would provide opportunities for both increased revenues on several modes, as well as provide NJ TRANSIT with the ability to provide vital system redundancy to both its rail and bus network in the event that primary routes to New York City via the Hudson River Tunnels or bridges become unavailable. This redundancy would also prove invaluable during any major renovation to primary routes to New York City or at any of the major New York City Terminal.

If funded, Phase I of the Redevelopment Program would address the facilities that require immediate attention to maintain state of good repair of current services at the terminal, while facilitating the future long-term development goals of the project captured in Phase II. The first phase of the project would include rehabilitation of the existing Long Hallway and YMCA buildings at the terminal, which are beyond the end of their service life and are in need of rehabilitation to address several noted deficiencies, including the removal of mold and asbestos. Both Long Hallway and the YMCA buildings recently served as facilities and crew quarters for hundreds of NJ TRANSIT employees, some of which have been relocated due to the condition of the noted facilities. Renovation would provide safer and more reliable facility. Rail infrastructure improvements include track, bridge and structural improvements, including traction power and control systems upgrades to increase commuter capacity, mobility and speed. Also included are plans to consolidate the work locations of the Mechanical Equipment Division staff and provisions for additional equipment inspection capabilities.

ESTIMATED PROJECT COSTS (2020 Dollars):

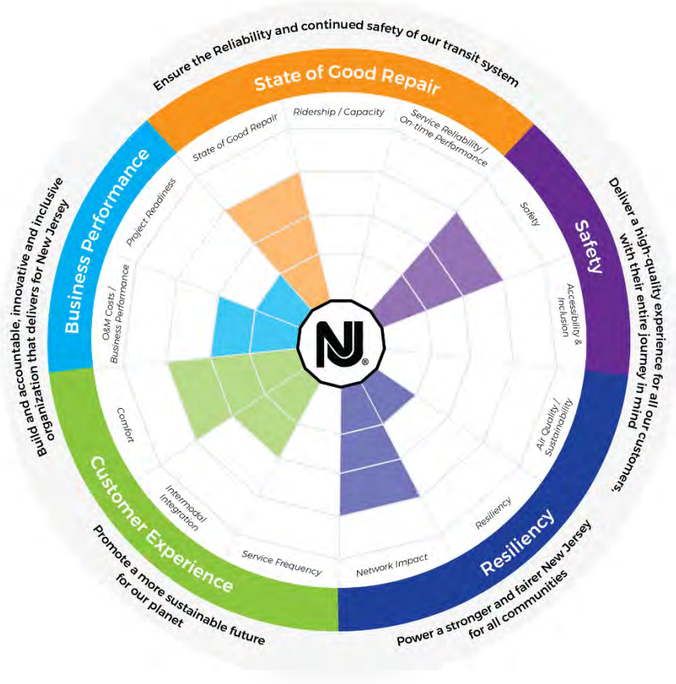
$257 Million

Existing: Hoboken Terminal



Proposed: Hoboken Terminal



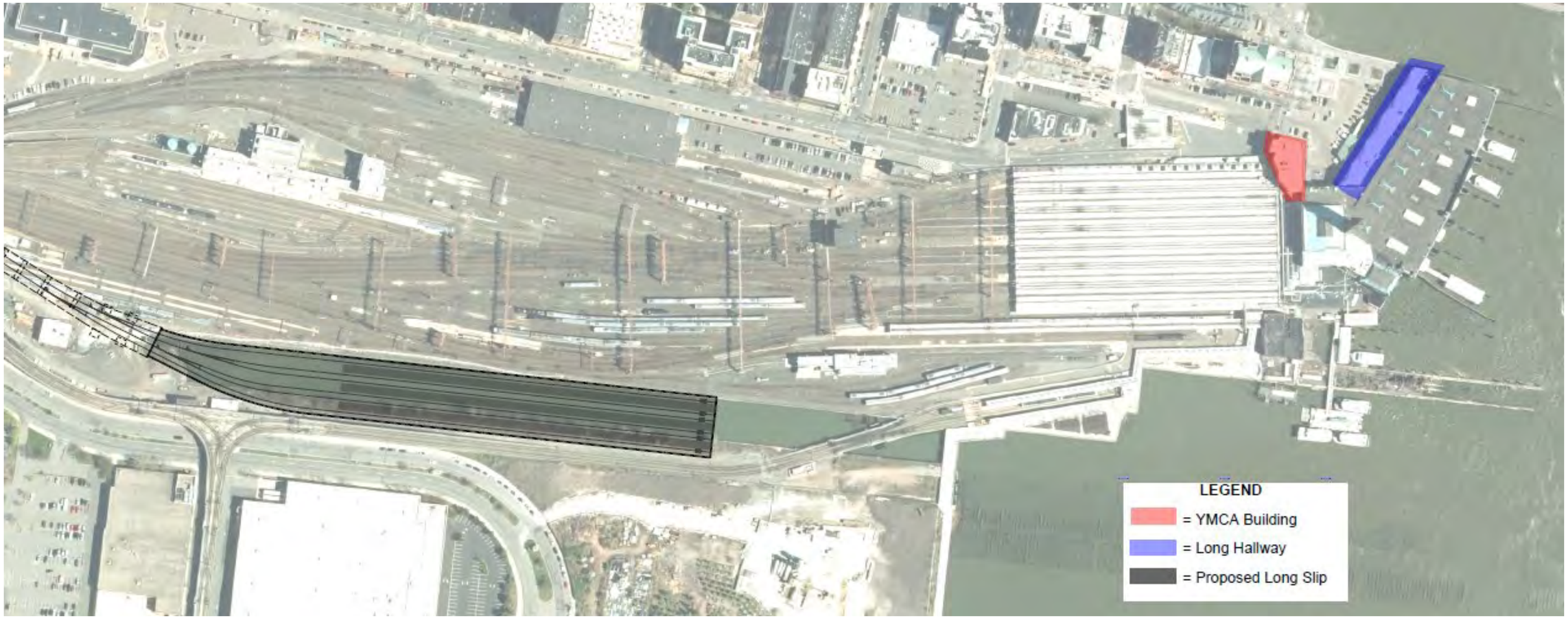


Value to Customers

- Improves state of good repair of facilities
- Lays the groundwork for Phase II of Hoboken Terminal Redevelopment, which will include significant improvements for customers

Value to State

- Eliminates additional expenses with rental of alternative office space
- Enhances safety of working conditions for personnel
- Facilitates Phase II of Hoboken Terminal Redevelopment


LEGEND
= YMCA Building
= Long Hallway
= Proposed Long Slip

PROJECT SHEET HOBOKEN TERMINAL AND YARD RESILIENT REDEVELOPMENT PROGRAM - PHASE I

ESTIMATED TOTAL PROJECT COSTS

$257M

Comfort
Improved facilities would make transfers between modes more comfortable for customers

Network Impact
All NJ TRANSIT modes pass through the station and would be positively impacted by the redevelopment

State of Good Repair
Addressing facilities that require immediate attention would bring them to a state of good repair

Safety
Fixing facilities that are not safe for customers would make it possible for all facilities to be fully utilized in the future

STRATEGIC GOALS MET

Deliver a high-quality experience for all our customers, with their entire journey in mind

Ensure the reliability and continued safety of our transit system

*Redeveloping Hoboken Terminal and Yard would address **state of good repair and resiliency challenges** while **increasing capacity for rail, bus, light rail, and ferry service**.*

Description

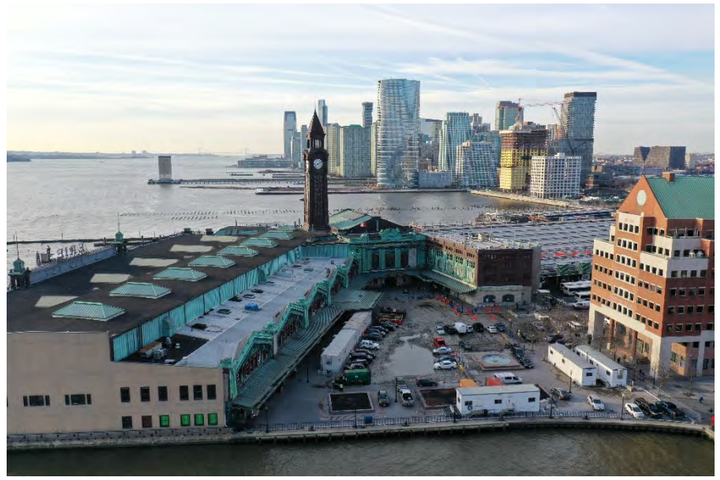
Hoboken Terminal is a critical lynchpin for NJ TRANSIT's system. The terminal's 17 tracks are the terminus for our Pascack Valley, Main/ Bergen, and Gladstone Branch lines. There is also a variety of rail infrastructure at or near the terminal site that assists with daily operations. A rail yard, a fueling facility, and other similar infrastructure pieces are nearby to help ensure service runs efficiently and smoothly. The terminal also has significant bus service as buses from Hoboken travel throughout Hudson County and into New York City. The Hudson Bergen Light Rail also stops at the terminal, and PATH service is present as well.

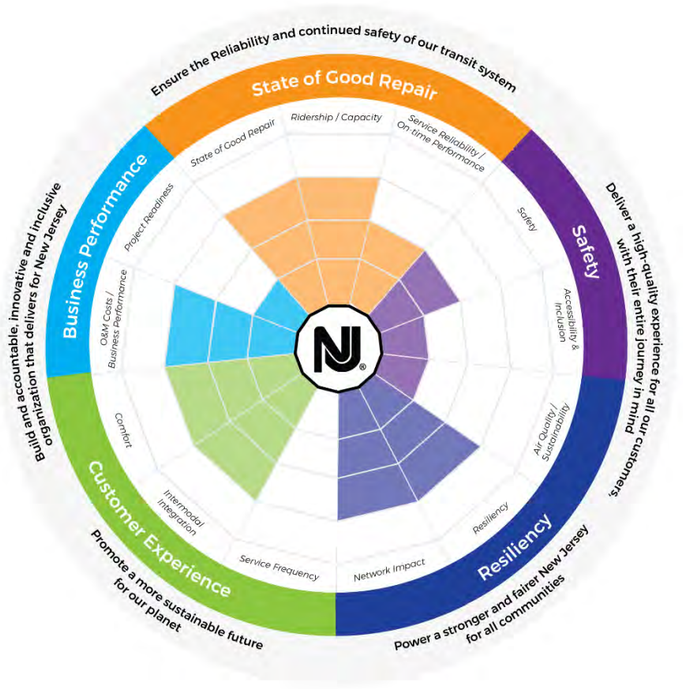
Superstorm Sandy showed, in stark detail, the vulnerability the terminal faces. The storm surge associated with that storm flooded the terminal. Five feet of stormwater flooded the terminal, and it was closed for more than two months as repairs and restorations were made. The terminal remains vulnerable to similar threats in the future. The Capital Plan would address this threat by making the terminal more resilient.

Hoboken Terminal is currently situated on a low-lying area immediately adjacent to the Hudson River, making it susceptible to both periodic nuisance flooding as well as more intense flooding associated with extreme events. The existing terminal layout and aged conditions make flood prevention measures extremely challenging. In 2012 following Superstorm Sandy, operations at Hoboken Terminal were forced to cease until flood waters in the vicinity receded and emergency repairs were conducted. In addition, Hoboken Terminal's historic waiting room was also inundated with water and remained closed for repairs until January 2013.

If funded, the Hoboken Terminal and Yard Resilient Redevelopment Program – Phase II would address many of the resiliency challenges the terminal currently faces, while providing opportunities for increasing the capacity of rail, bus, light rail, and ferry service. In addition, the redevelopment program would provide opportunities for improving overall operation and passenger flow between the various transportation modes. The capacity improvements would provide opportunities for both increased revenues on several modes, as well as provide NJ TRANSIT with the ability to provide vital system redundancy to both the rail and bus networks in the event that primary routes to New York City via the Hudson River Tunnels or bridges become unavailable. This redundancy would also prove invaluable during any major renovation to primary routes to New York City or at any of the major New York City Terminals.

Existing: Hoboken Terminal





ESTIMATED PROJECT COSTS (2020 Dollars):

$2.9 Billion

Value to Customers

- Increases bus and light rail service
- Improves customer access and flow between alternate modes of transportation
- Enhances overall customer experience through implementation of improved technology
- Improves access to iconic transportation hub, market, and gathering place

Value to State

- Improves state of good repair for multimodal infrastructure
- Enhances resiliency of primary multimodal terminal
- Provides robust auxiliary terminal to New York Penn Station, the Port Authority Bus Terminal, and other regional transportation hubs
- Creates potential for additional revenue streams by allowing more opportunities for retail space
- Increases capacity of bus service in and out of Hoboken
- Increases light rail capacity within Hoboken
- Provides a more robust and resilient terminal that has the capacity to act as an emergency transportation hub in the event of a regional catastrophe

The Phase II Resilient Redevelopment Program has several key features:

Elevated Rail Shed and Rail Yard

The rail shed, which houses the train platforms, could be raised approximately 20 feet such that the bottom of structure lies above both FEMA base flood and NJ TRANSIT flood elevations, thereby protecting vital rail infrastructure from both nuisance and extreme event flooding. The raised rail shed could be supported by a framed structure, permitting light rail and/or bus facilities to be housed underneath the shed within the same footprint, along with a new, integrated entrance to the PATH station, providing seamless multimodal access for all customers. The new rail shed would feature high level platforms for improved accessibility to rail service and enhanced safety for both passengers and NJ TRANSIT personnel. Passenger circulation enhancements at the new elevated rail shed would include new stairways, escalators, and elevators to improve customer flow between the various modes of service, PATH Trains and the streets of Hoboken.

The existing yard and approach tracks could also be elevated and supported on a combination of framed structure and structural fill, tying into existing undergrade bridges that cross over Marin Boulevard to the west. Raising of the yard and approach tracks would provide enhanced resiliency for both rail service and train storage. In addition, concurrent reconfiguration of the yards and approaches to Hoboken Terminal during the redevelopment work could provide an opportunity to eliminate some unfavorable track configurations, which were implemented decades ago and have caused operating inefficiencies, speed reductions, and periodic disruptions to rail and yard operations, particularly with some of the newer rail rolling stock. Relocation of service/inspection facilities and other maintenance facilities to a new location nearby could also be included as part of the redevelopment process to augment yard operations, continue maintenance service during construction, and provide opportunities for NJ TRANSIT to reduce noise and pollution in the densely populated city of Hoboken. The elevated and redeveloped yard could be fully electrified.

Restored and Repurposed Terminal Buildings

The existing terminal building consists of multiple sections including the historic Hoboken Waiting Room, the Upper Concourse, and Long Hallway. The Hoboken Terminal and Yard Resilient Redevelopment Program could renovate each portion of the facility, as well as restore and repurpose those sections which have limited use in their present-day configuration within the terminal.

Enhanced flood resistance measures could be implemented at the historic waiting room, which includes passenger facilities such as ticket windows and restrooms. Improvements such as restored and enhanced passenger stairwells and ramps, as well as the introduction of new elevators could improve access for passengers to the elevated rail shed and other parts of the terminal. The existing Upper Concourse, which is situated adjacent to and above the waiting room, currently consists of over 28,000 square feet of unused open space. This area could be restored and repurposed into an iconic marketplace to give both customers and visitors alike access to various retail shops and gathering spaces. The existing Long Hallway, which is adjacent to the Upper Concourse and currently functions as the crew quarters and facilities for NJ TRANSIT personnel, is slated for base renovation during Phase I of the Terminal and Yard Resilient Redevelopment Program to address several existing deficiencies. Like the Upper Concourse, this section could also be repurposed and closely coordinated with the City of Hoboken's vision for development in and around the historic Hoboken Terminal.

Expanded Bus Terminal

The existing bus terminal, which is currently located north of the existing at-grade rail shed, contains only five bus lanes to facilitate bus routes between Hoboken, NYC, and other NJ communities. Existing site constraints, particularly the at-grade rail shed, provide very little room to expand the existing terminal and its capacity. The redevelopment program could relocate the existing bus terminal underneath the proposed elevated rail shed, just southwest of its current location. The proposed bus terminal could include over 20 bus lanes, vastly enhancing capacity. The proximity of the buses to both rail and light rail service would improve passenger movements between the various modes of transportation. The bus passenger waiting areas and concourse could be vastly improved, with wider passenger walkways for improved customer movement, eliminating the existing narrow and congested passenger walkways which traverse bus entry lanes. Additional space for bus parking and layover could also be provided, facilitating the terminal's use as an auxiliary or overflow facility in the event of disruption of service at other major transportation terminals in New York City or the region.

Relocated and Expanded Light Rail Station

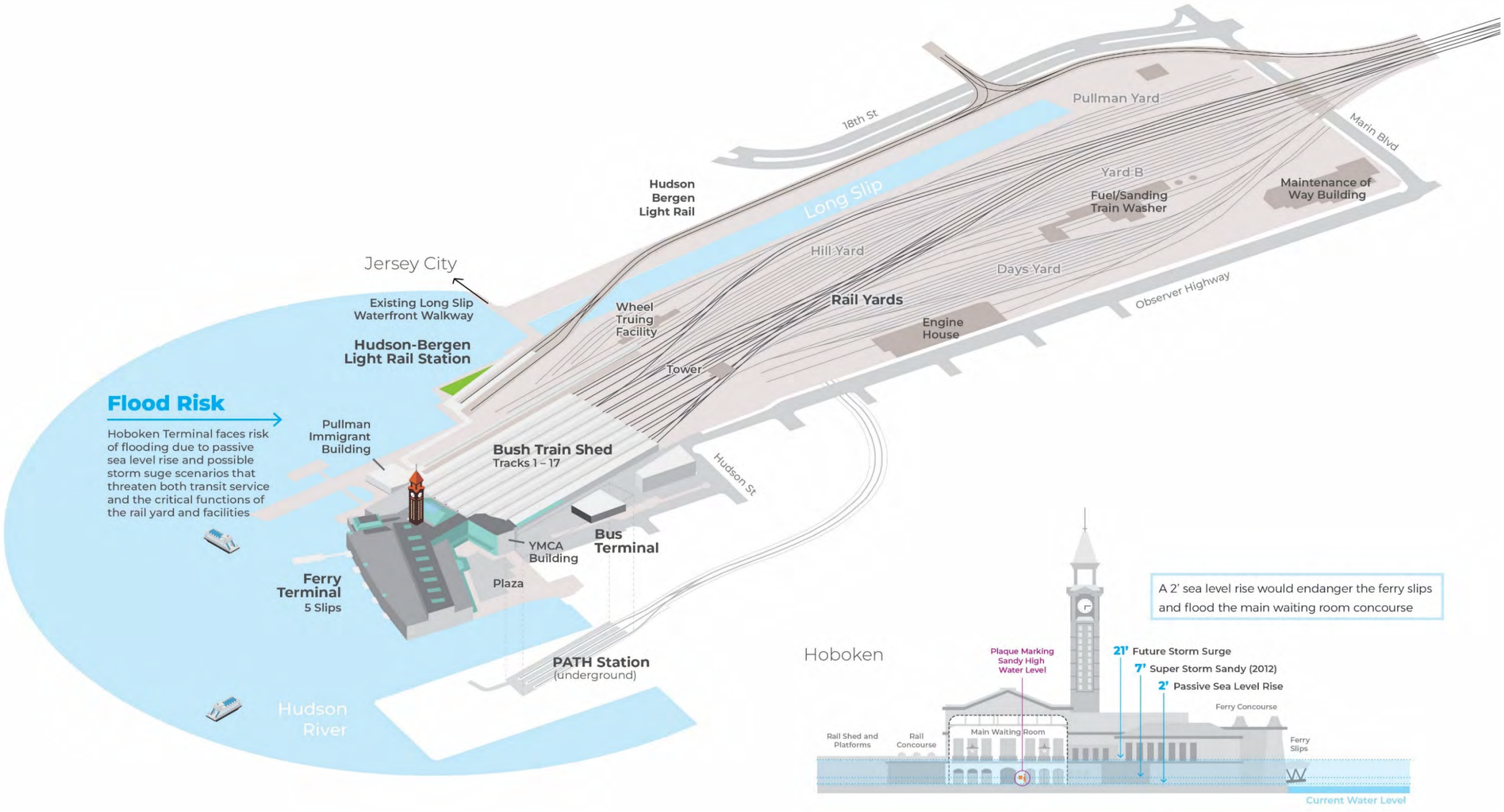
The existing light rail station is located at the far south end of the terminal and rail shed. Its current location is nearly a quarter of a mile walk from the both the adjacent city streets and existing bus terminal, making it very inconvenient for customers to access. It is also far away from the ferry slips and PATH stations, which light rail customers primarily use for transfers to service into NYC. The redevelopment program proposes relocating the light rail station underneath the elevated train shed or above the elevated train shed to better align with the other modes of service at the terminal to bring customers closer to their points of transfer or access to the city streets. In addition, an additional track is proposed to increase light rail station capacity at the terminal. The relocation and additional platform would enhance light rail travel capacity and passenger access and egress efficiency, making it more convenient to customers.

Expansion of South Ferry Terminal

As a part of a multi Trans-Hudson strategy, NJ TRANSIT intends to explore purchasing up to 12 additional high-speed ferry vessels with a vessel size of approximately 350 passengers. These ferries would be purchased in conjunction with the funding ferry terminal enhancements in Hoboken and New York City, and port storage improvements to accommodate this expanded service. Initiatives to accommodate a potential ferry fleet include redevelopment of the existing piers adjacent to Track 17 in the southeast corner of the terminal and are included with the New Jersey Ferry Fleet Expansion Project

Expansion and Redevelopment of Personnel Facilities

Hoboken Terminal is home to a substantial number of NJ TRANSIT employees. Initiatives of the proposed redevelopment could include enhanced capacity and upgraded facilities for NJ TRANSIT employees. During Phase I, the YMCA building would be refurbished, creating an upgraded space for NJ TRANSIT employee use. Construction of a new crew quarters is contemplated as part of the Long Slip Canal Phase II work and would be located at the terminal. A new police headquarters could also be constructed on site, along with medical, EAP, and station management. To support all NJ TRANSIT employees, a new parking lot would be proposed on site.


Jersey City
Existing Long Slip
Waterfront Walkway
Hudson-Bergen
Light Rail Station
Flood Risk
Hoboken Terminal faces risk of flooding due to passive sea level rise and possible storm suge scenarios that threaten both transit service and the critical functions of the rail yard and facilities
Pullman
Immigrant
Building
Ferry
Terminal
5 Slips
Bush Train Shed
Tracks 1 – 17
YMCA
Building
Plaza
Bus
Terminal
PATH Station
(underground)
Hudson
River
Hudson
Bergen
Light Rail
18th St
Long Slip
Wheel
Truing
Facility
Tower
Hill Yard
Rail Yards
Engine
House
Days Yard
Pullman Yard
Yard B
Fuel/Sanding
Train Washer
Maintenance of
Way Building
Marin Blvd
Observer Highway
Hudson St
A 2' sea level rise would endanger the ferry slips and flood the main waiting room concourse
Hoboken
Plaque Marking
Sandy High
Water Level
21' Future Storm Surge
7' Super Storm Sandy (2012)
2' Passive Sea Level Rise
Ferry Concourse
Rail Shed and
Platforms
Rail
Concourse
Main Waiting Room
Ferry
Slips
Current Water Level

PROJECT SHEET HOBOKEN TERMINAL AND YARD RESILIENT REDEVELOPMENT PROGRAM - PHASE TWO

ESTIMATED TOTAL PROJECT COSTS

$2.9B

Resiliency
New facilities would be resilient to nuisance flooding and extreme events and provide redundancy in the even of service disruptions

O&M Costs/Business Performance
New facilities would reduce maintenance costs and develop retail, as well as increase capacity of bus and light rail and improve rail operation to allow the facility to handle more customers

STRATEGIC GOALS MET

Deliver a high-quality experience for all our customers, with their entire journey in mind

Ensure the reliability and continued safety of our transit system

State of Good Repair
New facilities, including rail, light rail, and bus infrastructure, would replace aging facilities, rehabilitate a historic building, and modernize obsolete equipment

Intermodal Integration
Streamlined passenger flow and new modal facilities would improve customer access to all modes of transit

Redeveloping Hoboken Terminal and Yard would ***improve state of good repair***, ***upgrade customer experience***, *and allow for* ***more efficient intermodal integration***.

Description

Hoboken Terminal is one of NJ TRANSIT's major transportation hubs, serving over 17,000 passengers on an average weekday with its rail service alone. The terminal also supports bus and light rail passengers, while providing access to PATH trains and ferries to and from New York City.

The Hoboken Redevelopment Project is a three phased approach to address many of the state of good repair and resiliency challenges which the terminal faces, while at the same time provide opportunities for increasing capacity for rail, bus, light rail, and ferry service.

Concurrent to Phase I is the proposed work on Long Slip. Adjacent to the terminal and alongside the existing Hoboken Yard at the Hudson River Waterfront is Long Slip Canal. It is a one-third mile long, one hundred-foot wide canal that was formerly used for marine shipping traffic, but has been inactive for more than 40 years. In 2012, the storm surge from Superstorm Sandy caused the Long Slip Canal to overflow its banks resulting in significant flood damage to both passenger and yard facilities at Hoboken Terminal. Weeks of remedial work followed this event. Several tracks at the terminal were also temporarily out of service, significantly reducing the rail capacity at this vital transit hub.

If funded, the Long Slip redevelopment would initially address some of the resiliency needs at Hoboken Terminal while providing additional operational flexibility. The project is broken into two phases: Phase I includes filling of the existing canal with structural fill and surcharging; Phase II includes construction of six new tracks with high level platforms and a small crew quarters facility on the filled in canal. These additional tracks would be constructed above the base flood elevation and provide emergency capacity in the event multiple main track outages are incurred, such as following an extreme weather event. This increased capacity would also allow for implementation of the Hoboken Terminal Redevelopment Plan which includes a comprehensive approach to providing substantial resiliency and redundancy as well as enhanced capacity of both Hoboken Terminal, ensuring its service as an essential hub facility within the NJ TRANSIT transportation network.

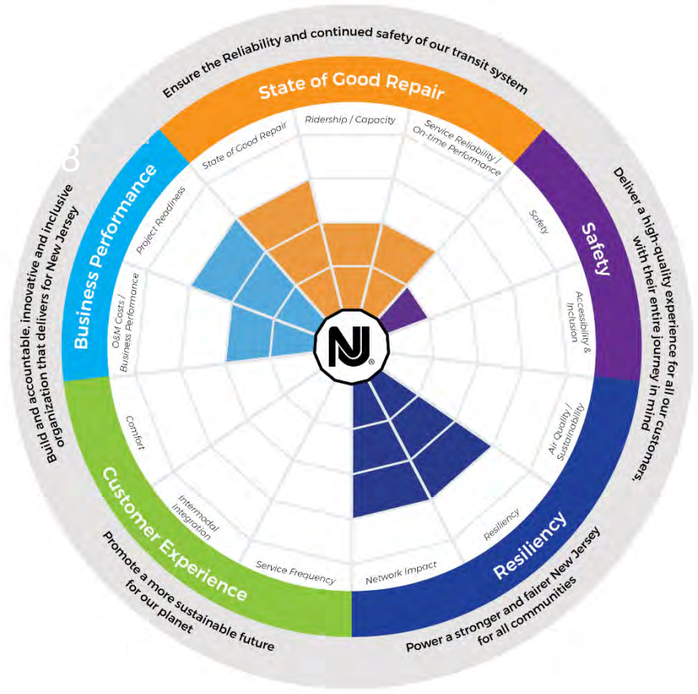
***ESTIMATED PROJECT COSTS (2020 Dollars):**

$195 Million

**Total estimated 2020 project cost indicates total cost over span of the project and includes funds already spent.*

Existing: Long Slip Canal





Value to Customers

- Reduces train delays following extreme weather events
- Increases operational flexibility

Value to State

- Increases service reliability and mitigates revenue disruptions
- Provides additional rail capacity as needed to accommodate future ridership growth

PROJECT SHEET HOBOKEN LONG SLIP

ESTIMATED TOTAL PROJECT COSTS

***$195M**

**TOTAL ESTIMATED 2020 PROJECT COST INDICATES TOTAL COST OVER SPAN OF THE PROJECT AND INCLUDES FUNDS ALREADY SPENT*

Network Impact
Increased rail capacity at this essential transit hub would positively impact rail operations across the NJ TRANSIT network

Ridership
Increased rail operational capacity at the station would enable more riders to utilize the rail network via Hoboken

State of Good Repair
Increasing track operational capacity and raising track beds and platforms would bring these facilities up to a state of good repair

Resiliency
Constructing tracks and platforms above base flood elevation, providing emergency capacity, and allowing for implementation of Hoboken Redevelopment Plan would improve resiliency

STRATEGIC GOALS MET

Deliver a high-quality experience for all our customers, with their entire journey in mind

Ensure the reliability and continued safety of our transit system

*Redevelopment of Long Slip would **address some resiliency needs** at Hoboken Terminal while **providing operational flexibility**.*

Description

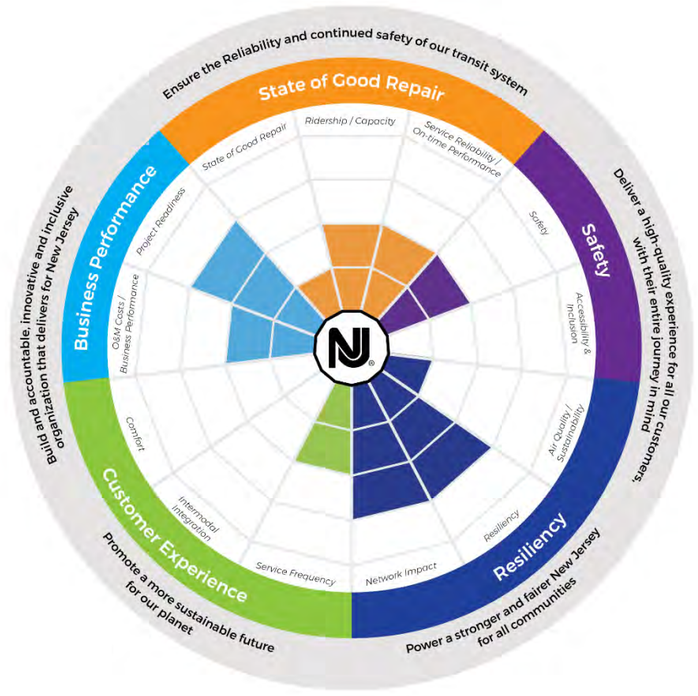
NJ TRANSIT's service to New York City currently relies on two aging tunnels operated and dispatched by Amtrak. On average, over 94,380 boardings occur at New York Penn Station on weekdays, indicating the number of New Jerseyans rely on this critical connection for the growth of their careers and the number of New Jersey communities that rely on the Trans-Hudson growth story to remain vibrant and sustainable communities.

The Hudson Tunnels, which were built in the 1910s, are being used to accommodate the demands of a local commuter service run by NJ TRANSIT and a regional high speed rail run by Amtrak. Following damage from Superstorm Sandy, the significantly aged tunnels required significant repairs and rehabilitation. With projected growth in New Jersey and a desire by Amtrak to run faster trains that will require increased track volume to accommodate, a new tunnel is needed to alleviate the current capacity constraints.

With the failure of the Access to the Region's Core (ARC) and the delay to Gateway, NJ TRANSIT intends to invest in updating the current design for a new Hudson River Tunnel to accommodate the significant changes in the built environment in New York City and in New Jersey. Additionally, NJ TRANSIT would purchase the required land for a new yard to accommodate the future growth of the NJ TRANSIT's commuter rail system. By making this early investment NJ TRANSIT intends to continue to drive for a new Trans-Hudson connection that accommodates the needs of communities across New Jersey.

Existing: Hudson Tunnels





***ESTIMATED PROJECT COSTS (2020 Dollars):**

***$2.4 Billion**

*Work and funding made in conjunction with Gateway Portal Partners

Value to Customers

- Increases Trans-Hudson service
- Improves rail reliability and on-time performance (OTP)

Value to State

- Expands Trans-Hudson capacity needed to accommodate future economic growth.
- Provides additional train storage and maintenance capacity to accommodate rail fleet growth

PROJECT SHEET GATEWAY STORAGE YARD AND HUDSON TUNNEL DESIGN

ESTIMATED TOTAL PROJECT COSTS

$2.4B

**WORK AND FUNDING MADE IN CONJUNCTION WITH GATEWAY PORTAL PARTNERS*

Resiliency
Update design of the tunnel to withstand future weather events

Network Impact
The additional yard would accommodate trains across the NJ TRANSIT rail system

Ridership
Updated tunnel design would alleviate capacity constraints and allow for more trains and riders to pass through

Service Reliability
Reduced capacity constraints would increase service reliability for trains

STRATEGIC GOALS MET

Deliver a high-quality experience for all our customers, with their entire journey in mind

Ensure the reliability and continued safety of our transit system

Update the current design for a new Hudson River Tunnel to ***accommodate needed growth in the NJ TRANSIT commuter rail system****.*

Project Sheet | New Jersey Ferry Fleet Expansion

Description

NJ TRANSIT's service to Hoboken Terminal relies heavily on agency partnerships with the Port Authority's PATH system and private ferry carriers to bring customers to New York City. As a part of a multi Trans-Hudson strategy, NJ TRANSIT intends to purchase up to 12 additional high-speed ferry vessels with a vessel size of approximately 350 passengers. These ferries would be purchased in conjunction with the funding ferry terminal enhancements in Hoboken and New York City, and port storage improvements to accommodate this expanded service.

If funded, an expanded high-speed ferry fleet would improve Trans-Hudson capacity, improve customer comfort, and help mitigate future growth strains on the transit systems linking New Jersey residents to New York City. Ferries also play a critical role in emergency situations and give NJ TRANSIT the flexibility to include the fleet as a holistic strategy to mitigate day-to-day or longer-term service disruptions. To accommodate the expanding fleet, the existing piers adjacent to Track 17 in the southeast corner of Hoboken Terminal would be redeveloped to supplement the existing ferry terminal. Additional floating docks would also be installed at Pier 78 in NYC to accommodate growth in service.

ESTIMATED PROJECT COSTS (2020 Dollars):

$414 Million

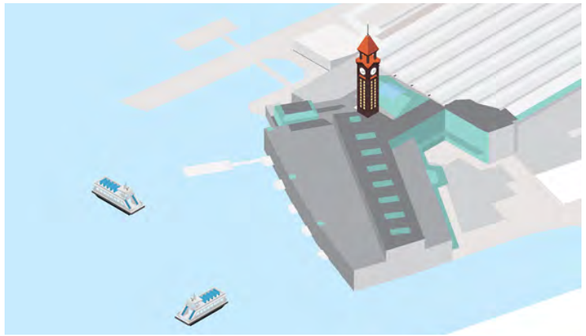
Value to Customers

- Provides faster, more comfortable service to NYC
- Creates greater intermodal opportunities at Hoboken

Value to State

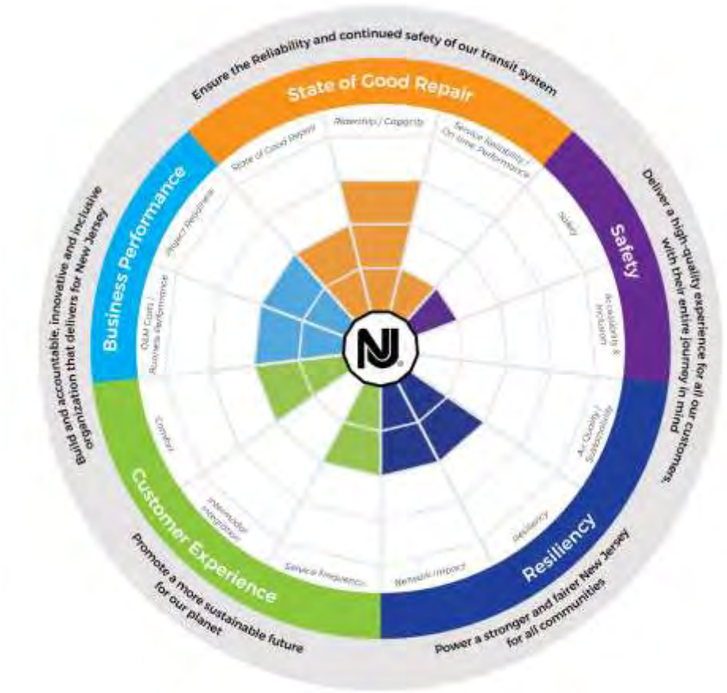
- Expands Trans-Hudson capacity needed to accommodate future economic growth
- Increases return on investment (ROI) from increased ridership

Hoboken Terminal



Ferry Fleet Expansion

	Line Item
1	New Ferries (High Speed Vessels 350 passengers) X 12
2.1	Design of walkway connection between 7-train & ferry terminal
2	1 pier with 4 floating docks at pier 78 (NYC)
3	Upgrades to Hoboken Piers and 4 additional floating docks
4	Fleet storage dock



PROJECT SHEET NEW JERSEY FERRY FLEET EXPANSION

ESTIMATED TOTAL PROJECT COSTS

$414M

Network Impact
Improved and expanded ferry operations would enhance the transit link between the state of New Jersey and Manhattan

State of Good Repair
Expanding and upgrading the ferry fleet would enhance service and improve overall state of good repair

Ridership/Capacity
Expanded service and a modernized ferry fleet would increase ridership

Comfort
New ferries would be equipped with modern features to maximize customer experience

STRATEGIC GOALS MET

Deliver a high-quality experience for all our customers, with their entire journey in mind

Power a stronger and fairer New Jersey for all communities

An expanded high-speed ferry fleet would ***improve Trans-Hudson capacity, customer comfort****, and* ***mitigate any future strains on transit systems*** *linking New Jersey to New York City.*

Appendix B Capital Plan Project Sheets

Light Rail



NJTRANSIT
The Way To Go.

Description

NJ TRANSIT's River LINE provides a vital connection from Trenton to Camden for 8,690 weekly riders. However, the final 1.5 miles of the service experiences frequent disruptions from localized flooding. The flooding occurs in Camden's downtown business and entertainment district during rain events exasperated by high tides from the Delaware River. Flooding that rises above the curb level halts River LINE service, forcing NJ TRANSIT to supplement the service with bus operations. The River LINE Right-of-way (ROW) Flooding Mitigation Study would evaluate the drainage system alongside the tracks between the Cooper Street/Rutgers station to Entertainment Center and determine upgrades that could alleviate the flooding and allow continuous service.

If funded, the study would include recommendations for repairs to the track structure and drainage system at each station location. The study would also identify steps to ensure compliance with New Jersey's stormwater regulations, identify where the water discharges after it enters an inlet, and if the existing stormwater pipes are operational. Coordination with the City of Camden would be need if additional flood mitigation measures are identified outside the NJ TRANSIT River LINE ROW.

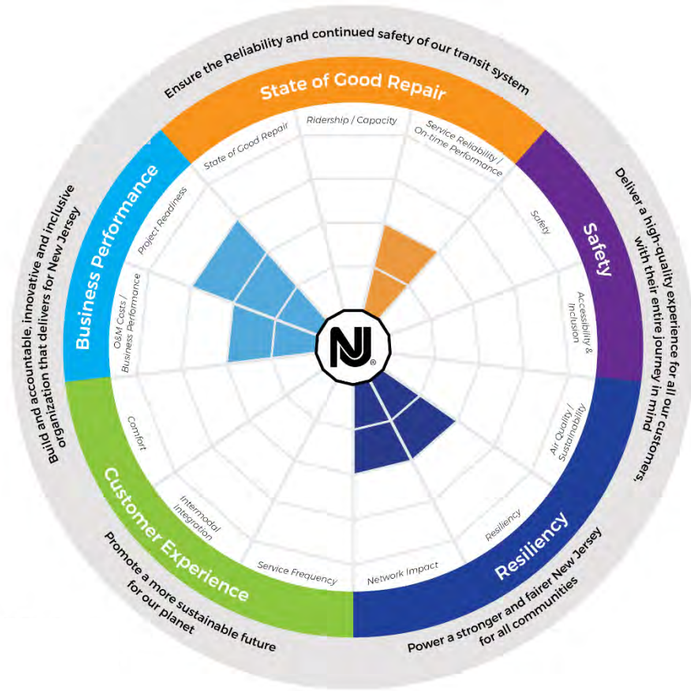
***ESTIMATED PROJECT COSTS (2020 Dollars):**

$1 Million

**Project cost is for study phase only*

Existing: River LINE





Value to Customers

- Decreases delays caused localized flooding

Value to State

- Increases service reliability
- Reduces operational costs of redundant bus service, providing more efficient use of public funds

PROJECT SHEET RIVER LINE ROW FLOODING MITIGATION STUDY

ESTIMATED TOTAL PROJECT COSTS

$1M

Network Impact
Mitigating flooding events would improve overall River LINE service and decrease train cancellations

Resiliency
Improved drainage to mitigate flooding events would make the River LINE ROW more resilient

Service Reliability/On-Time Performance
Decreasing incidents of flooding would ensure more reliable service along the River LINE

O&M Costs/Business Performance
Mitigating flooding along the River LINE ROW would decrease operational delays and reduce maintenance costs

STRATEGIC GOALS MET

Deliver a high-quality experience for all our customers, with their entire journey in mind

Promote a more sustainable future for our planet

*The study would result in recommendations to **mitigate River LINE ROW flooding** and **determine infrastructure upgrades to allow continuous service**.*

Description

The NJ TRANSIT River LINE Light Rail provides service between the Walter Rand Transportation Center in Camden, NJ, and the Trenton Transit Center in Trenton. This line currently services an average of 8,700 riders per average weekday, which is well above the originally estimated 5,500 per day. Given the growth in ridership, it is important that all rail line cars operate properly to ensure a safe and reliable commute for passengers. However, the existing River LINE Light Rail fleet has surpassed the midpoint of its service life and requires a mid-life overhaul to ensure adequate operation and that it meets continued demands of the system.

If funded, this project would provide mid-life overhauls to the existing light rail vehicles. This would include both mechanical and customer facing repairs, replacements, and upgrades. Furthermore, this project would follow the Engine Repower effort, which is an ongoing NJ TRANSIT project that is replacing the engines in many of the vehicles. These engines would meet current EPA standards for emissions, provide better fuel efficiency, and include upgrades to its control and diagnostic capabilities. These overhauls would ultimately extend the vehicle service life by a minimum of 10 years and would provide a safer and more reliable experience for passengers.

***ESTIMATED PROJECT COSTS (2020 Dollars):**

$85 Million

** Assumes overhauling 8 cars per year; includes engine repower work*

Value to Customers

- Helps provide more reliable service by reducing risk of loss of equipment due to maintenance issues
- Increases customer comfort and experience

Value to State

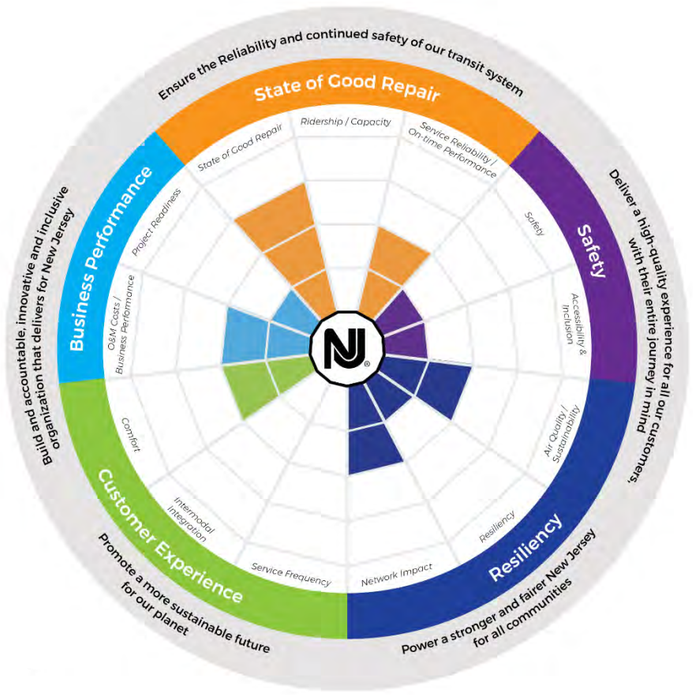
- Lowers operating cost by utilizing a more fuel-efficient engine
- Minimizes environmental impacts by using EPA compliant engines
- Minimizes loss in revenue from service disruptions

Existing: River LINE Fleet



Proposed: Fleet Overhaul





PROJECT SHEET RIVER LINE FLEET OVERHAUL

ESTIMATED TOTAL PROJECT COSTS

$85M

Service Reliability/On-Time Performance
More efficient equipment would reduce service delays and make River LINE service more reliable

Comfort
Customer-facing upgrades would make light rail trips more comfortable for customers

O&M Costs/Business Performance
More efficient equipment would reduce operating costs

State of Good Repair
Mid-life overhauls and repairs provided to light rail vehicles would improve state of good repair

STRATEGIC GOALS MET

Deliver a high-quality experience for all our customers, with their entire journey in mind

Ensure the reliability and continued safety of our transit system

A mid-life overhaul of the River LINE fleet is required to ***ensure operations would meet the demands*** *of a growing system.*

Description

In 2002, the Newark City Subway system was converted from the original PCC streetcar vehicles, to the current Newark Light Rail system (NLR). The original light rail vehicles (LRVs) introduced along the NLR consisted of three-section, single-articulating units. In 2015, 35 of these LRVs were scheduled for modification from three-section, single-articulating units to five-section, double-articulating units. The anticipated ridership growth of the NLR has necessitated a further expansion of capacity.

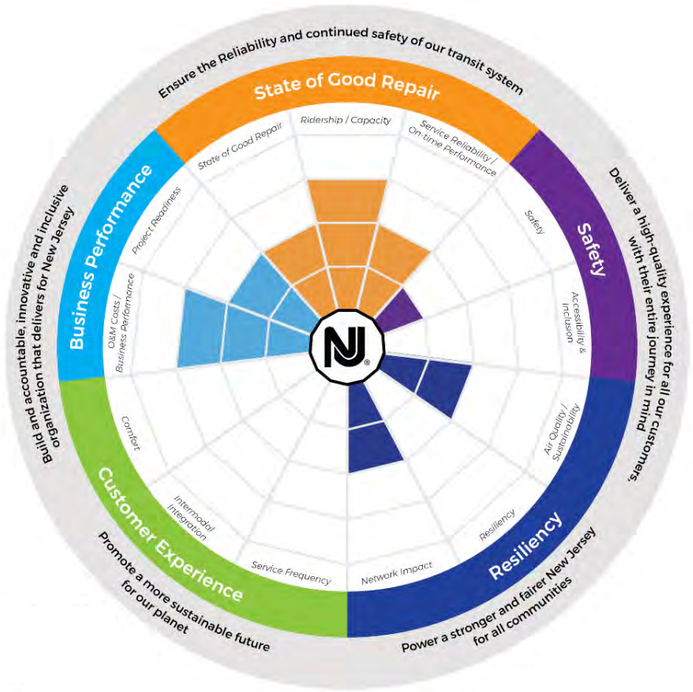
If funded, 11 additional vehicles could be modified from three-section units to five-section units, bringing increased capacity to the NLR to meet anticipated demand. To allow for use of these longer units within the NLR system, interlockings and switch modifications near Fulton Street and Broad Street, specified and budgeted as part of NLR programmatic work, would first need to be completed. The scope of the NLR Capacity Enhancement Program could then be executed, including modification and extension of the 11 light rail vehicles, an additional new power substation, and modifications to the existing VBF yard to allow for storage of the longer LRVs.

ESTIMATED PROJECT COSTS (2020 Dollars):

$33 Million

Existing: NLR Light Rail Vehicle





Value to Customers

- Increases capacity and comfort on the NLR system
- Reduces delays due to overcrowding
- Enhances safety and service reliability

Value to State

- Increases capacity to meet growing ridership demand
- Increases return on investment (ROI) from increased ridership

PROJECT SHEET NEWARK LIGHT RAIL (NLR) CAPACITY ENHANCEMENT PROGRAM

ESTIMATED TOTAL PROJECT COSTS

$33M

Comfort
Expanded vehicle capacity and subsequent infrastructure improvements would improve customer comfort by reducing overcrowding and delays

Network Impact
Increasing capacity and upgrading switches and interlockings will improve service along the entire NLR network

Ridership/Capacity
Modifying and extending light rail vehicles would expand capacity to meet anticipated demand

O&M Costs/Business Performance
Increasing capacity and reliability would improve business performance and return on investments

STRATEGIC GOALS MET

Deliver a high-quality experience for all our customers, with their entire journey in mind

Ensure the reliability and continued safety of our transit system

Increasing capacity on the NLR would ***meet anticipated demand*** *while* ***improving customer comfort and service reliability****.*

Description

The Newark Light Rail (NLR) has twelve stations along the Grove Street Line of the original Newark City Subway System that need improvements to meet regulatory requirements, enhance customer experience, and/or improve business performance. Many of these stations have not been renewed since system conversion from PCC streetcar vehicles to light rail cars in 2002.

Four NLR stations have accessibility improvement opportunities. They are Park Avenue, Norfolk Avenue, Warren Street/NJIT and Military Park. If funded, proposed improvements would include construction of elevators, platform reconstruction, improved station signage, and communications.

Passenger safety enhancements at stations across the NLR would include the introduction of Platform Edge Doors (PED) to prevent passengers on the platforms from entering track areas and/or from getting too close to moving trains. These enhancements would also accommodate future technology upgrades.

Fare collection on the NLR has been an issue under the current proof of payment system. Introduction of a systemwide point of entry fare collection via touch and go or optical barcode ticket collection would allow for consistent and increased light rail revenue collections. Improvements to ticketing and fare validation would be introduced.

***ESTIMATED PROJECT COSTS (2020 Dollars):**

$130 Million

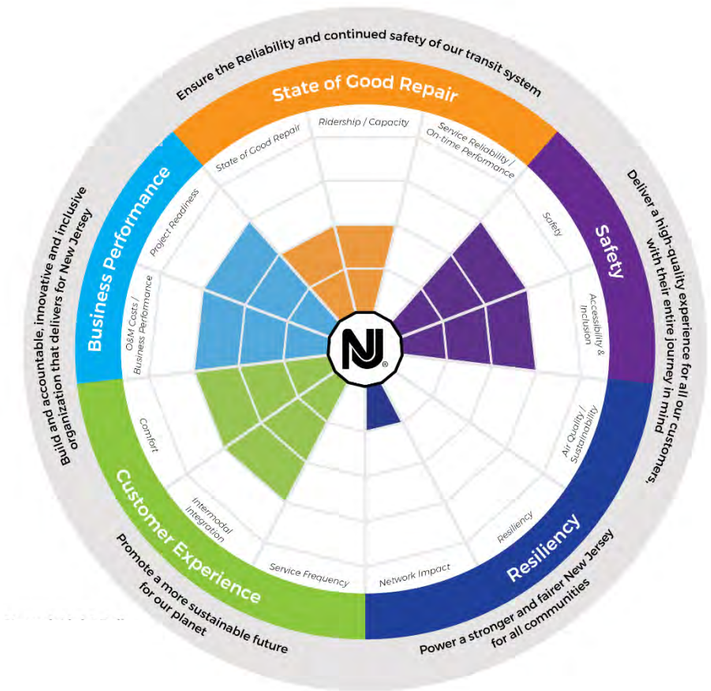
**Estimates are based upon concept for design*

Existing: Station without elevator access (Norfolk Avenue)



Proposed: Example of elevator access to platform (Bloomfield Ave)





Value to Customers

- Increases access to NLR system for passengers
- Provides access to cleaner, safer, and well-lit stations
- Enhances signage and communications to relay station information and rail service status

Value to State

- Reduces risk of accidents by inhibiting passenger entry to tracks
- Increases revenues through consistent and efficient fare collection

Project Sheet | Newark Light Rail (NLR) – Station Modernization & Access Program

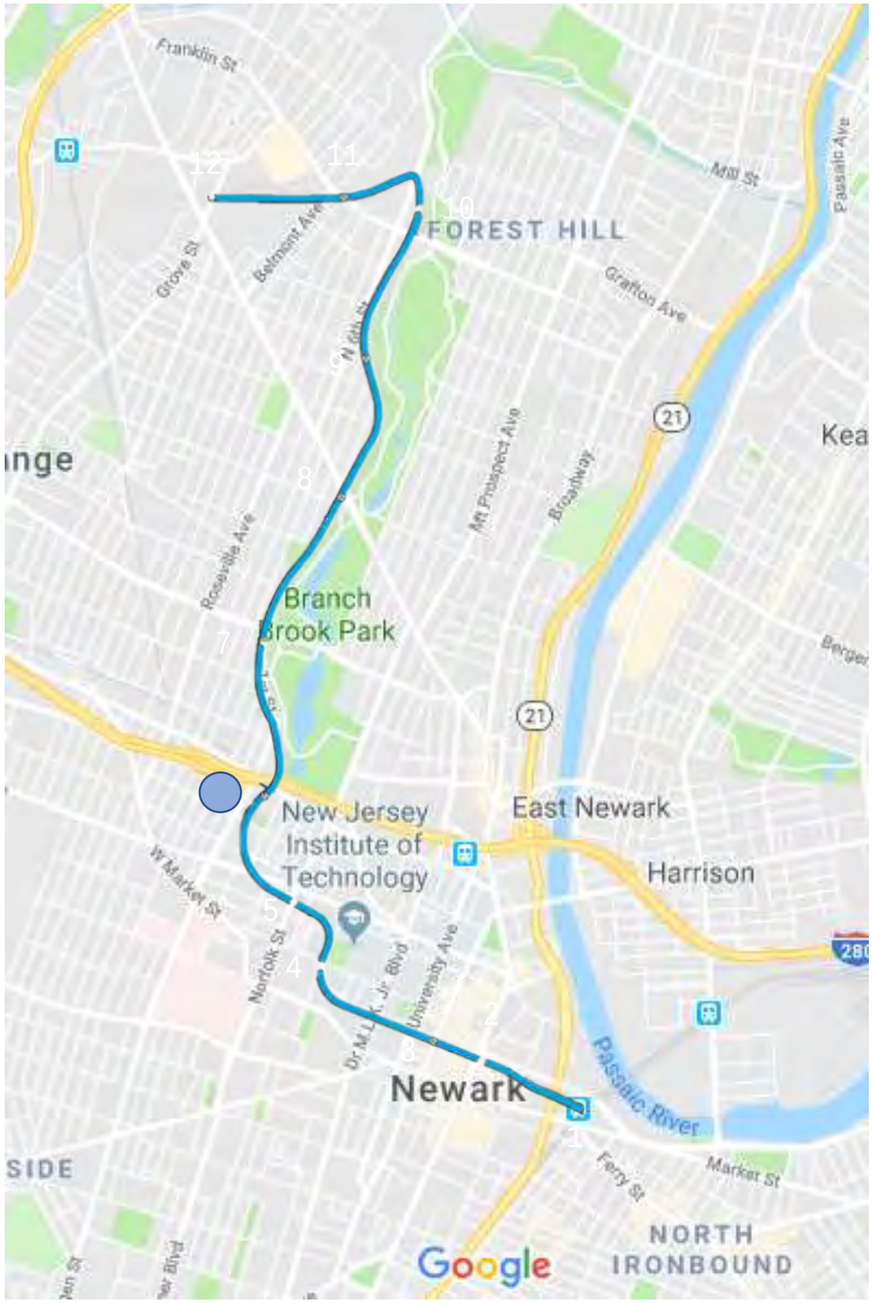
Newark Light Rail Grove Street Line		Passenger Data		Proposed Improvements				
#	Station	Average Weekday Boardings	% Per Line	General	Access	Platform Edge Doors	Point of Entry Fare Collection	
1	Newark Penn **	6225	34%	✓		✓	✓	
2	Military Park	1582	9%	✓	✓	✓	✓	
3	Washington Street	1041	6%	✓		✓	✓	
4	Warren Street/NJIT	1012	5%	✓	✓	✓	✓	
5	Norfolk Street	827	4%	✓	✓	✓	✓	
6	Orange Street	1027	6%	✓		✓	✓	
7	Park Avenue	1403	8%	✓	✓	✓	✓	
8	Bloomfield Avenue	1281	7%	✓		✓	✓	
9	Davenport Street	545	3%	✓		✓	✓	
10	Branch Brook Park	2174	12%	✓		✓	✓	
11	Silver Lake	530	3%	✓		✓	✓	
12	Grove Street	809	4%	✓		✓	✓	

**General Improvements include cleaning, sealing, painting (steel and concrete), signage, lighting, local tunnel repairs*

***Newark Penn Station services both NLR Grove Street and Broad Street Lines*

LEGEND:

Opportunities to Improve Accessibility



PROJECT SHEET NEWARK LIGHT RAIL STATION MODERNIZATION & ACCESS PROGRAM

ESTIMATED TOTAL PROJECT COSTS

$130M

Safety
Reconstructed platforms, Platform Edge Doors, and new signage would provide a safer platform experience

State of Good Repair
Station service life would be extended and aesthetic improvements would positively impact the station experience

STRATEGIC GOALS MET

Deliver a high-quality experience for all our customers, with their entire journey in mind

Ensure the reliability and continued safety of our transit system

Comfort
Enhanced lighting and improved wayfinding at stations would improve customer comfort

Accessibility and Inclusion
Station design would follow universal design guidelines, and elevators would be added

Four Newark Light Rail stations would be accessible for all and Platform Edge Doors would improve safety and fare enforcement.

Description

The Hudson Bergen Light Rail (HBLR) Hoboken Wye is a level junction of the HBLR northern and southern alignments, located on elevated viaduct to the west of Hoboken Terminal. The current configuration includes two tracks from both the northern and southern HBLR alignments meeting in a “T-intersection” at the Wye, with the ability for light rail vehicles (LRVs) to move from any one approach to either of the other two. Currently, the HBLR is operating at capacity through the existing Wye Junction. The HBLR system will be subject to additional demand for train service as a result of projected overall growth in ridership, as well as the Northern and Route 440 expansions. Increasing frequencies is the only practical method of increasing HBLR service to meet anticipated growth and expansion.

If funded, the proposed Hoboken Wye Bypass project would add a third track at the junction on a northern alignment, extending from the nearby Grove Street undergrade bridge to Hoboken Terminal, providing increased capacity to facilitate more frequent service. An integral part of the project would include a new light rail platform at Hoboken Terminal to the East. In addition, construction of a new Grove Street Station would be completed in the adjacent developing neighborhood to the West. This effort would require the reconstruction of a railroad traction substation and an easement from developer owned property. Coordination with the proposed adjacent Long Slip project and the Hoboken Terminal Restoration and Resiliency Project has been ongoing and will be essential as the Wye Bypass Track would not have utility if the alignment geometry is compromised and meaningful operating speed (minimum 15 mph) is not attained.

ESTIMATED PROJECT COSTS (2020 Dollars):

$89 Million

Value to Customers

- Improves reliability and eliminate potential delays waiting for crossing trains at the current junction
- Provides new point of entry to HBLR

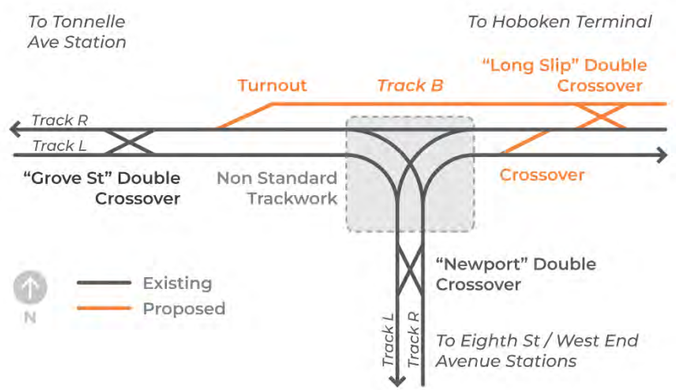
Value to States

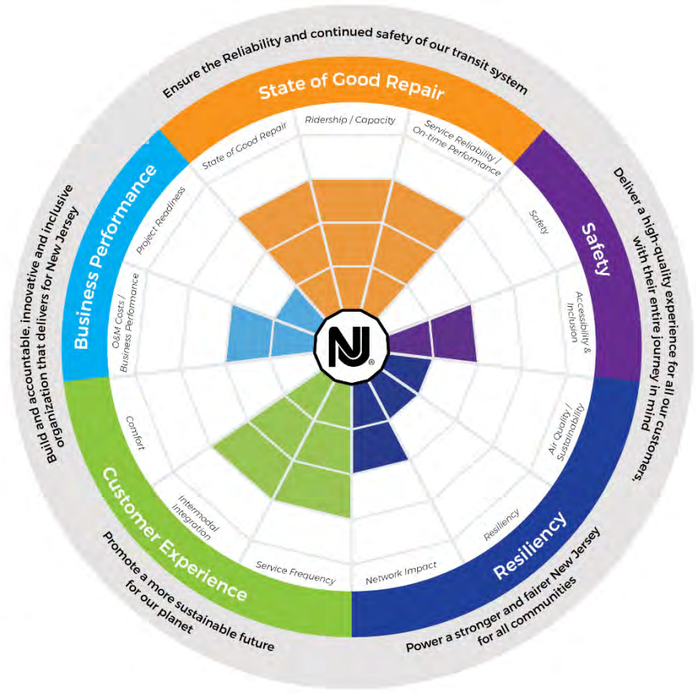
- Provides additional capacity to meet growing demand for service

Existing: Hoboken Wye Junction



Proposed: New Bypass





PROJECT SHEET HUDSON BERGEN LIGHT RAIL (HBLR) - HOBOKEN WYE BYPASS

ESTIMATED TOTAL PROJECT COSTS

$89M

Ridership/Capacity
The proposed bypass would increase ridership capacity to meet future growth

Intermodal Integration
The project would increase opportunities for passengers to use more than one mode on their journey through Hoboken

Service Reliability/On-Time Performance
The proposed bypass would increase service while reducing delays

State of Good Repair
New track infrastructure would increase efficiency and capacity of operations contributing positively to overall state of good repair

STRATEGIC GOALS MET

Deliver a high-quality experience for all our customers, with their entire journey in mind

Ensure the reliability and continued safety of our transit system

*Addition of third track would provide **increased capacity to facilitate more frequent service**.*

Description

The Northern Branch Corridor Project is a proposed northern extension of the Hudson-Bergen Light Rail (HBLR). Expansion of the HBLR from its current northern terminus at Tonnelle Ave in Hudson County would bring light rail service to eastern Bergen County. The proposed extension would stretch nine miles to the north, creating seven new stations along its route, terminating at the Englewood Hospital and Medical Center. Light Rail operation along the new northern branch corridor would share right-of-way that is owned by CSX, with the freight operator limiting their service to overnight hours to facilitate light rail service between 5 AM and 1 AM daily.

The project has received valuable input from the public hearing process, including comments from both the City of Englewood and the Englewood Hospital and Medical Center on the proposed expansion and new northern terminus. The project is currently proceeding through the National Environmental Policy Act (NEPA) process.

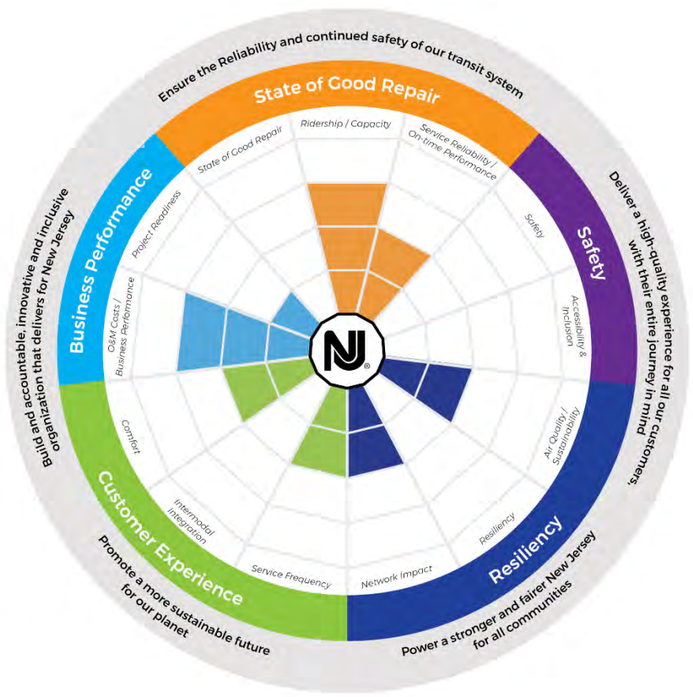
Expansion of the HBLR would significantly improve mobility within both Hudson and Bergen Counties, particularly within the project corridor, which currently features a substantial roadway-based transportation system. Improvement to the corridor's transportation network is vital to support continued economic growth to the region.

ESTIMATED PROJECT COSTS (2020 Dollars):

$1.18 Billion

Existing: Tonelle Avenue Terminus





Value to Customers

- Provides additional travel option for travelers trying to avoid highway congestion in the region
- Improves convenience and travel time to customers in Bergen county seeking access to Hudson Harbor and connection to New York City and NJ TRANSIT regional rail via Hoboken Terminal

Value to State

- Attracts riders to transit by providing direct access to HBLR system for passengers within Bergen County
- Provides transportation capacity to support population and employment growth in the region
- Supports growth and development in Bergen and Hudson Counties including the Hudson River Waterfront

Project Sheet | Hudson Bergen Light Rail (HBLR) – Northern Branch Corridor

#	PROPOSED STATION	LOCATION
1	91st Street Station	North Bergen Township
2	Ridgefield Station	Ridgefield Borough
3	Palisades Park Station	Palisades Park Borough
4	Leonia Station	Leonia Borough
5	Englewood Route 4 Station	Englewood
6	Englewood Town Center Station	Englewood
7	Englewood Hospital & Medical Center	Englewood



PROJECT SHEET HUDSON BERGEN LIGHT RAIL (HBLR) NORTHERN EXPANSION

ESTIMATED TOTAL PROJECT COSTS

$1.18B

Service Reliability/On-Time Performance
Additional light rail service options would reduce travel time for regional travelers as fewer connections would be needed to reach their destinations

Network Impact
Expansion would increase regional network connectivity while reducing transit gaps in the corridor

Ridership/Capacity
Expanding access to the light rail system would increase ridership

O&M Costs/Business Performance
Expanding light rail would increase potential revenue streams

STRATEGIC GOALS MET

Deliver a high-quality experience for all our customers, with their entire journey in mind

Ensure the reliability and continued safety of our transit system

Expansion of the HBLR would ***significantly improve mobility*** *within both Hudson and Bergen Counties.*

Description

The Hudson Bergen Light Rail (HBLR) operates two routes to the south of Hoboken Terminal – the 8th Street line which terminates in Bayonne, and the West Side Avenue line which terminates in Jersey City.

The proposed HBLR Route 440 Extension Project would expand the West Side Avenue line, bringing light rail service to the west of State Route 440 and the developing western waterfront area of Jersey City. Early action construction has recently commenced on the project.

Enhancement of transit service and mobility in this location is vital to support planned residential and commercial development of the Jersey City western waterfront area, known as Bayfront, including the development of the New Jersey City University West Campus.

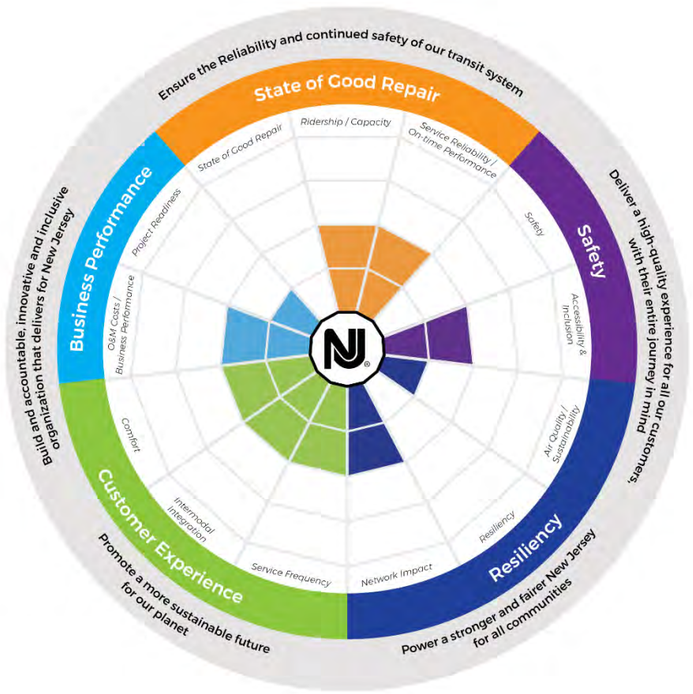
The proposed HBLR 440 Extension would include a 0.7-mile, two track extension on viaduct and an elevated center island platform terminal station at the northern end of the Bayfront development. The project would also include upgrades to the existing West Side Avenue Station, including access ramp enhancements, replacement of existing pedestrian bridge, stairway and elevator, and reconfiguration of the existing station parking lot. The project began its early phases of construction in March 2020.

ESTIMATED PROJECT COSTS (2020 Dollars):

$248 Million

Existing: West Side Avenue Station





Value to Customers

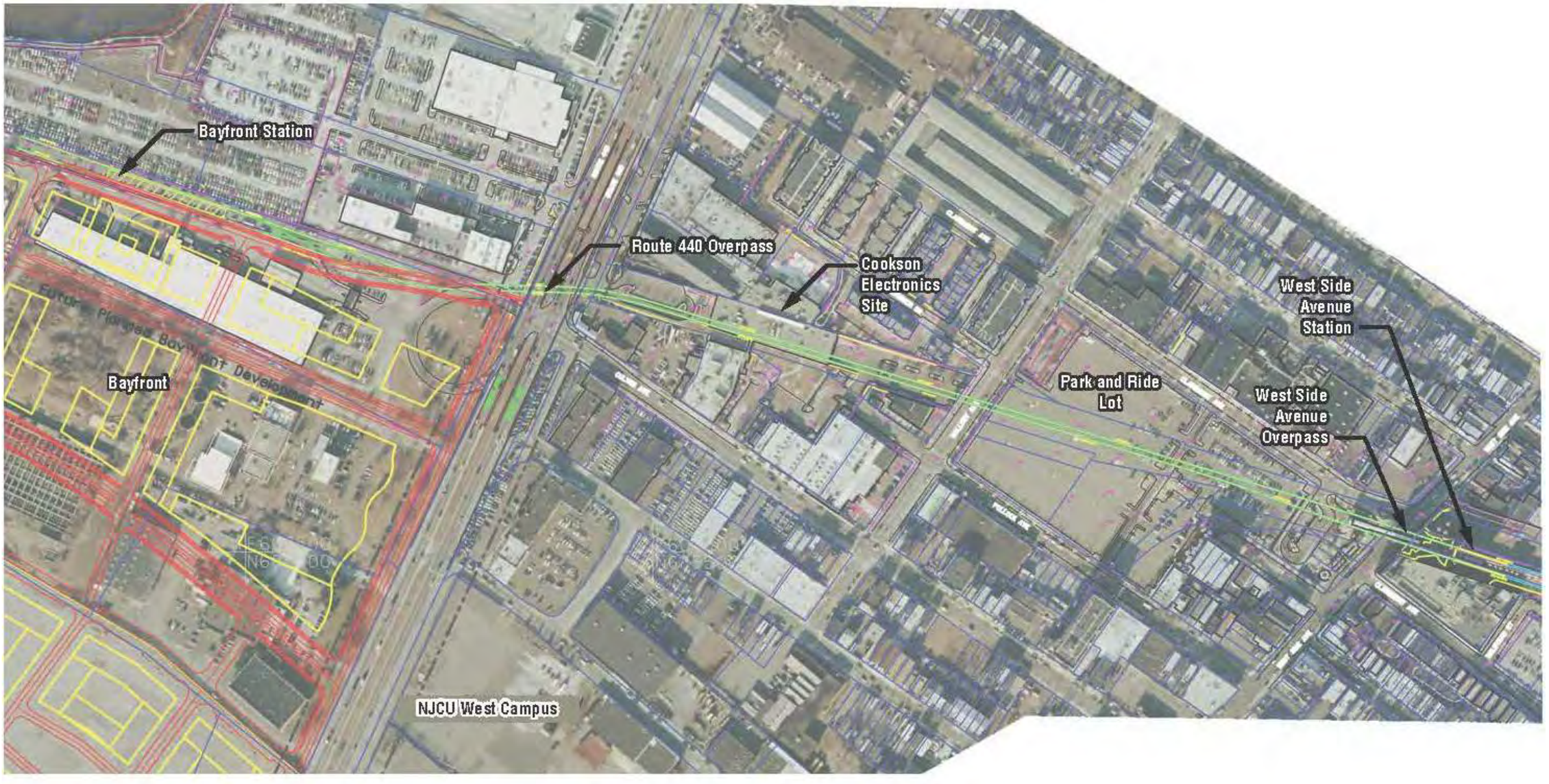
- Provides additional travel option for travelers trying to avoid highway congestion in the region

Value to State

- Attracts riders to transit by providing direct access to HBLR system for passengers within Bayfront development area
- Provides additional transportation capacity to support population and employment growth in the region
- Supports growth and development for the western waterfront area
- Provides potential diversions from automobile traffic

NJTRANSIT The Way To Go.

Project Sheet | **Hudson Bergen Light Rail (HBLR) – Route 440 Extension**



PROJECT SHEET HUDSON BERGEN LIGHT RAIL (HBLR) ROUTE 440 EXTENSION

ESTIMATED TOTAL PROJECT COSTS

$248M

State of Good Repair
Expansion would result in upgrades to the access ramp, pedestrian bridge, stairway and elevator at the existing West Side Avenue Station

Network Impact
Expansion would increase regional network connectivity while reducing transit gaps along the western waterfront of Jersey City

Ridership/Capacity
Expanding access to the light rail system would increase ridership

O&M Costs/Business Performance
Expanding light rail would increase potential revenue streams

STRATEGIC GOALS MET

Deliver a high-quality experience for all our customers, with their entire journey in mind

Ensure the reliability and continued safety of our transit system

Expansion of HBLR as a transit service and mobility option would ***compliment planned residential and commercial development***.

Description

The intersection of Paterson Avenue and the Hudson Bergen Light Rail (HBLR) is a rail grade crossing at the border of the Cities of Hoboken and Jersey City. The red phase of the traffic signal is triggered when loop detectors along the tracks detect trains nearing the intersection. Previous traffic studies indicate that the crossing experiences extended red signal times for motorists when no HBLR vehicle is present. Therefore, there is an issue with the way the traffic signal system interfaces with the HBLR signals.

If funded, this project would remove the at-grade crossing and elevate the track bed above Paterson Avenue to eliminate conflicting traffic and the need for a traffic signal. Removing the at-grade crossing and elevating the track would include replacement of the 2nd Street Station with a new elevated structure and modern station layout.

ESTIMATED PROJECT COSTS (2020 Dollars):

$136 Million

Value to Customers

- Improves efficiency and reliability of HBLR operations
- Improves travel time for customers in Hudson and Bergen Counties
- Eliminates excessive vehicle idling at the intersection

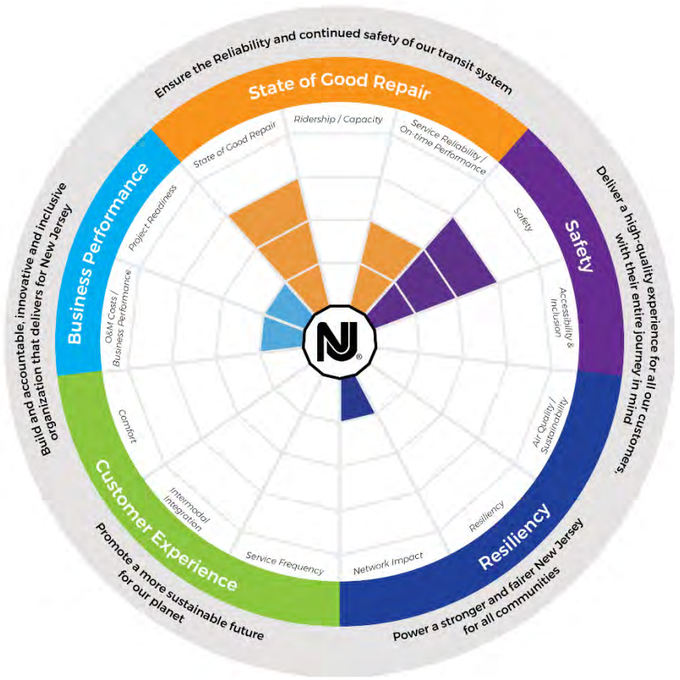
Value to State

- Enhances safety for pedestrians in Hudson County
- Improves traffic circulation for residents of Hudson County

Existing: Paterson Avenue Grade Crossing







PROJECT SHEET PATERSON AVENUE GRADE CROSSING ELIMINATION

ESTIMATED TOTAL PROJECT COSTS

$136M

Service Reliability/On-Time Performance
Removing the at-grade crossing would improve the on-time performance and reliability of trains as the signal system would have fewer interactions with traffic

Safety
Removing the at-grade crossing would improve safety conditions for pedestrians and remove the potential for conflicts with vehicles

O&M Costs/Business Performance
Elevating the track infrastructure and upgrading the station layout would reduce operations and maintenance costs

State of Good Repair
Modernizing the station layout and elevating track infrastructure would improve state of good repair

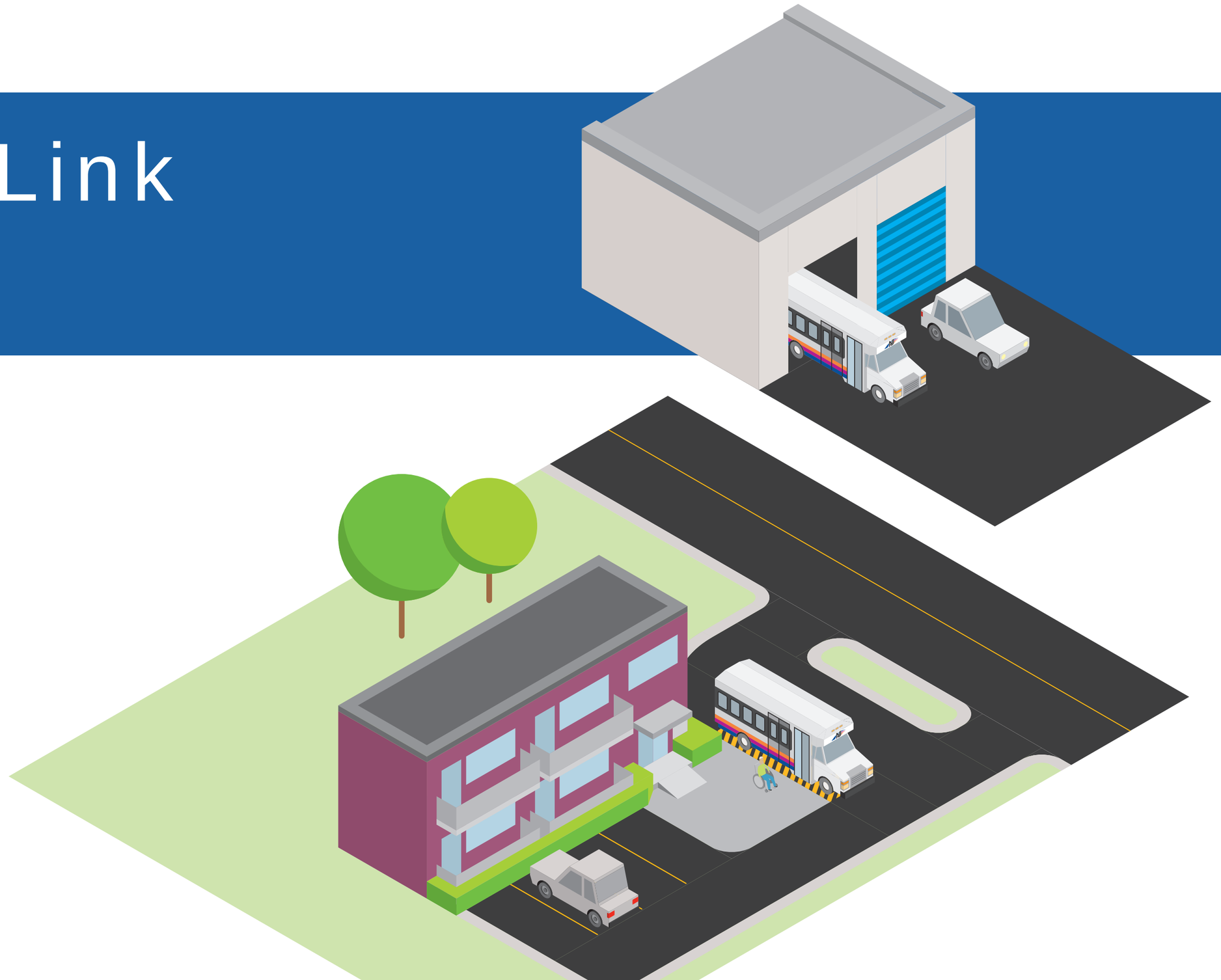
STRATEGIC GOALS MET

Deliver a high-quality experience for all our customers, with their entire journey in mind

Ensure the reliability and continued safety of our transit system

Remove the at-grade crossing *and* ***elevating the track bed*** *above Paterson Avenue would* ***eliminate traffic conflicts, improving service and enhancing safety****.*

Access Link



NJTRANSIT
The Way To Go.

Description

NJ TRANSIT's paratransit program, Access Link, provides accessible public transportation for customers throughout the state. Access Link provides comparable service to the local fixed bus route system within ¾ of a mile around local fixed bus routes and light rail stations, during the same times and days of the week. The Access Link fleet consists of 500 vehicles with an average age of 3.75 years consisting of 20% sedans and 80% minibuses. The oldest vehicles in the fleet are up to six years old and have traveled over 290,000 miles. As the fleet has advanced in age, maintenance expenses have begun to escalate due to the increased frequency of component failure. These maintenance challenges result in significant delays which in turn adversely effect on-time performance.

If funded, the Access Link Fleet Modernization and Expansion Program would meet the needs of our customers through vehicle expansion to meet projected ridership growth as well as to maintain a state of good repair of the Access Link fleet. The program would allow Access Link to remain current with the latest technology, accessibility options, safety equipment, and customer amenities. Vehicles would be replaced on a first-in first-out basis on a five year and/or 250,000 miles useful service life cycle. This replacement plan would account for 25% fleet growth. The first vehicles that would be replaced in the plan would be replaced with hybrid vehicles. Twenty-five percent of the light duty fleet would be plug-in electric by the end of 2025.

ESTIMATED PROJECT COST (2020 Dollars):

$48 Million

Value to Customers

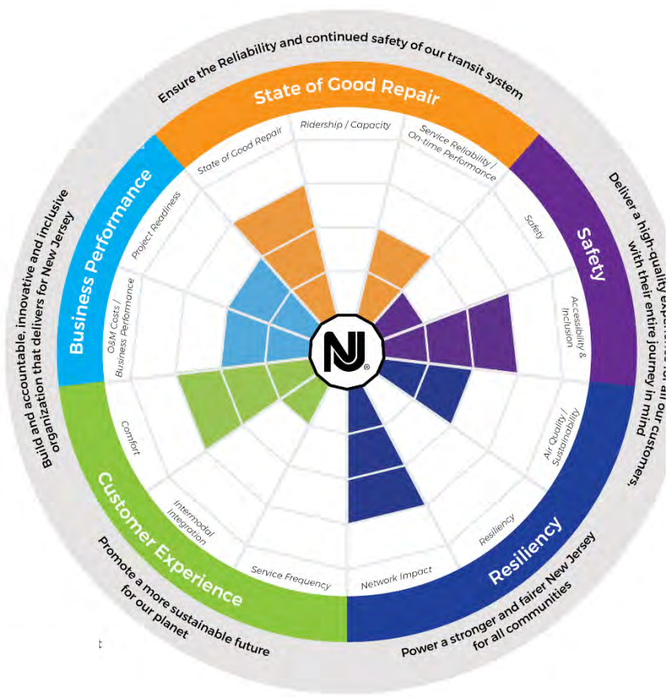
- Increases on time performance (OTP), safety and service reliability

Value to State

- Lowers operating expenses hence more efficient use of public funds
- Better performance for a more accessible transportation network

Proposed: New Updated Fleet





PROJECT SHEET ACCESS LINK FLEET MODERNIZATION AND EXPANSION

ESTIMATED TOTAL PROJECT COSTS

$48M

O&M Costs/Business Performance
New vehicles would reduce maintenance costs and enhance the attractiveness of the service to potential customers

Service Reliability/On-Time Performance
Expanded fleet and new vehicles would improve service reliability and reduce delays

State of Good Repair
Fleet replacement would reduce the average age of the fleet and frequency of equipment failures

Accessibility and Inclusion
Fleet would be expanded and new vehicles would include amenities to better meet the needs of the growing customer base

STRATEGIC GOALS MET

Deliver a high-quality experience for all our customers, with their entire journey in mind

Power a stronger and fairer New Jersey for all communities

Expanded and modern Access Link fleet would ***accommodate ridership growth*** *and* ***improve service performance***.

Description

NJ TRANSIT's paratransit program, Access Link, provides accessible public transportation for customers throughout the state. Access Link service operates parallel to NJ TRANSIT bus and light rail service and consists of 500 vehicles. To improve paratransit service and improve air quality for the communities it serves, NJ TRANSIT has a goal of transitioning its entire Access Link Fleet to electric vehicles.

If funded, the Access Link EV Pilot Program would deploy a limited number of electric vehicles (EVs) to test the performance of EVs for Access Link service. The pilot would include the procurement of 15 sedan style EVs and all associated equipment, such as 240 volt chargers. The EVs would be deployed out of an existing Access Link facility with no anticipated utility upgrades.

ESTIMATED PROJECT COSTS (2020 Dollars):

$3 Million

Value to Customers

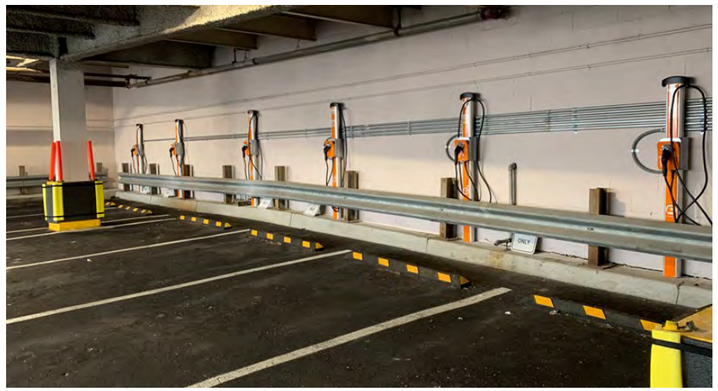
- Improves customer experience with more comfortable ride
- Improves customer experience with environmentally sustainable fleet

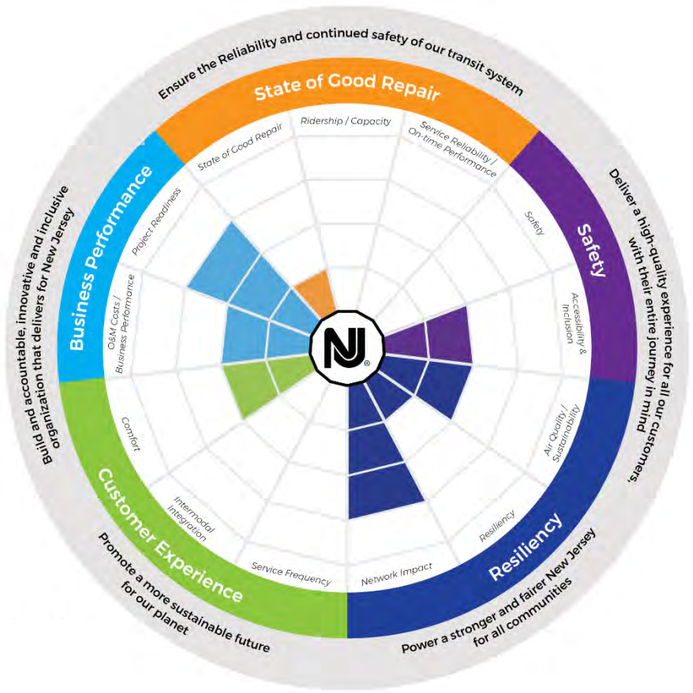
Value to State

- Lowers operating expenses hence more efficient use of public funds
- Better performance for a more accessible transportation network

Proposed: Limited Electric Vehicle Rollout







PROJECT SHEET ACCESS LINK ELECTRIC VEHICLE (EV) PILOT PROGRAM

ESTIMATED TOTAL PROJECT COSTS

$3M

Accessibility/Inclusion
New vehicles would be more reliable and include amenities to better meet the needs of the growing customer base

Network Impact
The addition of new electric vehicles would improve service and reliability throughout the Access Link network

Air Quality/Sustainability
Piloting electric would be an initial step to reducing the agency's overall vehicle emissions

O&M Costs/ Business Performance
New electric vehicles would reduce O&M costs and enhance the attractiveness of the service to potential customers

STRATEGIC GOALS MET

Deliver a high-quality experience for all our customers, with their entire journey in mind

Power a stronger and fairer New Jersey for all communities

*The Access Link EV pilot would **create a more environmentally sustainable network** while **improving customer experience** and **reducing O&M costs**.*

Description

NJ TRANSIT's paratransit program, Access Link, provides accessible public transportation for customers throughout the state. Access Link service operates parallel to NJ TRANSIT bus and light rail service and consists of 500 vehicles. Access Link contracts paratransit service out to providers and paratransit facilities are leased through the service providers from property owners. Leasing facilities introduces numerous challenges such as a long and expensive bid process and site identification, neighborhood objections, high cost of structural modifications, and efforts needed to restore properties to their original state at the conclusion of the lease. Approximately 70% of NJ TRANSIT's Access Link system operates in Region 4 (Mercer, Middlesex, Monmouth & North Ocean Counties), Region 5 (Essex, Morris, Somerset & Union Counties), and Region 6 (Bergen, Hudson, Passaic, & parts of Essex Counties).

If funded, a new Access Link garage owned by NJ TRANSIT would likely be located in Region 5. Locating the facility in Region 5 would provide a dedicated storage and maintenance facility for over 35% of the Access Link fleet. The new garage would be constructed with solar panels on the roof, modern fleet diagnostics and maintenance equipment, and space for electric charges for zero emission paratransit buses. The location of the facility would be selected to minimize vehicle travel time to and from the garage to their respective NJ TRANSIT bus lines. The facility would be sized to address forecasted ridership growth and service demand.

ESTIMATED PROJECT COSTS (2020 Dollars):

$59 Million

Value to Customers

- Improves system resiliency due to maintained equipment
- Reduces depot delays

Value to State

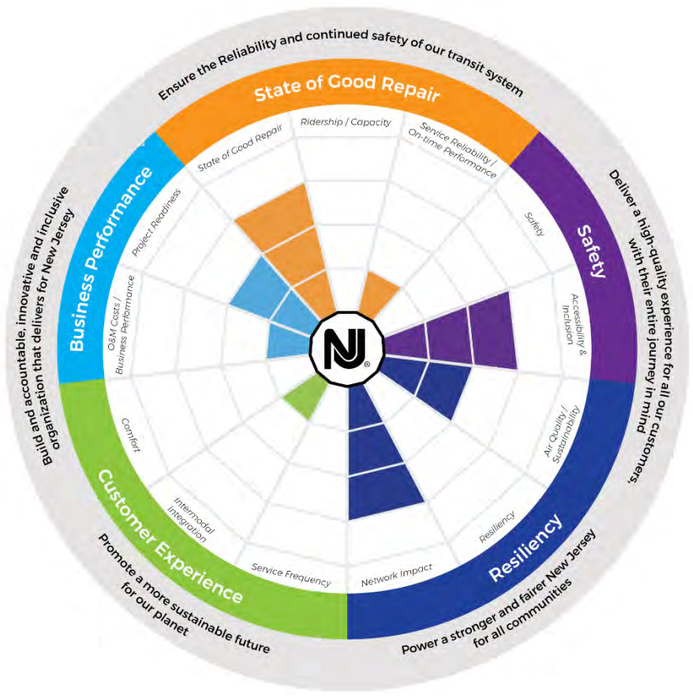
- Reduces lifecycle maintenance costs and enables more efficient use of taxpayer funds with new sustainable facilities
- Return on Investment (ROI) of owning vs. leasing garage

Existing: Leased Access Link Vehicle Storage



Proposed: New Garage Facility





PROJECT SHEET NEW ACCESS LINK GARAGE

ESTIMATED TOTAL PROJECT COSTS

$59M

Accessibility and Inclusion
New garage with centralized fleet storage would improve reliability and reduce delays to more efficiently transport customers

Service Reliability/On-Time Performance
Dedicated maintenance facility would improve reliability and reduces delays

State of Good Repair
New garage with modern fleet diagnostics would reduce critical equipment failure rate

Network Impact
The new garage would be sized and located to effectively address ridership growth and service demand

STRATEGIC GOALS MET

Deliver a high-quality experience for all our customers, with their entire journey in mind

Power a stronger and fairer New Jersey for all communities

New Access Link garage would ***accommodate ridership growth*** *and* ***improve service and state of good repair****.*

IT, Innovation, and Transport Network Improvements



NJTRANSIT
The Way To Go.

Description

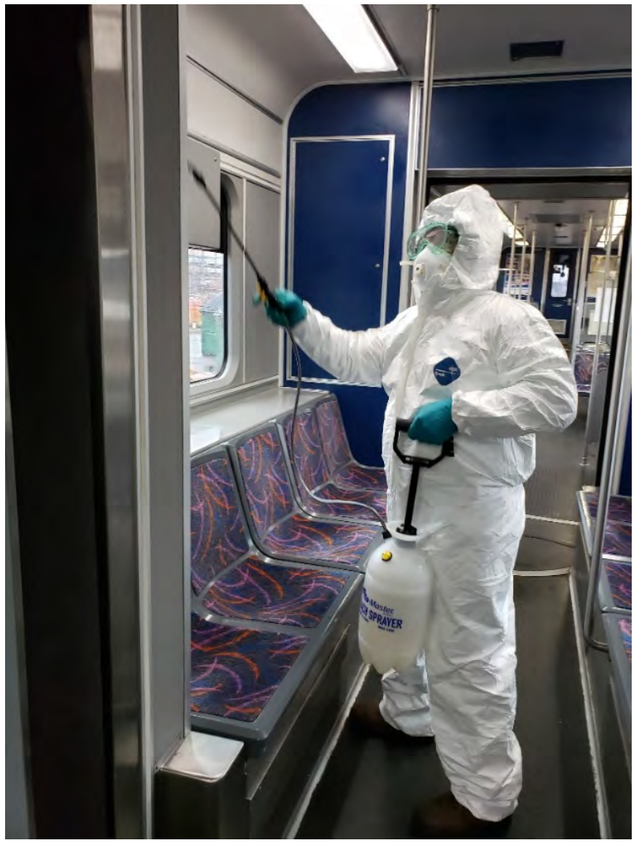
NJ TRANSIT operates and supports an expansive array of passenger and employee facilities and vehicles throughout the state that are critical components of the state's transportation network. NJ TRANSIT operates critical public facilities that include commuter rail and light rail stations, bus park and rides and other public facing facilities throughout the state.

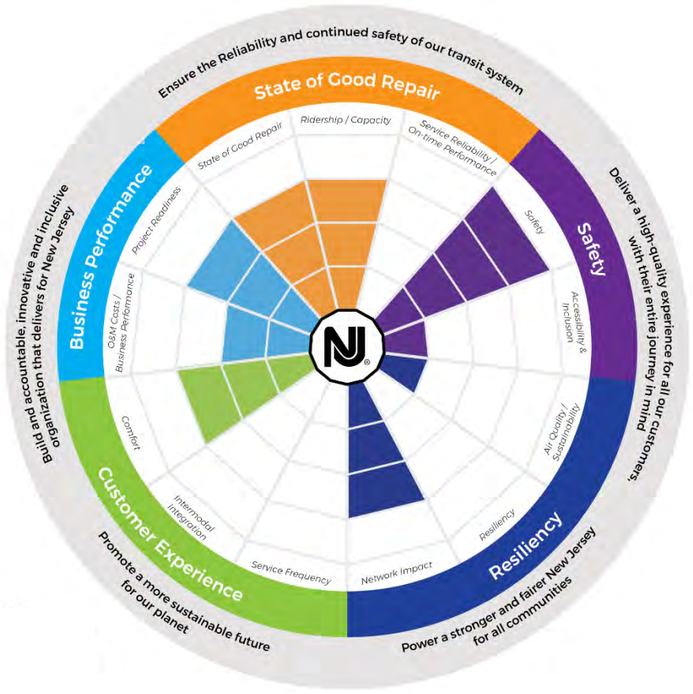
COVID-19 continues to pose a risk to the public and impacts the regional economy and people's travel needs, and likely will continue to do so for some time. Therefore, NJ TRANSIT intends to make targeted capital investments to improve the public transportation network's ability to respond to the pandemic and to ensure the system is better suited to address future health safety events, including improving the network's ability to reduce viral and bacterial transmissions.

To ensure investments in the short, medium and long term are holistically integrated, the program would include different investment phases and would provide flexibility to plan, design and deploy near-term projects, design medium term treatments and targeted investments and plan for the adoption of longer-term investments, best practices and technologies.

ESTIMATED PROJECT COSTS (2020 Dollars):

$156 Million





Value to Customers

- Provides customers with a cleaner and healthier transportation network.

Value to State

- Improves the state's resiliency to future public health concerns.
- Allows NJ TRANSIT to be better positioned as a part of a regionwide strategy for pandemic response.

Project	Scope	FY1	FY2	FY3	FY4	FY 5	Total
		In millions ($)					
Phase 1: Planning & Design	Provides budget for planning activities related to developing agencywide best practices in pandemic response, new design standards for facilities, buses, rail cars & engines, light rail systems, access link vehicles and other public health management improvement related to public transportation for both future long term projects and short and medium term improvements. Also includes budget to institutionalize findings and to facilitate culture change with post-pandemic best practices and creates media for public facing communications to customers for how to best to interact with the system during a pandemic.	4	3	3	3	3	16
Phase 2: Immediate Term Equipment Purchases, Technology Deployments and System Retrofitting	Provides budget for performing immediate term purchases, deployments of equipment and technology and retrofitting exsiting systems. Examples includes adding driver shields in buses to reduce driver exposure, deploying infrared cameras at stations, purchasing advanced cleaning technologies, establishing cleaning and protection stockpiles at strategic locations.	15	15	10	4	4	48
Phase 3: Immediate IT Investments and Technology Partnership Pilots	Provides budget for performing immediate IT improvments to reduce customers physical interactions with the system leveraging contactless technology utilizing video analytic platform, install air quality/thermal sensors. Other systemwide improvments to implement endpoint managment, upgrade virtual desktop infrastructure to elevate remote working capabilities. Partnership with technology companies to have one stop mobility operating system by which they can manage their entire transportation environment.	17	16	14	7	7	61
Phase 4: Long-term Cleaning Infrastructure & Equipment Pilots	Provides budget for long-term facility improvements & pilots to improve efficiency in cleaning and sanitation operations.	3	4	8	8	8	31
Total Program Cost:		39	38	35	22	22	156

PROJECT SHEET PUBLIC TRANSPORTATION HEALTH IMPROVEMENT PROGRAM

ESTIMATED TOTAL PROJECT COSTS

$156M

State of Good Repair
This program would ensure NJ TRANSIT assets do not become functionally obsolete due to public health concerns

Comfort
This program would result in a healthier and safer experience for employees and customers

STRATEGIC GOALS MET

Deliver a high-quality experience for all our customers, with their entire journey in mind

Ensure the reliability and continued safety of our transit system

Safety
This program improves public and employee facilities and establishes new design practices to respond to public health needs

Project Readiness
This program would be implemented immediately to improve public and employee transportation facilities to respond to COVID-19

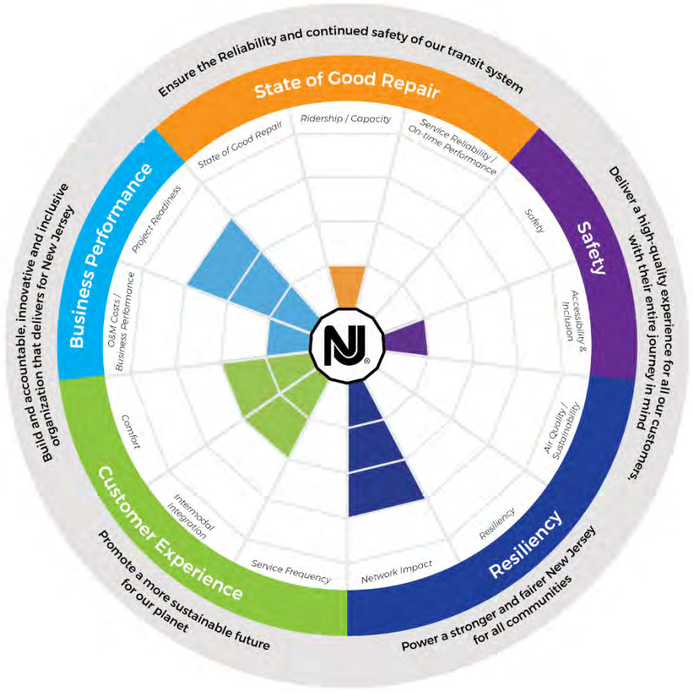
__Targeted investments__ in public transportation to __respond to COVID-19__ would ensure a __safer and healthier environment for customers and employees__.

Description

This project would develop a comprehensive transit trip planner database and app under the Federal Transit Administration's Mobility on Demand Sandbox "subprogram." The goal of this project is to enhance the visibility of community transit options and connections to fixed route services. The database and app could also form the foundations of a future Mobility as a Service initiative by adding additional modes as searchable services.

If funded, the project would help community transit providers develop new General Transit Feed Specification (GTFS)-flex databases of their on-demand and curb-hail services that currently cannot be processed by Google and other conventional trip planning apps. A website and app would be developed for customers to create personal trip itineraries across all transit services "visible" to the GTFS-flex enabled search engine. This would allow trips to be planned by customers using community transit and traditional transit around all areas of New Jersey. A partnership with the Rutgers Voorhees Transportation Center, Trillium, and Cambridge Systematics is proposed for the project.





ESTIMATED PROJECT COSTS (2020 Dollars):

$3 Million

Value to State

- Creates a more economically competitive region with improved local growth opportunities
- Provides better connectivity for customers across the state
- Creates safer travel choices for state residents
- Develops new and innovative technologies to improve transportation options

Value to Customers

- Improves transit system connections across the state
- Improves first/last mile transit options for customers
- Creates safer and more efficient transit options

PROJECT SHEET COMPREHENSIVE TRIP PLANNER

ESTIMATED TOTAL PROJECT COSTS

$3M

Network Impact
New trip planner app would enable customers to use transit more effectively across the state by pairing them with the right trip plan

Comfort
Using the trip planner, customers can plan their trip more effectively and decrease trip times

Intermodal Integration
More efficient trip planning with increased options would allow for more integration of modes on a given trip

Project Readiness
This project can be completed in two years and can begin quickly

STRATEGIC GOALS MET

Deliver a high-quality experience for all our customers, with their entire journey in mind

Power a stronger and fairer New Jersey for all communities

*The trip planner app would **allow trips to be easily planned by customers using community transit and traditional transit** around all areas of New Jersey.*

Description

The NJ TRANSIT Mobile App serves over 3.1 million customers, providing the tools to plan a trip, pay the fare and be informed with Rail real time travel information. Over the next five years, continuous investment in the app is required to keep pace with rapidly improving mobile technology and rising customer expectations, new technology which will allow NJ TRANSIT to support every aspect of our customers commute or trip. Broadly, NJ TRANSIT will capitalize on geotargeting in trip planning, service and station alerts, and onboard notifications; cooperate with neighboring transit agencies to develop support for regional travel; and, integrate with third party vendors to provide first and last mile travel options into the app. During the next five years both the customer facing design and functionality of the app and back end systems supporting it will require ongoing development, including cloud integration, blockchain transactional database design and a mobile test lab.

If funded, a state-of-the-art application would improve our customer's experience and draw a larger share of customers to the app, which would in turn decrease NJ TRANSIT's operational costs.

ESTIMATED PROJECT COSTS (2020 Dollars):

$10 Million

Value to Customers

- Plan, purchase and track their trip
- Simplify regional travel
- Real time arrival/departure information across rail/bus/light rail

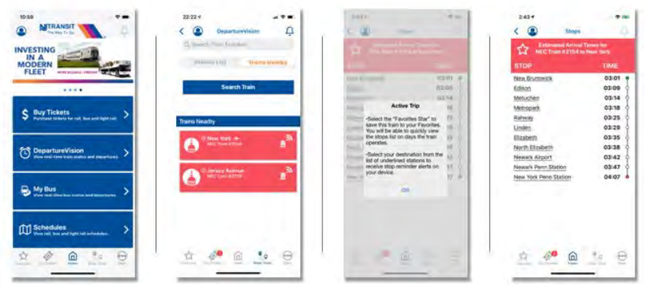
Value to State

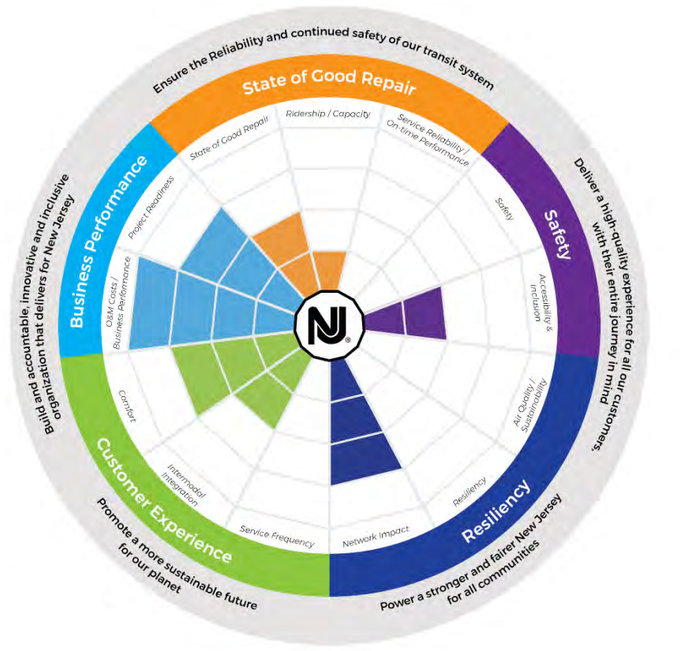
- Continue to migrate riders to NJ TRANSIT's most efficient sales channel.
- Increase customer satisfaction by improving communication from NJ TRANSIT

Existing: NJ TRANSIT APP



Proposed: NJ TRANSIT APP





NJ TRANSIT App

	Line Item
1	GPS enabled app with active trips across Rail/Bus/LR
2	Way Finding/trip planning/next stops
3	Third Party integration/rideshare/bikeshare/parking
4	Regional Ticketing/MTA/PATH/ SEPTA/Amtrak
5	App interface redesign/enhancement
6	Back end redesign/mobile test lab & cloud integration & block chain

PROJECT SHEET NJ TRANSIT MOBILE APP DEVELOPMENT

ESTIMATED TOTAL PROJECT COSTS

$10M

Network Impact
All NJ TRANSIT modes and systems would benefit from an upgraded app with more users

Comfort
An improved app platform would make journeys simpler and more enjoyable for customers

Project Readiness
App enhancements can be completed within five years and can be rolled out quickly to customers

O&M Costs/Business Performance
Upgraded software would decrease operating costs from ticketing operations and attract more app users and customers

STRATEGIC GOALS MET

Deliver a high-quality experience for all our customers, with their entire journey in mind

Ensure the reliability and continued safety of our transit system

*A state-of-the-art mobile app would **improve customer experience**, **draw more app users**, and **decrease NJ TRANSIT operating costs**.*

Description

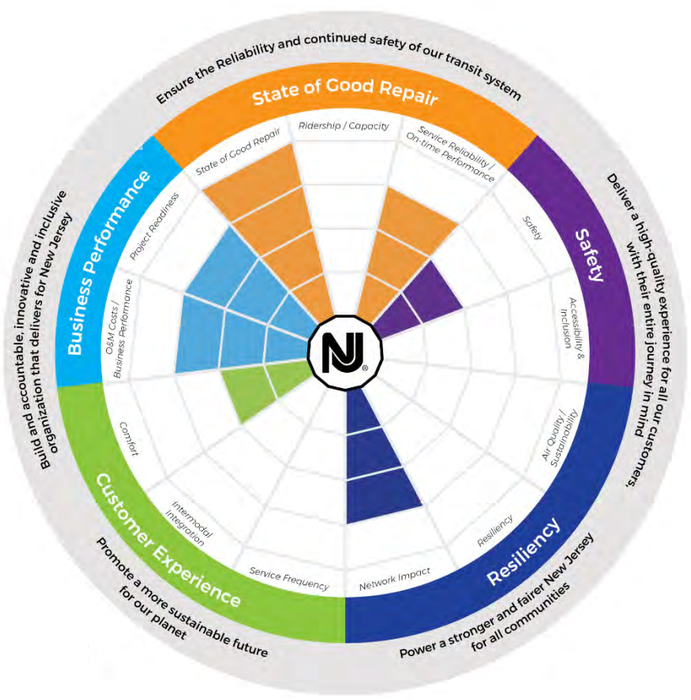
NJ TRANSIT is investing in internal, business unit. and customer-facing Information Technology (IT) infrastructure to become a leader in the digital revolution in public transportation over the next five years.

If funded, IT Business Units Improvements would create safer, more secure, more robust, and more dynamic processes to improve overall customer experiences, provide real time information updates, and better support employees in their work. These improvements would streamline processes and invest in the people who keep the NJ TRANSIT system running. Projects would support business units in eradicating manual processes and implementing automation to develop operational efficiencies and increase productivity. Providing staff with the latest tools would improve customer service and deploying enterprise asset management systems would enable staff to ensure critical assets perform at maximum efficiency.









ESTIMATED PROJECT COSTS (2020 Dollars):

$103 Million

Value to Customers

- Improves the experience and convenience of non-ride infrastructure
- Deploys the tools, technology, and talent to listen and react to customers in real-time
- Uses NJ TRANSIT as a daily touchpoint to create a sense of pride in the state and its economy for our customers by targeting pain points in journeys, payments, and accessibility

Value to State

- Invests in digital technology and people to keep NJ TRANSIT safe, secure, reliable to communicate with customers and keep them informed
- Modernizes technology, talent, and process to allow NJ TRANSIT to be a leader in transit technology
- Enables NJ TRANSIT to get to a single source of truth and develop insights rapidly by improving emerging capabilities in data & analytics, PMO, lean methodologies, and API repositories
- Pushes the organization towards a culture of automation, business intelligence, and process improvement in HR, Finance, Procurement, Compliance, and Internal Communications

Program	Project	Strategy
Procurement Process Improvement	Enhanced Vendor Management	Establish industry leading procurement practices
	Procurement Automation	Establish industry leading procurement practices
	Uplift Procurement Technology	Establish industry leading procurement practices
	Procurement integration with Business Intelligence	Establish industry leading procurement practices
HR	Digitized Evaluation of Employee	Invest in the people who keep our transit system running
	HR Consolidation	Invest in the people who keep our transit system running
Finance	Finance Enhancements	Invest in the people who keep our transit system running
Customer Oriented Improvements	Customer Satisfaction Enhancement	Improve information flow to and from customers
	NJ Transit Technology uplift	Deliver tech that improves customer experience
	Customer Communication Enhancement	Inform: Improve information flow to and from customers
	Digitization of Social Communication	Enhance customer comfort throughout their journey
	Reform Customer Comfort	Deliver tech that improves customer experience
	Loyalty Program	Deliver tech that improves customer experience
Enterprise Applications	Oracle Upgrades	Deliver tech that improves customer experience
	Cashless Payments	Integrate and expedite customer payments
	Enterprise Asset Management	Enhance our fleet through replacement and preventative maintenance programs
	Economic and Technology Intelligence	Keep improving tech that improves customer experience
	Improved Data Strategy	Improve our collection and use of data to drive better decision-making
All BU	Business Process Reengineering	Deliver tech that improves customer experience

PROJECT SHEET IT BUSINESS UNIT IMPROVEMENTS

ESTIMATED TOTAL PROJECT COSTS

$103M

O&M Costs/Business Performance
Automating internal processes would decrease paperwork and increase agency efficiency

Safety
Enhanced security would decrease risks of cyber attacks

Network Impact
Upgrading business unit processes and applications would positively affect the entire NJ TRANSIT network

State of Good Repair
Creating efficient enterprise applications would increase operational efficiency and improve state of good repair

STRATEGIC GOALS MET

Deliver a high-quality experience for all our customers, with their entire journey in mind

Build an accountable, innovative, and inclusive organization that delivers for New Jersey

Business unit improvements would ***help create safe, secure, robust, and dynamic processes to improve customer experience*** *throughout the journey.*

Description

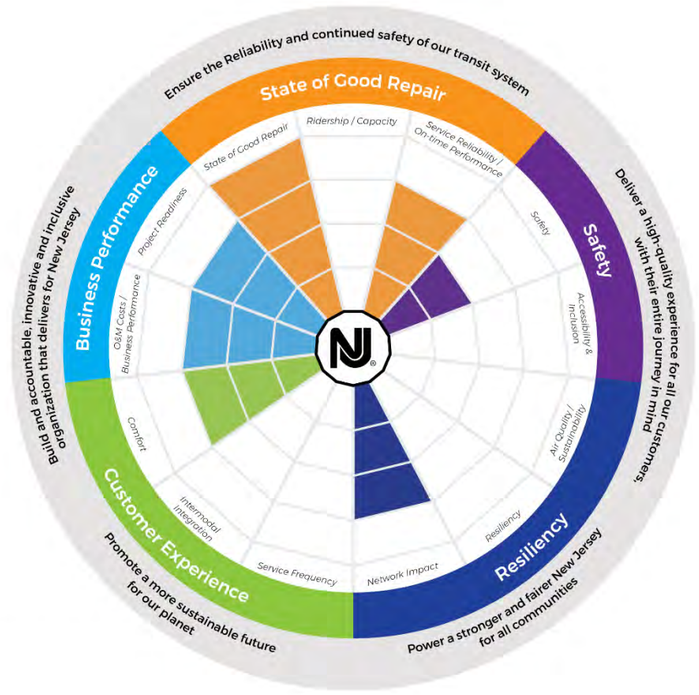
NJ TRANSIT is investing in internal, business unit. and customer-facing Information Technology (IT) infrastructure to become a leader in the digital revolution in public transportation over the next five years

If funded, IT improvement projects would uplift and modernize IT Infrastructure, IT security, IT support, and monitoring, PMO set up to improve overall technology and related domain for NJ TRANSIT. To reinforce the backbone of NJ TRANSIT operations, IT improvement projects would be focused on revolutionizing infrastructure and network capabilities to improve customer and staff experiences. A portion of projects would focus on disaster recovery to prevent data loss and minimize impacts on the organization and our customers. Providing infrastructure resiliency would ensure that there is no disruption at NJ TRANSIT's offices, rail/light rail stations and maintenance yards, bus terminals, garages and Access Link offices. Additional projects would adapt the best project/program portfolio management methodologies to rollout a PMO that will unite business units and keep everyone on track.









ESTIMATED PROJECT COSTS (2020 Dollars):

$65 Million

Value to Customers

- Provides a safer, more secure environment for our customers and communities we serve

Value to State

- Invests in Information Security to keep NJ TRANSIT resilient (e.g., Disaster Recovery, Business Continuity Planning, embedding security into all protocol)

Program	Project	Strategy
IT Infrastructure Upgrade	Infrastructure Resiliency	Enhance system resilience to extreme climate events
	Disaster Recovery Implementation	Provide a safer, more secure environment for our customers and communities we serve
	Cloud Implementation	Provide a safer, more secure environment for our customers and communities we serve
	Service Desk Enhancements	Deliver tech that improves customer experience
	Digital Uplifting Datacenter	Deliver tech that improves customer experience
	Digitization of Manual Processes	Invest in the people who keep our transit system running
IT	Enhanced App Capabilities	Deliver tech that improves customer experience
	Modernization of Workforce	Invest in the people who keep our transit system running
	Security Uplift	Provide a safer, more secure environment for our customers and communities we serve
	Innovative Technology	Keep improving tech that improves customer experience
PMO	Business Collaboration	Invest in the people who keep our transit system running
	Dynamic PMO Rollout	Deliver tech that improves customer experience

PROJECT SHEET IT HQ IMPROVEMENTS

ESTIMATED TOTAL PROJECT COSTS

$65M

O&M Costs/Business Performance
IT improvements would Increase efficiency of NJ TRANSIT's business operation systems and applications

Safety
IT improvements would increase safety of NJ TRANSIT's technology assets and information

STRATEGIC GOALS MET

Deliver a high-quality experience for all our customers, with their entire journey in mind

Build an accountable, innovative, and inclusive organization that delivers for New Jersey

Network Impact
Upgraded systems, servers, and applications would positively affect the entire NJ TRANSIT network

State of Good Repair
Modernizing applications, servers, and systems would improve the state of good repair of NJ TRANSIT's IT infrastructure

Upgrading and modernizing IT Infrastructure, security, support, and monitoring would improve NJ TRANSIT's overall technology.

Description

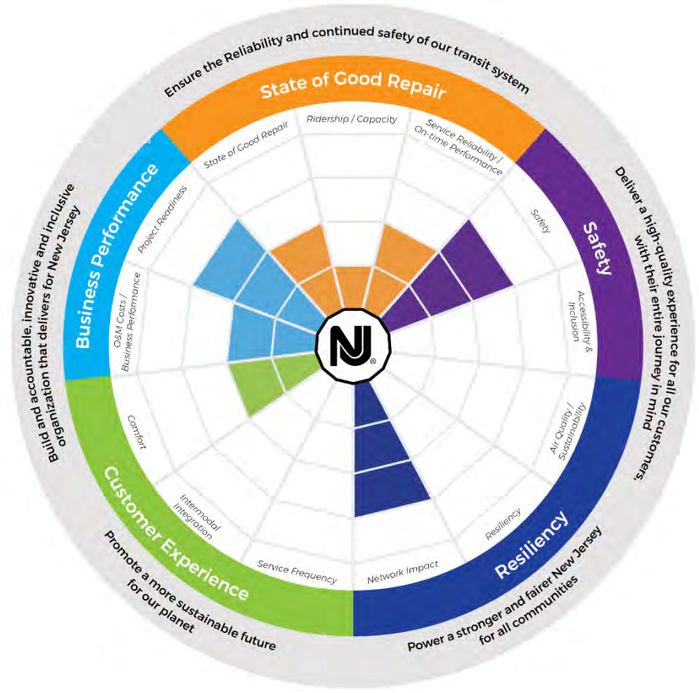
NJ TRANSIT operates an approximately 2,300 vehicle bus fleet. Much of the software used on buses, in bus garages, and at bus depots is very old and needs to be upgraded to reflect the latest technologies. If funded, this project would help NJ TRANSIT make these upgrades and improve customer satisfaction with features such as ticket validation and app maps with bus locations and vehicle loads. The projects included would also improve driver aid and customer safety with features that would integrate braking, vehicle breakdown detection, and collision warning.

In addition, projects to improve customer experience on NJ TRANSIT's Access Link paratransit service would also be included.

Upgrades to the light rail PA systems, which include Newark Light Rail, River LINE, and Hudson Bergen Light Rail, would be included to better provide information to customers.







ESTIMATED PROJECT COSTS (2020 Dollars):

$148 Million

Value to Customers

- Provides a safer, more secure environment for our customers and communities we serve

Value to State

- Minimizes revenue loss from disruption of services





Project	Project Description	Strategy
ViriCiti	Electric Bus AVM	Deliver tech that improves customer experience
IVN Upgrade	IVN3 & IVN4 Upgrade to	Deliver tech that improves customer experience
NeverFail Implementation	Establish a High Availability or Disaster Recovery Environment using NeverFail	Deliver tech that improves customer experience
Graphical UI Uplift	Upgrade to Graphical UI	Deliver tech that improves customer experience
CleverCAD Upgrade	CleverCAD Upgrade to 9.5 (Current Version) and Enhancements	Deliver tech that improves customer experience
Disruption Management	Disruption Management will allow to react to unplanned situations to provide the passengers updated information	Deliver tech that improves customer experience
On Board TTS implementation	On-Board Text to Speech (Dispatch Announcements On-Board the Bus)	Deliver tech that improves customer experience
Bus Time Upgrade	BusTime Upgrade for Responsive Website that will allow a more modern and intuitive user experience	Deliver tech that improves customer experience
Quick Turn Enhancements	Quick Turn Schedule Only Updates (for Exceptions/Holidays/Changes)	Deliver tech that improves customer experience
CleverCAD Mobile Enhancement	CleverCAD Mobile Enhancements	Deliver tech that improves customer experience
SmartYard Central System	SmartYard Central System	Deliver tech that improves customer experience
Upgrade to Bus Depot	Upgrading our Bus Depot with latest technology and tools that will provide accurate real time information on buses and enhance customer comfort at Bus Depot	Provide a safer, more secure environment for our customers and communities we serve
Automated Bus Assignment	Technology to improve operations in automating the bus assignments	Deliver tech that improves customer experience
CleverVision implementation	CleverVision implementation	Deliver tech that improves customer experience
Monitor Operator Behavior	Operator Behavior - Module 3 (EcoDrive)	Deliver tech that improves customer experience
AVM OnDemand and Optimization	AVM OnDemand Includes:	Deliver tech that improves customer experience
Luminator Destination Sign Upgrade	Luminator Destination Sign Upgrade Includes:	Deliver tech that improves customer experience
Celrado	Celrado Implementation	Deliver tech that improves customer experience
Customer Safety thru technology	Improve technology assets to ensure customer safety	Provide a safer, more secure environment for our customers and communities we serve

Project Sheet | IT Surface Transit Improvements

Project	Project Description	Strategy
Bus Innovation	Bus innovation: Modernize garages and pilot all-door boarding	Deliver tech that improves customer experience
Bus hardware/software upgrades	Modernize technology on buses to improve reliability and service	Provide a safer, more secure environment for our customers and communities we serve
VMIS Replacement	Vehicle Management Information System replacement	Deliver tech that improves customer experience
AL: Yard Management	The Yard Management module supports the vehicle inventory and parking grid definition	Deliver tech that improves customer experience
AL: Viewpoint Implementation	BI/Dashboard Module for AL	Deliver tech that improves customer experience
AL: Merge AL network with Corporate network	Currently AL users are on separate network, request to merge it with Corp network	Deliver tech that improves customer experience
AL: ACD upgrades: phone info displays on computer screen	Phone information displayed for customer care for better customer service	Deliver tech that improves customer experience
AL: Workforce Management software	Employee mgmt for AL, currently done via email	Deliver tech that improves customer experience
AL: E-learning	AL Team members eLearning - to host video, guides, currently done via email	Deliver tech that improves customer experience
AL: Alexa Type solution for AL customers using IVR	Voice enabled features for customers (Like Alexa)	Deliver tech that improves customer experience
AL: Continuously recording video cameras on AL buses (Apollo?)	Upgrade recording capabilities for 24*7 (replace SmartDrive with Apollo). Eight cameras instead of two on buses and four cameras in car.	Deliver tech that improves customer experience
AL: Off-site Ops Center	Need back-up location for AL to support any disruption at Newark	Deliver tech that improves customer experience
AL: Customer ID Cards (images captured at Cert and stored on Trapeze)	Customer ID cards to identify customers	Deliver tech that improves customer experience
AL: Tap and Go payment onboard vehicles	Some customers don’t travel frequently and request this facility	Deliver tech that improves customer experience
LR: Light Rail PA	PA System for Light Rail (River line, Newark, HBLR)	Deliver tech that improves customer experience

PROJECT SHEET IT SURFACE TRANSIT IMPROVEMENTS

ESTIMATED TOTAL PROJECT COSTS

$148M

O&M Costs/Business Performance
Upgraded software would increase operational efficiency and decrease redundancies

Safety
Driver assist technologies would support driver and passenger safety

Network Impact
The upgraded software and integration of new technologies has the potential to affect the entire NJ TRANSIT bus system

State of Good Repair
Reduce frequency of equipment failures and upgrade bus fleet software

STRATEGIC GOALS MET

Deliver a high-quality experience for all our customers, with their entire journey in mind

Ensure the reliability and continued safety of our transit system

*This program would **improve driver aid and customer safety with features such as integrated braking, vehicle breakdown detection, and collision warning**.*

Description

NJ TRANSIT is investing in internal, business unit, and customer-facing Information Technology (IT) infrastructure to become a leader in the digital revolution in public transportation over the next five years.

IT projects addressing rail improvements would create safer, more secure, more robust, and more dynamic processes to improve customer experiences and provide real time information updates. If funded, these projects would help process improvement, invest in people who keep our transit system running, and invest in targeted rail infrastructure programs to reduce delays and alleviate capacity constraints.

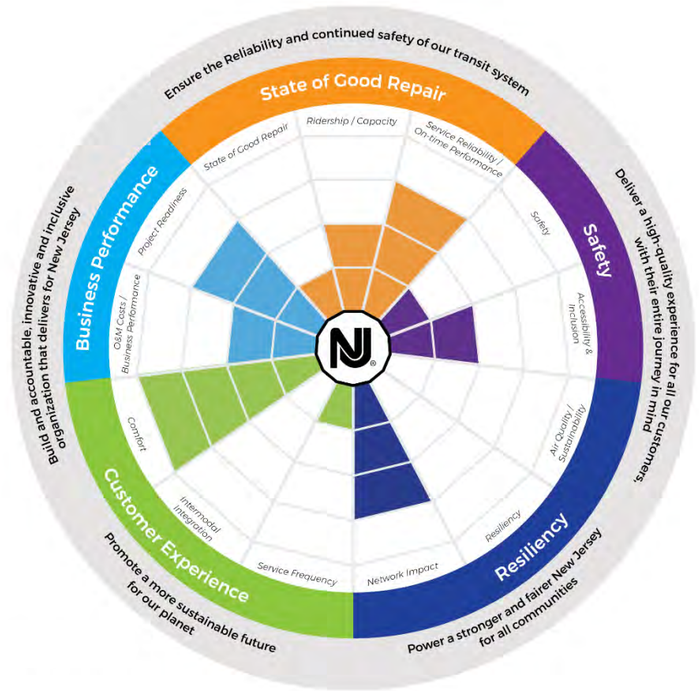
ESTIMATED PROJECT COSTS (2020 Dollars):

$53 Million









Value to Customers

- Improves the experience of customer journey, provide more safe, secure, reliable service
- Deploys the tools, technology, and talent to listen and react to customers in real-time
- Invests in digital technology and people to keep NJ TRANSIT safe, secure, reliable to communicate with customers and keep them informed

Value to State

- Enables NJ TRANSIT to get to a single source of truth and develop insights rapidly by improving emerging capabilities in data & analytics, lean methodologies, and API repositories
- Uses NJ TRANSIT as a daily touchpoint to create a sense of pride in the state and its economy for our customers by targeting pain points in journeys, payments, and accessibility

Program	Project	Strategy
Rail	PA system For Rail	Improve information flow to customers
	Rail Asset Management	Invest in targeted rail infrastructure programs to reduce delays and alleviate capacity constraints
	Smart Train	Smart train with WiFi and additional features
	TIMS- Track Information Management System	Deliver tech that improves customer experience
	RTVL- The Real Time Vehicle Locator - capability of locating our trains and equipment in real time	Deliver tech that improves customer experience
	Telematics / ORBITA- predictive asset management	Deliver tech that improves customer experience
	TRS Replacement- Rail's On-Time Performance reporting	Invest in targeted rail infrastructure programs to reduce delays and alleviate capacity constraints
	TQS Replacement- Rail's train and engine various qualifications	Invest in targeted rail infrastructure programs to reduce delays and alleviate capacity constraints
	Electronic/Mobile Inspections- Periodic Inspections and Preventive Maintenance	Deliver tech that improves customer experience
	Wi-Fi MMC/ROC	
	Electronic Wheel Set Forms	Deliver tech that improves customer experience
	Infrastructure Engineering Asset Management System	Deliver tech that improves customer experience

PROJECT SHEET IT RAIL IMPROVEMENTS

ESTIMATED TOTAL PROJECT COSTS

$53M

Comfort
Improved customer experience and real-time information updates would increase comfort for customers

Network Impact
Rail improvements would target all rail lines across the NJ TRANSIT system

Service Reliability/On-Time Performance
Targeted rail infrastructure programs would be designed to reduce delays and would alleviate capacity constraints

Ridership/Capacity
Real-time information and reduced delays would attract more riders

STRATEGIC GOALS MET

Deliver a high-quality experience for all our customers, with their entire journey in mind

Ensure the reliability and continued safety of our transit system

Implementing IT rail improvements would create ***safe, secure, and robust processes to improve customer experience***.

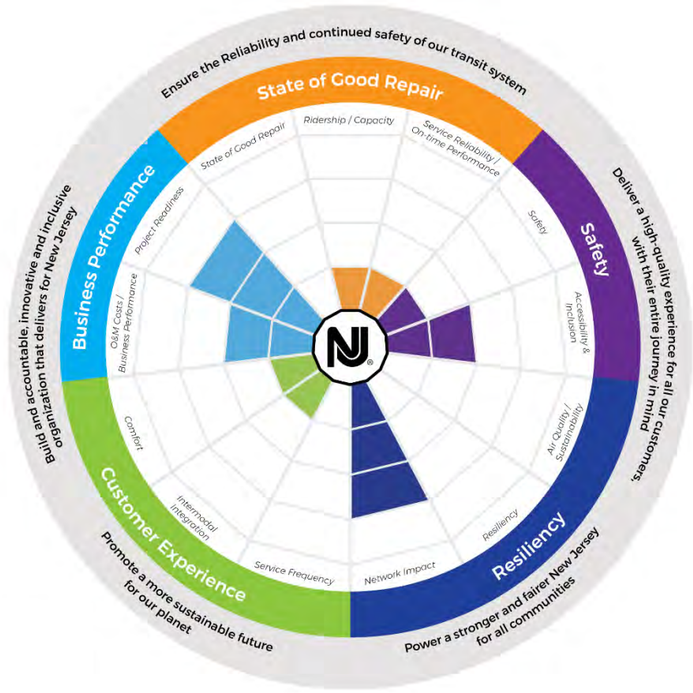
Description

A number of vehicle assist and fleet automation technologies are emerging in the transportation industry. NJ TRANSIT views these technologies as opportunities to improve the safety, reliability, and management of operations in crowded garages, improve driver safety, and realize future enhancements to surface transportation services. If funded, four automation technology pilot projects are proposed.

Pilot Project	Description
Automated vehicle (AV) bus pilot project operating in dedicated right-of-way (ROW)	• Test the operations of a fully autonomous 45' coach bus on a test track at Fort Monmouth that offers different types of intersections to mimic real world traffic conditions. • Road segments would vary from straight to curved to make pilot testing conditions as realistic as possible • On-site testing would be fully separated from all other traffic and buses • Include vehicle procurement services, pilot setup, operations testing, monitoring, and report evaluations
Driver assist bus pilot project operating in mixed traffic	• Assist drivers in increasing spatial and object awareness, limit driver distraction, and ultimately, increase safety on transit lines • Test the operations of a 45' bus with driver assist capabilities at normal speeds in mixed traffic on normal revenue passenger routes • Driver assist technology would be incorporated into a planned bus procurement • Include vehicle procurement or contract modification with driver assist technologies, pilot setup, operations testing, and report evaluations.
Automated bus yard project to pilot the automation of bus navigation through a bus garage facility	• Make bus movements at the garage facility faster and safer, decrease bus operator error in choosing the wrong bus, and increase operational efficiency • Retrofit 40', 45', and 60' articulated buses with automated driver assistance systems software • Software would connect to steering, braking, acceleration, and power switch systems, allowing the bus to autonomously navigate the test site • Use Meadowlands garage as test facility as it already services these three bus types • Three phases of testing are recommended with phase one addressing parking and recall, phase two covering wash and fuel, and phase three addressing charging simulation • Include vehicle procurement services, deployment setup, operations testing, and report evaluations
Driverless automated light rail vehicle (LRV) to evaluate and test the use of automated vehicle (AVS) technologies in a LRV portion of one of the NJ TRANSIT Light Rail systems	• Use similar to the infrastructure being tested in buses and autos on segments of light rail systems that could be designated as a test area during hours when the line is not in operation • Integrate AVS technologies into the LRV, and operate along a ROW that has multiple at-grade crossings and open platform passenger boarding areas • Work with the vehicle manufacturer to integrate the systems, identify a rail segment for testing, develop a testing plan and operating parameters, and report results from observations and evaluations
Mobility on Demand (MOD) demonstration project	• Pilot would be for "first mile/last mile" service in three zones along the U.S. Route 9 corridor in central New Jersey • Partner with transportation network companies (TNC) and taxi operators for on-demand service connecting area residents to the mainline U.S. Route 9 commuter buses • Goal to engage TNCs or taxi operators to serve as feeders to/from regional bus park and rides that allow transit trunk routes to be more frequent and TNCs to serve as more convenient connectors for the customer's first/last mile ride home from the park and ride hubs

ESTIMATED PROJECT COSTS (2020 Dollars):

$20 Million



Value to Customers

- Lessens disruption to service associated with operational issues and/or maintenance work
- Creates opportunities for improvement in services and safety

Value to State

- More efficient operations and use of limited garage space
- Improvements to vehicular safety
- Develops new and innovative technologies to improve surface transportation services

PROJECT SHEET SURFACE TRANSPORTATION TECHNOLOGY INNOVATION PROGRAM

ESTIMATED TOTAL PROJECT COSTS

$20M

O&M Costs/Business Performance
The piloted technologies would ease operations, make more efficient use of crowded facilities, and improve agency capacity to deploy emerging technology

Safety
Driver assist technologies and driverless movements inside garages would improve safety for employees and passengers

Network Impact
The technologies piloted as part of this program have the potential to affect the entire NJ TRANSIT bus and light rail systems

Project Readiness
The pilot program can be completed within five years and begin quickly

STRATEGIC GOALS MET

Deliver a high-quality experience for all our customers, with their entire journey in mind

Ensure the reliability and continued safety of our transit system

*Vehicle assist and fleet automation technologies would **improve safety, reliability, and the efficiency of garage operations**, as well as **enhance surface transit services**.*

Description

A pilot project is proposed to test a low-speed autonomous vehicle (AV) shuttle. This project would assess the feasibility of utilizing an AV system to enhance community transit offerings where more system capacity is needed. Further, the project could reveal opportunities for automated shuttles to provide first mile/last mile access to NJ TRANSIT's existing bus and rail stations.

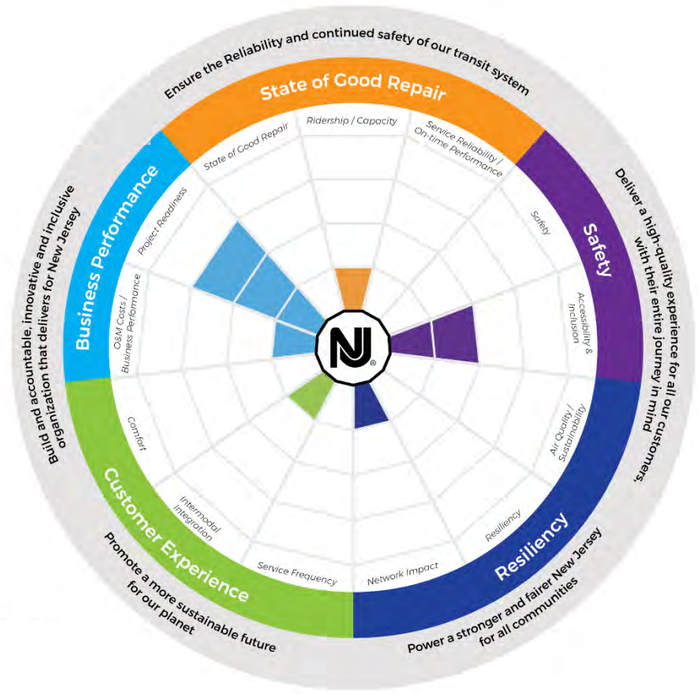
If funded, this project would test up to three vehicles in two-years at Fort Monmouth. Year One would cover private road testing to build confidence in the system. If successful, Year Two would test open door service around Fort Monmouth and adjacent NJ TRANSIT bus and rail stations, potentially expanding to bus stops on NJ Route 35 and the Little Silver Rail station. Access to and from Fort Monmouth is important as the Fort serves inclusionary, senior, and market-rate housing, as well as support services and a growing technology hub. A partnership with the Rutgers Center for Advanced Infrastructure, Navya, and Infratek, as well as the Fort Monmouth Economic Revitalization Authority is proposed.

ESTIMATED PROJECT COSTS (2020 Dollars):

$8 Million

Proposed: Autonomous Shuttle





Value to State

- Creates more economically competitive region with improved local growth opportunities
- Allows for potential to set a precedent for AV technology in New Jersey that could transform the state's current economic trajectory
- Provides better connectivity for customers
- Improves vehicle safety
- Development of new and innovative technologies to improve surface transportation services

Value to Customers

- Improves transit system connections
- Improves first/last mile transit options for customers
- Lessens disruption to service associated with operational issues and/or maintenance work

PROJECT SHEET LOW SPEED AUTONOMOUS SHUTTLE

ESTIMATED TOTAL PROJECT COSTS

$8M

O&M Costs/Business Performance
The pilot project would decrease operations and maintenance costs as many of the operations would be automated

Network Impact
This pilot project could potentially be used on many buses across the NJ TRANSIT bus system

Project Readiness
This pilot project could be completed within two years and would be ready to start very quickly

Accessibility and Inclusion
The pilot project would serve inclusionary, senior, and market-rate housing at Fort Monmouth

STRATEGIC GOALS MET

Deliver a high-quality experience for all our customers, with their entire journey in mind

Ensure the reliability and continued safety of our transit system

*Assessing the feasibility of using an **autonomous vehicle system** would **enhance community transit** offerings **where more system capacity is needed.***

Description

Moving Ahead for Progress in the 21st Century (MAP-21) requires NJ TRANSIT to report annually on the State of Good Repair (SGR) of capital assets, to the FTA National Transit Database (NTD). The FTA uses NTD data to apportion funding to transit agencies across the country. To receive funding from the FTA, NJ TRANSIT must report to the NTD in a compliant manner.

NJ Transit has established a program for Facility Inspections that involves the physical inspections, the assessment of facility conditions, achieving and maintaining a State of Good Repair (SGR), and complying with the Federal Transit Administration (FTA) Transit Asset Management (TAM) Final Rule, issued July 26, 2016 for inspection of approximately 285 locations, that would enable more efficient and effective management of our facilities across all modes.

The NJ TRANSIT Facility Database Management System (FDMS) would support NJ TRANSIT enterprise asset management for the NTD reporting for the facilities asset category.

ESTIMATED PROJECT COSTS (2020 Dollars):

$9 Million

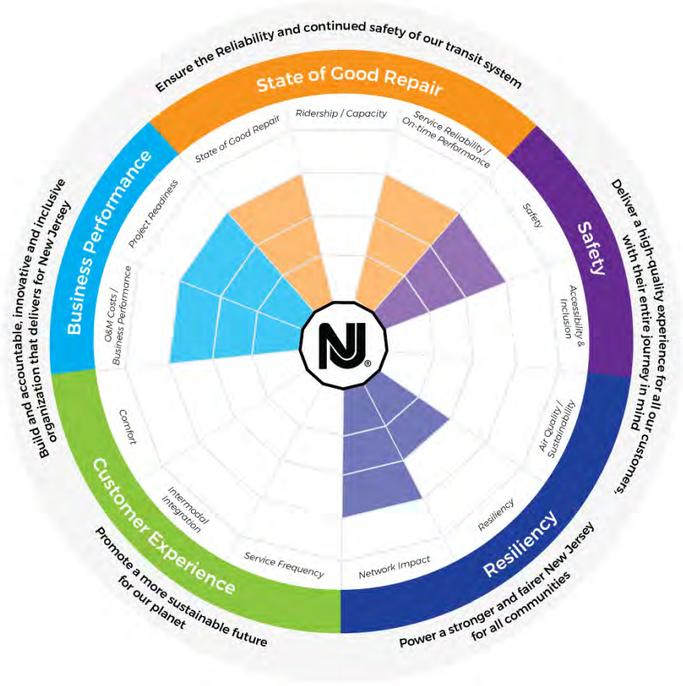
Value to State

- Improves knowledge of assets and accurate reporting
- Provides better justification of funding requests
- Enhances understanding of short and long-term funding needs











PROJECT SHEET ENTERPRISE ASSET MANAGEMENT: FACILITY INSPECTIONS FY21 - FY23

ESTIMATED TOTAL PROJECT COSTS

$9M

Safety
The resulting state of good repair improvements would make NJ TRANSIT's entire networks safer for customers and employees

Service Reliability/On-Time Performance
Regular inspection and assessment of facilities would improve service reliability

State of Good Repair
Facility inspections and assessments would improve understanding of asset conditions and maintenance and capital needs

O&M Costs/Business Performance
Facility inspections and assessments would provide data and information to improve NJ TRANSIT's decision making process and understanding of future investment needs

STRATEGIC GOALS MET

Deliver a high-quality experience for all our customers, with their entire journey in mind

Build an accountable, innovative, and inclusive organization that delivers for New Jersey

*Supporting the Facility Inspection program would **enhance state of good repair**, **support business performance**, and **improve customer experience and safety**.*

Description

Moving Ahead for Progress in the 21st Century (MAP-21) requires transit agencies to develop an enterprise strategy for managing assets. Asset Management is fundamental for effectively maintaining NJ TRANSIT's $5.3 billion in assets, ensuring the system is in a State of Good Repair and providing the level of service that our customers demand.

NJ TRANSIT established the Enterprise Asset Management (EAM) Program Management Office (PMO) to lead and manage a program of change through the delivery of a range of projects that establish the vision and future state for asset management at NJ TRANSIT. The PMO's initial work involves establishing new processes and practices, establishing data standards, identifying the preferred approach for an Enterprise Asset Management System, and developing the analytical tools and investment prioritization procedures that would enable more efficient and effective management of our assets across all modes.

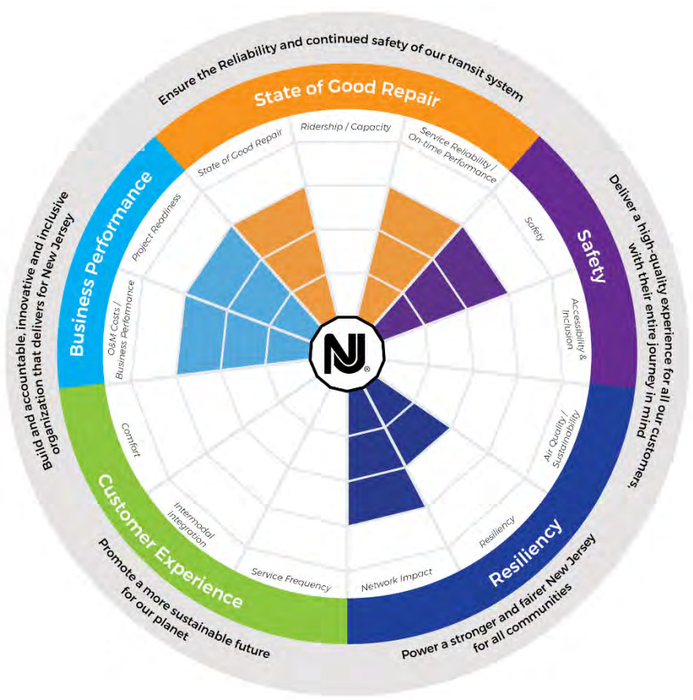
If funded, the work completed as part of the EAM PMO over the next several years would establish the first phase of improvement work, which, once implemented would result in the following goals being met.











ESTIMATED PROJECT COSTS (2020 Dollars):

$8 Million

Value to Customers

- Improves customer experience due to improved SOGR
- Allows better use of fare revenue toward customer-facing improvements

Value to State

- Improves knowledge of assets and accurate reporting
- Provides better justification of funding requests
- Enhances understanding of short and long-term funding needs

PROJECT SHEET ENTERPRISE ASSET MANAGEMENT

ESTIMATED TOTAL PROJECT COSTS

$8M

Safety
The resulting state of good repair improvements would make NJ TRANSIT's entire networks safer for customers and employees

Service Reliability/On-Time Performance
Improved management of transit assets and better understanding of maintenance and capital needs would enhance service reliability

State of Good Repair
EAM PMO would enhance state of good repair by improving understanding of asset conditions and improving processes for identifying maintenance and capital needs

O&M Costs/Business Performance
EAM PMO would provide data and information to improve NJ TRANSIT's decision making process and understanding of future investment needs

STRATEGIC GOALS MET

Deliver a high-quality experience for all our customers, with their entire journey in mind

Build an accountable, innovative, and inclusive organization that delivers for New Jersey

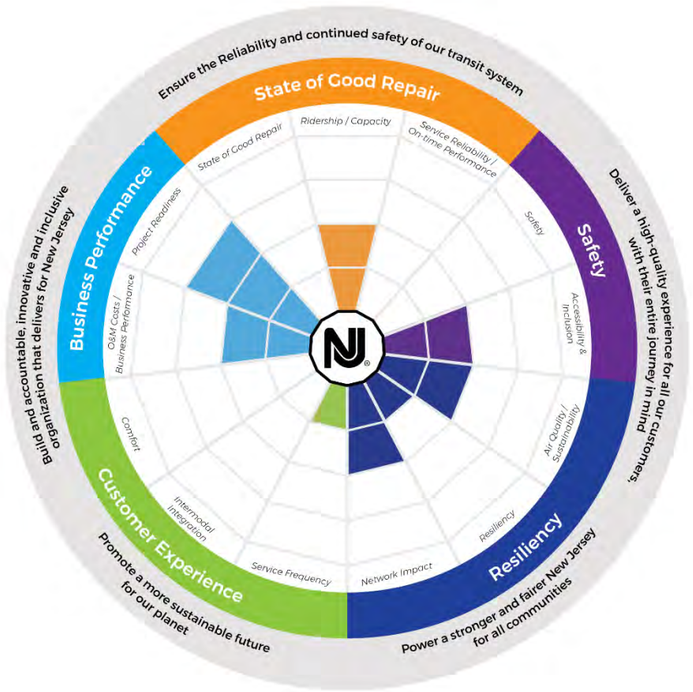
*Supporting the EAM PMO would **enhance state of good repair**, **support business performance**, and **improve customer experience and safety**.*

Description

Over the years, NJ TRANSIT has conducted numerous studies in partnership with regional and local stakeholders to plan for expansions to New Jersey's multi-modal transit system. NJ TRANSIT recognizes the importance of expanding service to accommodate more customers and support emerging development patterns and economic vitality.

If funded, this project would propose updates to several past studies to determine their feasibility in the current environment and with the application of recent technological innovations.





ESTIMATED PROJECT COSTS (2020 Dollars):

$5 Million

Value to Customers

- Expands transit network to provide convenient options for more customers
- Creates new and faster transit connectivity to employment centers, educational institutions, medical centers, and other major trip attractors and generators throughout the State

Value to State

- A more economically competitive region with improved local growth opportunities.
- Creates a more efficient and environmentally sustainable transit network.
- Lessens congestion on local roads and major highways.

Project Sheet | **Updated Planning Studies**

STUDY	DESCRIPTION
West Trenton Line Passenger Service Study	Determine the feasibility of restoring passenger service on the CSX-owned West Trenton Line to provide service between SEPTA's West Trenton Station in Ewing and NJ TRANSIT's Raritan Valley Line at Bridgewater. The service would provide a direct connection between West Trenton and Newark Penn Station. This project was last studied in 2007 when NJ TRANSIT published an Environmental Assessment. An updated study would assess the feasibility of using the CSX ROW for passenger service under current conditions, examine potential vehicle technologies, and determine initial conceptual designs.
Monmouth-Ocean-Middlesex Line Feasibility Study	Investigate extending NJ TRANSIT commuter rail service to better serve Monmouth, Ocean, and Middlesex Counties in Central New Jersey. A previous study in 2002 proposed various alignments connecting a southern terminus in Lakehurst with the North Jersey Coast or Northeast Corridor Lines in Middlesex County. An updated study would reassess these alignment options given recent development patterns and determine a preferred vehicle technology
New Brunswick Area Passenger Service Study	Build on previous studies examining light rail service in Middlesex County. The most recent study was completed in 2001, and proposed a light rail alignment following Route 18 and connecting Piscataway, New Brunswick, and East Brunswick. An updated study would evaluate alignments and propose additional modal alternatives beyond light rail, including BRT and autonomous rail or bus vehicles.
West Shore Line Passenger Service Restoration Study	Determine the feasibility of restoring passenger service to the West Shore Line, currently part of CSX's River Subdivision, to improve transit within Hudson, Bergen, and Passaic Counties in New Jersey and Rockland County in New York. Based on previous studies, passenger service along the West Shore Line would run between Hoboken and West Nyack, New York via the Secaucus Transfer and Meadowlands Sports Complex. This study would examine the previously proposed alignment, recommend new alignments to complement recent development patterns in Bergen County, examine potential vehicle technologies, and determine initial conceptual designs.
HBLR to Secaucus Bergen Arches Study	Determine the feasibility of reactivating the abandoned Bergen Arches ROW to expand HBLR service to connect Jersey City with Secaucus Junction. Use of the Bergen Arches ROW for passenger service was last studied in 2002. An updated study would assess the feasibility of using the ROW for light rail service and determine an initial set of concepts to upgrade the ROW for passenger service.
Newark-Elizabeth Passenger Service Study	Assess the alternatives for extending Newark Light Rail service to connect the downtown areas of Newark and Elizabeth with Newark Airport. The study would examine the previously proposed 8.8 mile light rail alignment and develop additional alignment and modal alternatives to reflect recent technological advances in autonomous vehicles.
River LINE to West Trenton Study	Assess a possible extension of the River LINE to connect to SEPTA's West Trenton Station in Ewing. This study would determine the feasibility and potential benefits of this extension given recent development trends.
Phillipsburg Extension Study	Examine extending the Raritan Valley Line to Phillipsburg to relieve congestion on Interstate 78 and Route 22. Last studied in 2010, an updated study would reassess the proposed rail extension and develop potential modal alternatives, including enhanced bus service or BRT.
New York, Susquehanna & Western (NYS&W) Line Passenger Service Study	Determine the feasibility of restoring passenger service on the NYS&W Line between Pompton Junction and Hawthorne. The study would examine the feasibility of using the NYS&W Line for passenger service, examine potential vehicle technologies, and determine initial conceptual designs.
Boonton Line – Orange Branch Transit Feasibility Assessment	Determine the feasibility of restoring passenger service on currently unused portions of the Boonton Line and Orange Branch rail corridors. The study would examine the feasibility of implementing a variety of potential transit options, including BRT and other surface transport options, along the corridor between Montclair, Belleville, and Secaucus.

PROJECT SHEET UPDATED PLANNING STUDIES

ESTIMATED TOTAL PROJECT COSTS

$5M

Project Readiness
Planning studies could be completed within two years and would be ready to start very quickly

Ridership/Capacity
Expanding the transportation network would increase the customer base and provide more convenient options to existing customers

Air Quality/Sustainability
An expanded transit network would reduce vehicle emissions and provide a more efficient, sustainable transportation option

Network Impact
Expanding the transit network throughout the State would provide better transit connectivity to key destinations

STRATEGIC GOALS MET

Deliver a high-quality experience for all our customers, with their entire journey in mind

Power a stronger and fairer New Jersey for all communities

Updating planning studies would lay the groundwork for NJ TRANSIT to ***expand service*** *and* ***better support economic vitality****.*

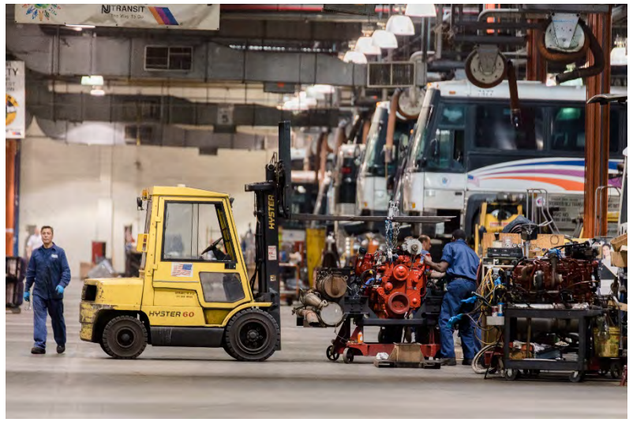
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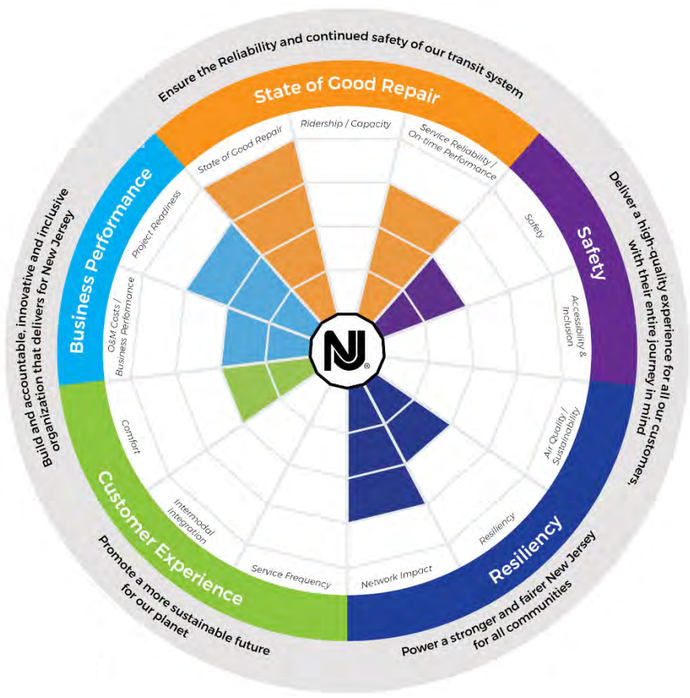
NJ TRANSIT operates over 200 commuter rail and light rail stations, bus park and rides and other facilities that our customers touch and use every day. In addition, there are dozens of facilities that service the infrastructure and fleet that our customers use every day that must be kept in a good state of repair to provide clean, reliable, on time service. Continuous improvements to keep and restore these facilities to a state of good repair are a critical part of ensuring these assets are preserved, and that customers enjoy a safe and comfortable interaction with the NJ TRANSIT system. NJ TRANSIT constantly performs conditions inspections for all NJ TRANSIT assets to assess their state of good repair across the entire facility inventory. This was done to both comply with Federal Transit Asset Management System (TAMS) requirements, but also to systematically inspect, categorize, and prioritize necessary work across the largest state-wide transportation system in the country. This ongoing process would be constantly updated as a standard business practice so that every asset in the system inventory would be re-inspected on a maximum three-year cycle.

To manage this geographically and numerically expansive number of facilities, the State of Good Repair Program has been created to rapidly address critical needs as they are identified by NJ TRANSIT's TAMS inspections, Operations group alerts, and customer complaints at the wide variety of NJ TRANSIT facilities. The program is intended to leverage an innovative Job Order Contracting (JOC) delivery tool to allow for rapidly deployed repair teams to effect treatments and repairs in days or hours instead of weeks or months to quickly make near term improvements to the state of good repair to public facing facilities.

In the State of Good Repair program, deficient conditions are prioritized and dispatched for prompt repair based on priority of need, as follows our strategic and capital needs where the safety of our customers and employees comes first, but also to be able to demonstrate a responsive and nimble organization that can quickly repair deficient facility assets that ensure continued and efficient operation of NJ TRANSIT service, and create a mechanism that offers rapid and constant improvement to the facilities our customers use every day. This effort is being treated as an ongoing Program and funding shown reflects a yearly investment that can be adjusted up or down dynamically to meet the needs of the system.







ESTIMATED PROJECT COSTS (2020 Dollars):

$100 Million

Value to Customers

- Enhances comfort for customers at improved facilities.

Value to State

- Extends service life of facilities while improving state of good repair systemwide.

Line/Division	Overall Facility Name	Overall Facility Rating	Building Exterior/Shell	Building Interior/ Interiors	Canopies/ Platform	Electrical	Equipment	Fare Collection Equipment	Fire Protection	HVAC	Plumbing	Site	Substructure	Vertical Transportation
Raritan Valley Line	High Bridge Station	2.3	x	x	x	x				x	x	x		
Central Division Bus	Newfoundland Park and Ride	2.3										x		
Raritan Valley Line	Raritan Station	2.5	x	x	x					x		x		
Newark Light Rail System	Park Avenue Station	2.5	x		x	x				x	x	x		
Raritan Valley Line	Lebanon Station	2.6	x		x	x				x	x	x		
Raritan Valley Line	Netherwood Station	2.6	x	x	x	x				x	x	x		
Newark Light Rail System	Norfolk Street Station	2.6	x		x	x						x		
Raritan Valley Line	Bound Brook Station	2.7	x	x	x	x						x		
Morristown Line	East Orange Station	2.7	x	x	x	x				x	x	x	x	
Gladstone Branch	Millington Station	2.7	x		x	x			x	x	x	x		
Gladstone Branch	Murray Hill Station	2.7	x	x								x		
Gladstone Branch	Peapack Station	2.7	x		x							x		
Central Division Bus	Lakewood Bus Terminal	2.7	x	x		x			x	x	x	x		
Morristown Line	Convent Station	2.8	x	x	x					x	x	x		
Morristown Line	Highland Avenue Station	2.8	x	x	x							x		
Newark Light Rail System	Military Park Station	2.8		x	x					x	x	x		
Central Division Bus	Old Bridge Park and Ride	2.8		x	x							x		
Gladstone Branch	Bernardsville Station	2.9	x	x	x	x				x	x			
Main Line	Kingsland Station	2.9	x	x		x				x	x	x		

PROJECT SHEET STATE OF GOOD REPAIR PROGRAM

ESTIMATED TOTAL PROJECT COSTS

$100M

Safety
Public facing facilities would be safer for customers as three types of inspections are done to review for any critical needs

Network Impact
NJ TRANSIT facilities across the transit system would benefit from this program

Service Reliability
Facilities that are maintained regularly would support expedited boarding and alightings which would allow for continued reliable service

State of Good Repair
This program would ensure that NJ TRANSIT public facing facilities would be in good condition and would rapidly address any critical needs

STRATEGIC GOALS MET

Deliver a high-quality experience for all our customers, with their entire journey in mind

Ensure the reliability and continued safety of our transit system

Rapidly address critical needs *as identified by NJ TRANSIT TAMS inspections, operations group alerts, and customer complaints* ***at NJ TRANSIT public facing facilities***.

Description

The NJ TRANSIT Police Department services the various bus stops, rail, and light rail stations owned by NJ TRANSIT to enhance the security and safety of commuters. NJ TRANSIT Police operates out of seven command centers located at major transportation hubs within the seven NJ Districts: One Penn Plaza HQ (District 1), Newark Penn Station (District 2), Hoboken Terminal (District 3), Secaucus Junction (District 4), Trenton Transit Center (District 5), Walter Rand Bus Terminal (District 6), and the Atlantic City Bus Terminal (District 7). However, there are no local shelters or command posts for police at the stations. This makes it more challenging to efficiently patrol the various stops and stations and requires the police to report back to the respective district command post after each shift.

If funded, this project would construct police patrol and operations posts at various rail stations and at major bus terminals to facilitate patrol operations. The shelters would act as local command posts and allow police to more efficiently patrol stations and bus terminals. These shelters would also mitigate the need to physically report back to the district command posts after each shift, which would drastically save NJ TRANSIT Police time and money that can be better spent on providing more security at each transportation hub. In addition, police command centers at Atlantic City Bus Terminal and Secaucus Junction would see upgrades on top of the shelter implementation systemwide.

ESTIMATED PROJECT COSTS (2020 Dollars):

$13 Million

Value to Customers

- Increases safety and security for customers

Value to State

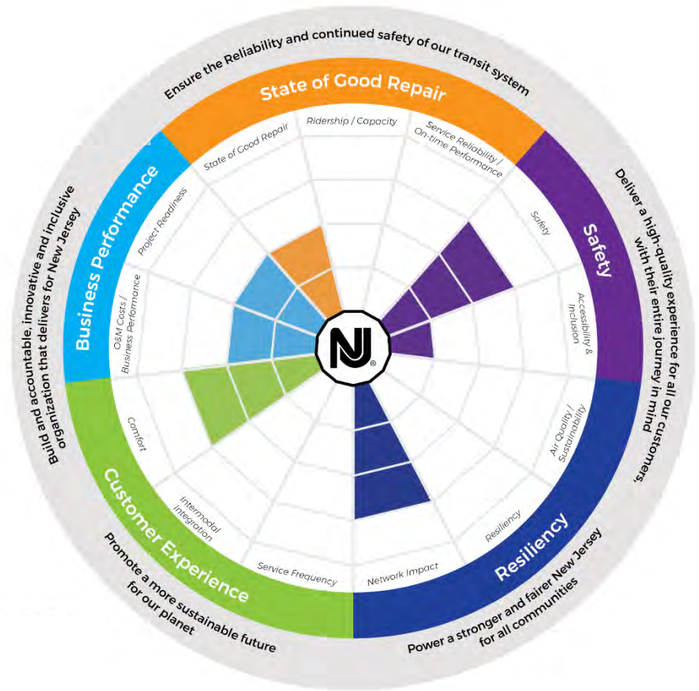
- Reduces expenses incurred by requiring police to report back to district command posts

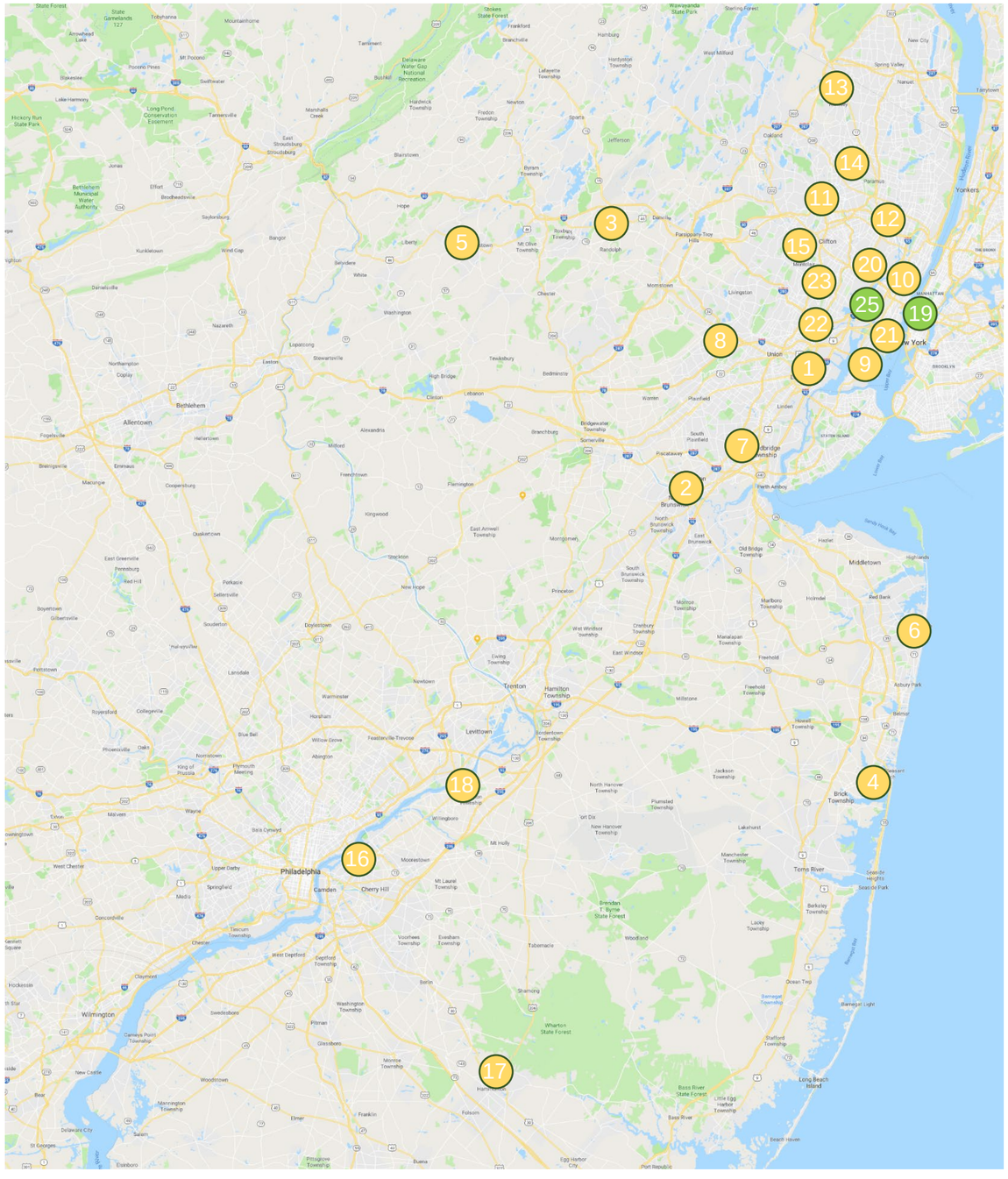
Existing: Long Branch Police Post



Proposed: Local Police Post







	Shelter	District	Line
1	Elizabeth	2	NEC
2	New Brunswick	2	NEC
3	Dover	2	M&E
4	Bay Head	6	NJCL
5	Hackettstown	2	M&E
6	Long Branch	2	NJCL
7	Metro Park	2	NEC
8	Summit	2	M&E
9	8th Street	3	HBLR
10	Tonnelle Ave.	3	HBLR
11	Paterson	4	MLBC
12	Hackensack	4	BUS
13	Ramsey Rt.17	4	MLBC
14	Ridgewood	4	MLBC
15	Great Notch Yard	2	MOBO
16	Pennsauken	6	AC
17	Hammonton	7	AC
18	Burlington	6	RL
19	New York Penn	-	NEC
20	Meadowlands	3	PVL
21	Liberty State Park	3	HBLR
22	Orange Street	2	NLR
23	Grove Street	2	NLR
24(1)	Atlantic City	6	AC
25	Secaucus	3	ALL

(1) Atlantic City not shown on map

LEGEND

	Proposed New Shelter
	Proposed Shelter Rehab

PROJECT SHEET POLICE PATROL AND OPERATIONS POST

ESTIMATED TOTAL PROJECT COSTS

$13M

O&M Costs/Business Performance
New network of police posts would allow for more efficient use of resources and reduction in expenses by eliminating having to report back to the district command posts after each shift

Comfort
Additional police posts would improve NJ TRANSIT police response times

Safety
Additional police posts would improve security and response times

Network Impact
New police posts would be added throughout the rail and bus networks

STRATEGIC GOALS MET

Deliver a high-quality experience for all our customers, with their entire journey in mind

Ensure the reliability and continued safety of our transit system

*New patrol and operations posts would **improve safety** and **police efficiency** across the bus and rail systems.*

APPENDIX E

NJ Transit Capital Program Overview

Appropriation Line	Narrative Summary	Appropriation To Date Or, If Ongoing Programs (Last 11 Years)	Proposed Appropriation (FY21)	Proposed Appropriation (FY22)	Proposed Appropriation (FY23 - FY30)	Amount Expended Or, If Ongoing Programs	Project Status	Project Status Expected Completion
Access to Region's Core (ARC) - T97	The ARC program will expand "one seat" ride service to Manhattan by doubling the capacity of the Trans-Hudson commuter rail system. The centerpiece of the program is the Trans-Hudson Express Tunnel project (THE Tunnel). This project includes construction of a connection between the Main Line & NEC, added tracks along the Northeast Corridor Line, a new trans-Hudson River tunnel, and station under 34th Street in Manhattan. These improvements will allow accommodation of future travel demand and relieve congestion on alternative modes of travel. CMAQ: Funding for this project will include CMAQ funds. This project is CMAQ eligible because it meets federal eligibility requirements. The project will provide enhanced mass transit service and increased transit ridership. For the CMAQ justification see "CMAQ Report for NJ TRANSIT." Toll Credit will be used as the non-federal match. An explanation of toll credit can be found in the Introduction Section of the STIP. This project is funded under the provisions of Section 13 of P.L. 1995, c.108. The total project cost is estimated to be $8.7 billion including the cost of new train equipment for opening day. There is an additional $400 million for new train equipment to be purchased for 2030 service.	$126.63			$0.00	$126.63	Ongoing	Ongoing
ADA - Equipment - T70	Funding is provided for the purchase of Access Link vans and/or small buses to serve people with disabilities. This project is funded under the provisions of Section 13 of P.L. 1995, c.108.	$4.00			$0.00	$4.00	Ongoing	Ongoing

APPENDIX E

Appropriation Line	Narrative Summary	Appropriation To Date Or, If Ongoing Programs (Last 11 Years)	Proposed Appropriation (FY21)	Proposed Appropriation (FY22)	Proposed Appropriation (FY23 - FY30)	Amount Expended Or, If Ongoing Programs	Project Status	Project Status Expected Completion
ADA - Platforms/Stations - T143	Funding is provided for the design and construction of necessary repairs to make NJ TRANSIT's rail stations, and subway stations more accessible for the Americans with Disabilities Act (ADA) including related track and infrastructure work. Funding is requested for repairs, upgrades, equipment purchase, platform extensions, and transit enhancements throughout the system and other accessibility repairs/improvements at stations.	$57.52	$0.50	$1.00	$8.00	$46.87	Ongoing	Ongoing
Bridge and Tunnel Rehabilitation - T05	This program provides funds for the design, repair, rehabilitation, replacement, painting, inspection of tunnels/bridges, and other work such as movable bridge program, drawbridge power program, and culvert/bridge/tunnel right of way improvements necessary to maintain a state of good repair.	$342.81	$81.06	$18.75	$187.24	$205.19	Ongoing	Ongoing
Building Capital Leases - T32	Funding is provided for capital improvements and lease payment obligations at NJ TRANSIT operating and office installations.This project is funded under the provisions of Section 13 of P.L. 1995, c.108.	$48.69			$0.00	$47.37	Ongoing	Ongoing
Bus Acquisition Program - T111	This program provides funds for replacement of transit, commuter, access link, and suburban buses for NJ TRANSIT as they reach the end of their useful life as well as the purchase of additional buses to meet service demands. Federal lease payments are provided for 1371 Cruiser buses. Pay-as-you-go funding is provided for over 2300 buses replacements over the next 10-years including but not limited to cruiser buses, NABI buses, and articulated buses. Toll Credit will be used as the non-federal match. An explanation of toll credit can be found in the Introduction Section of the STIP.	$1,071.23	$7.00	$100.82	$1,305.04	$917.16	Ongoing	Ongoing
Bus Maintenance Facilities - T93	This program provides funds for bus maintenance facilities systemwide. This project is funded under the provisions of Section 13 of P.L. 1995, c.108.	$23.41			$0.00	$8.22	Ongoing	Ongoing

APPENDIX E

Appropriation Line	Narrative Summary	Appropriation To Date Or, If Ongoing Programs (Last 11 Years)	Proposed Appropriation (FY21)	Proposed Appropriation (FY22)	Proposed Appropriation (FY23 - FY30)	Amount Expended Or, If Ongoing Programs	Project Status	Project Status Expected Completion
Bus Passenger Facilities/Park and Ride - T06	This program provides funds for the bus park and ride program, improvements to bus passenger facilities and the purchase and installation of bus stop signs and shelters systemwide. This program also involves the construction of an improved vehicular ground transportation facility at Frank R. Lautenberg (FRL) Station in Secaucus, NJ. Pedestrian connections to the rail terminal and signage improvements within and outside of the station are also included as part of this project including but not limited to acquisition of properties and any items or services needed to support the acquisition.	$12.10	$0.80	$0.80	$6.40	$8.53	Ongoing	Ongoing
Bus Support Facilities and Equipment - T08	This program provides funds to maintain NJ TRANSIT's bus fleet including but not limited to, bus tires, engines and transmissions and other parts, support vehicles\equipment (for bus operations), maintenance equipment, and bus mid-life overhaul needs. Also included is midlife rehabilitation of bus facilities, other capital improvements to various support facilities and bus mid-life overhauls including but not limited to acquisition of properties and any items or services needed to support the acquisition. This program also involves the replacement of two CNG Compressor filling stations at Howell Garage.	$90.56	$104.81	$24.98	$386.27	$46.01	Ongoing	Ongoing
Bus Vehicle and Facility Maintenance/Capital Maintenance - T09	Funding is provided for acquisition/installation/rehabilitation of major components associated with capital equipment and facilities in accordance with Transportation Trust Fund requirements and expanded eligibility criteria.	$190.47	$0.00	$0.00	$0.00	$190.47	Ongoing	Ongoing
Camden-Glassboro Light Rail Line - T302	Funding is for the design, engineering, construction and other necessary initiatives or items to complete the proposed Glassboro-Camden Light Rail Line (GCL) would provide light rail passenger service to communities in Camden and Gloucester Counties along an existing freight rail line using diesel light rail vehicles. The proposed 18-mile alignment connects Glassboro and Camden along an active Conrail freight right-of-way.	$5.00			$0.00	$0.00	Ongoing	Ongoing

APPENDIX E

Appropriation Line	Narrative Summary	Appropriation To Date Or, If Ongoing Programs (Last 11 Years)	Proposed Appropriation (FY21)	Proposed Appropriation (FY22)	Proposed Appropriation (FY23 - FY30)	Amount Expended Or, If Ongoing Programs	Project Status	Project Status Expected Completion
Capital Ferry Improvement Program - T700	Program involves the Ferry Capital Improvement Program (FCIP), which will provide needed capital equipment enabling the participating operators to acquire, replace and rehabilitate ferries and other capital equipment and make ferry facility improvements as well as NJ TRANSIT's administrative cost incurred for the FCIP program. This program includes federal dollars allocated from the Passenger Ferry Grant Program (Ferry Program), as authorized, under 49 U.S.C 5307 (Section 5307). Funding will be used to improve the state of good repair of the ferry fleet by retrofitting the power and propulsion systems of commuter ferry vessels to provide more efficient operation. This project will allow for improved ferry service for approximately 30,000 daily passengers travelling between the New York-New Jersey metropolitan regions. This program benefits the riding public by sustaining the availability of affordable mass transit service including but not limited to acquisition of properties and any items or services needed to support the acquisition.	$15.85	$6.50	$6.50	$52.00	$3.44	Ongoing	Ongoing
Capital Program Implementation - T68	Funding is provided for capital project management activities associated with capital program/project delivery including procurement and DBE/SBE activities.	$248.21	$21.47	$21.47	$171.76	$237.70	Ongoing	Ongoing
Casino Revenue Fund - T515	State law provides 8.5% of the Casino Tax Fund to be appropriated for transportation services for senior and disabled persons. This element also supports capital improvements that benefit the senior and disabled populations. The law provides 85% of these funds to be made available to the counties through NJ TRANSIT for capital, operating, and administrative expenses for the provision of locally coordinated para-transit services. The amount each county receives is determined by utilizing an allocation formula based on the number of residents 60 years of age and over as reflected in the most recent U.S. Census Report.	$272.43	$22.63	$22.63	$181.04	$242.28	Ongoing	Ongoing
Claims Support - T13	Funding is provided for claims related to capital projects, expert witnesses, court settlement, and other costs to defend NJ TRANSIT's interests as a result of litigation.	$6.33	$0.00	$0.00	$0.00	$5.58	Ongoing	Ongoing

APPENDIX E

Appropriation Line	Narrative Summary	Appropriation To Date Or, If Ongoing Programs (Last 11 Years)	Proposed Appropriation (FY21)	Proposed Appropriation (FY22)	Proposed Appropriation (FY23 - FY30)	Amount Expended Or, If Ongoing Programs	Project Status	Project Status Expected Completion
Cumberland County Bus Program - T170	This program provides funds for capital and operating assistance for Cumberland County UZA, including purchase of buses, minivans, support equipment, facility improvements and capital maintenance costs. Toll Credit will be used as the non-federal match. An explanation of toll credit can be found in the Introduction Section of the STIP.	$0.00	$1.02	$1.02	$8.16	$0.00	Ongoing	Ongoing
Delco Lead Safe Haven Storage and Re-inspection Facility Project - T907	Funding is provided to build the Delco Lead Safe Haven Storage and Re-Inspection Facility. The Delco Lead is located along the Northeast Corridor (NEC) adjacent to the CONRAIL "Delco Secondary". The Safe Haven Storage will provide resilient storage that will protect equipment against damage resulting from a storm. The Service and Inspection Facility will facilitate the rapid return of equipment to service following a storm event. The source of the local funding is the State Transportation Trust Fund (TTF).	$3.50			$0.00	$0.66	Ongoing	Ongoing
Environmental Compliance - T16	Funding is provided for compliance with environmental regulations at both bus, light rail and rail facilities and operating support includes but is not limited to replacement of leaking fuel tanks, clean up of contaminated soil and ground water, oil/water separators, asbestos removal, and fueling station improvements at various facilities etc.	$47.54	$3.00	$3.00	$24.00	$37.76	Ongoing	Ongoing
High Speed Track Program - T43	Funding is provided for an annual program of high speed track rehabilitation including high speed surfacing, systemwide replacement of life-expired ties and other rail improvements, right-of-way fencing, equipment necessary to maintain a state of good and safe repair, purchase of long lead-time materials for next construction season, maintenance-of-way work equipment, interlocking improvements, passing sidings, other improvements, materials and services as necessary to support the program. Toll Credit will be used as the non-federal match. An explanation of toll credit can be found in the introduction section of the STIP.	$3.00	$1.00	$1.00	$20.80	$3.00	Ongoing	Ongoing

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Hoboken Ferry Service Improvements - T702	Funding will support the acquisition, relocation, improvements and any other scope or item associated with the relocation and or purchase of support facilities such as and not limited to maintenance yards, crew quarters and administrative buildings etc.	$12.00			$0.00	$0.39	Ongoing	Ongoing
Hoboken Long Slip Flood Protection Project - T908	Funding is provided to reduce the risk of flooding to Hoboken Rail Yard and the City by filling the deteriorated "Long Slip" inlet inside the rail yard. This project would also improve disaster response and recovery by constructing new elevated tracks and boarding areas on the filled area. The elevated position of these tracks and platforms will permit rapid recovery of commuter rail services to and from Hoboken Yard and its associated Hudson Bergen Light Rail {HBLR}, Port Authority Trans-Hudson (PATH), and ferry service. It will allow continued passenger service while the yard is being decommissioned in preparation of a major storm, and again as the yard is being restored for passenger operation after the storm. The source of the local funding is the State Transportation Trust Fund (TTF).	$4.91			$0.00	$0.22	Ongoing	Ongoing
Hudson-Bergen and Newark LRT System - T87	Funding is provided for annual Hudson-Bergen Capital Asset Replacement improvements, and other improvements along the Hudson-Bergen Light Rail Line, including rolling stock enhancements. Funding is provided for the Route 440 Extension Project is planned to provide convenient transit access for existing and future residents of the western waterfront area. The HBLR Route 440 Extension project would extend the HBLR West Side Avenue Branch from its current terminus at West Side Avenue in Jersey city to a new terminus station on the west side of State Route 440.	$62.86			$0.00	$55.04	Ongoing	Ongoing

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Hudson-Bergen Light Rail 8th Street Extension - T533	Funding is provided for the Hudson-Bergen Light Rail Transit System 8th Street Extension which will provide light rail service from the existing 22nd Street station south to 8th Street in Bayonne. Toll Credit will be used as the non-federal match. An explanation of toll credit can be found in the Introduction Section of the STIP. This project is funded under the provisions of Section 13 of P.L. 1995, c.108. Total project cost of Hudson-Bergen Light Rail 8th Street Extension is $100 million.	$18.00			$0.00	$18.00	Ongoing	Ongoing
Hudson-Bergen LTR Northern Extension - T301	Funding is for the design, engineering, construction to reintroduce rail service between Englewood in Bergen County and North Bergen in Hudson County to improve regional mobility, mitigate traffic congestion, and foster economic investment. The reintroduction of rail transit service in eastern Bergen County will mark a significant step forward for congestion relief on local and county roads burdened by daily commuter traffic. Eastern Bergen County residents are significantly oriented to jobs in New York City and the Hudson County waterfront and Northern Branch service will provide a mass transit alternative. The 10-mile corridor extends from North Bergen to Englewood using the existing CSX Northern Branch freight corridor. The project will connect to the HBLR system, which terminates at Tonnelle Avenue in North Bergen.	$95.00			$0.00	$0.00	Ongoing	Ongoing
Immediate Action Program - T20	Funding is provided for emergency project needs under the rail, bus, and headquarters programs; contract change orders; consultant agreement modifications; and other unanticipated work identified during the course of the year, thus allowing the agency to be responsive to emergency and unforeseen circumstances which arise unexpectedly.	$382.43	$5.09	$12.51	$257.40	$325.52	Ongoing	Ongoing

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Job Access and Reverse Commute Program - T199	Funding is provided to continue the Job Access and Reverse Commute (JARC) program with non-federal funds. Moving Ahead for Progress in the 21st Century (MAP-21) eliminated the requirement for dedicated Federal funding for JARC.	$10.00	$0.00	$0.00	$0.00	$10.00	Ongoing	Ongoing
Lackawanna Cutoff MOS Project - T535	Funding is provided for FY 2008 New Starts earmarks for the Lackawanna Cutoff Rail project, which will provide an 88-mile, single-track commuter rail line with passing sidings between Scranton, Pennsylvania and Port Morris, New Jersey where it will connect with NJ TRANSIT's Boonton/Morristown Line.Toll Credit will be used as the non-federal match. An explanation of toll credit can be found in the Introduction Section of the STIP. The total project cost of the 7.3 mile Lackawanna Cutoff MOS project is $61.624 million.	$2.87			$0.00	$0.24	Ongoing	Ongoing
Light Rail Infrastructure Improvements - T95	Funding is provided for Light Rail improvements including, but not limited to, communication systems upgrade, accessibility improvements, vehicle and facility improvements, and other infrastructure rehabilitation improvements, including rolling stock enhancements. Funding is also provided for Newark Light Rail (NLR), Hudson Bergen Light Rail (HBLR) Infrastructure and River Line capital asset replacement including but not limited to acquisition of properties and any items or services needed to support the acquisition. Toll Credit will be used as the non-federal match. An explanation of toll credit can be found in the Introduction Section of the STIP.	$118.32	$11.28	$27.85	$234.06	$80.41	Ongoing	Ongoing
Light Rail Vehicle Rolling Stock - T550	Funding is provided for annual lease payments for Hudson Bergen Light Rail, Newark City Subway and Newark City Subway Extension vehicles. Toll Credit will be used as the non-federal match. An explanation of toll credit can be found in the Introduction Section of the STIP.	$96.51			$0.00	$96.51	Ongoing	Ongoing
Locomotive Overhaul - T53E	Funding is provided for the cyclic overhaul of locomotives based on manufacturer replacement standards to support the equipment through its useful life.	$137.02	$5.06	$5.06	$40.48	$107.41	Ongoing	Ongoing

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Lyndhurst Improvements - T610	Funding is provided for the Lyndhurst Intermodal Station construction to make the station ADA accessible.Toll Credit will be used as the non-federal match. An explanation of toll credit can be found in the introduction section of the STIP.	$0.00		$11.13	$0.00	$0.00	Ongoing	Ongoing
Major Bridge Program - T501	Funding is provided for the NJ TRANSIT Major Bridge Replacement and Rehabilitation program, including but not limited to rehabilitation/replacement at Newark Drawbridge, Raritan Valley Line bridges, Lower Hack Bridge Rehabilitation and Big Shark Drawbridge Timber Trestle. This project is funded under the provisions of Section 13 of P.L. 1995, c.108.	$55.30			$0.00	$55.05	Ongoing	Ongoing
Miscellaneous - T122	Funding is provided for the continuation of the mandated vital records program and other miscellaneous administrative expenses such as, but not limited to, match funds for special services grants and physical plant improvements incurred throughout the year. Funds support forensic accounting services in furtherance of the property insurance claim resulting from the damage caused by extreme weather events such as Superstorm Sandy. Funds also support project oversight/management for all day-to-day aspects of NJ TRANSIT projects.	$29.62	$3.10	$2.08	$6.12	$9.78	Ongoing	Ongoing
NEC Elizabeth Rail Station Improvements - T600	Funding is provided for the reconstruction of the passenger platforms and station building at Elizabeth Intermodal Station, including, but not limited to new elevators and stairs, ticket and operational office space, and retail space. Toll Credit will be used as the non-federal match. An explanation of toll credit can be found in the introduction section of the STIP.	$0.00			$13.96	$0.00	Ongoing	Ongoing

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NEC Improvements - T44	Funding is provided for improvements to the Northeast Corridor (NEC) to maintain state of good repair, increase capacity, and improve efficiency. Funding is provided for AMTRAK joint benefit projects and for NJ TRANSIT projects such as, Midline Loop in North Brunswick, New Jersey including associated track and station improvements; platform extensions; improvements at New York Penn Station; and yard improvements including but not limited to acquisition of properties and any items or services needed to support the acquisition.	$599.98	$108.64	$107.88	$1,350.31	$483.73	Ongoing	Ongoing
NEC Newark Intermodal - T81	Funding is provided for Newark Intermodal projects, including historic restoration, structural rehabilitation and lighting improvements, customer facility improvements, pedestrian and traffic circulation improvements, and any related track and rail infrastructure work. These improvements will make the station more functional, attractive and more customer friendly. Improvements will allow for continued increase in ridership using Newark Penn Station and have clean air and economic benefits. Improvements to the Newark Light Rail are also included. Toll Credit will be used as the non-federal match. An explanation of toll credit can be found in the introduction section of the STIP. This project is funded under the provisions of Section 13 of P.L. 1995, c.108.	$6.46			$0.00	$5.82	Ongoing	Ongoing
NEC Portal Bridge - T539	This project involves expansion of rail capacity on the Northeast Corridor across the Hackensack River in the vicinity of the existing Portal Bridge. The Portal Bridge is an almost 100-year-old, two-track, moveable swing-span rail bridge over the Hackensack River in New Jersey between the cities of Kearny and Secaucus. The project will evaluate alternatives including replacement, rehabilitation or modification of the existing bridge along with the construction of an additional bridge for added capacity.	$58.07			$0.00	$43.57	Ongoing	Ongoing

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NJ TRANSIT Grid Project - T910	Funding is provided to create a "microgrid" power generation and distribution system. NJ TRANSITGRID will be capable of supplying highly-reliable power during storms or other times when the centralized power grid is compromised. NJ TRANSITGRID will incorporate renewable energy, distributed generation, and other technologies to provide resilient power to key NJ TRANSIT stations, maintenance facilities, bus garages, and other buildings. NJ TRANSITGRID will also provide resilient electric traction power to allow NJ TRANSIT trains on critical corridors, including portions of the Northeast Corridor, to continue to operate even when the traditional grid fails. This project will directly benefit NJ TRANSIT and Amtrak. The source of the local funding is the State Transportation Trust Fund (TTF). The source of local funding is the State Transportation Trust Funds (TTF) in the amount of $144,616,890. The STIP ID is DB#T50, Signals and Communications/Electric Traction System program (S&C Program). The TTF component includes $45,000,000 of unspent funding appropriated in SFY14 and prior years for NJ TRANSIT from S&C Program. In addition, NJ TRANSIT is allocating $99,616,890 from the SFY 15-24 Constrained Capital Program including $33,881,000 in SFY15, $15,640,000 in SFY16, $9,381,890 in SFY17 $17,464,000 in SFY18 and $23,250,000 in SFY from the S&C program.	$28.55			$0.00	$12.39	Ongoing	Ongoing

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NJ TRANSIT Raritan River Drawbridge Replacement Project - T909	Funding is provided to replace the aged and deteriorated Raritan River Drawbridge located in Middlesex County on the North Jersey Coast line (NJCL). The Raritan River Drawbridge was damaged by Superstorm Sandy. The drawbridge will be replaced with a more resilient structure that is less vulnerable to storm surge and flooding, thus enhancing the reliability of the NJCL. The source of the local funding is the State Transportation Trust Fund (TTF) in the amount of $148,720,822. The STIP ID is DB#-T05, Bridge and Tunnel Rehabilitation program. The $148,720,822 from the "Bridge and Tunnel Rehabilitation" program is from the SFY15-24 Constrained Capital Program; including $4,750,000 in SFY15, $5,000,000 in SFY16, $5,000,000 in SFY17, $5,000,000 in SFY18, $70,887,000 in SFY19 and $58,083,822 in SFY20.	$10.00			$0.00	$3.71	Ongoing	Ongoing
Other Rail Station/Terminal Improvements - T55	Funding is provided for the design, land acquisition and construction of various stations, platform extensions, parking and related facilities, and upgrades throughout the system including related track and rail infrastructure work. Also included are station and facility inspection and repair, customer service station bike locker installation - systemwide, and STARS Program including but not limited to acquisition of properties and any items or services needed to support the acquisition.	$123.71	$12.92	$19.65	$64.48	$103.27	Ongoing	Ongoing
Perth Amboy Station Improvements - T620	Funding is provided for the construction of high level platforms in order to enhance access to commuter trains in conformance with ADA regulations. .	$1.98			$0.00	$0.00	Ongoing	Ongoing
Physical Plant - T121	Funding is provided for demolition of out-of-service facilities, energy conservation program, work environment improvements, replacement of antiquated administrative support equipment, purchase of material warehouse equipment, replacement of non-revenue vehicles, and other minor improvements to various bus/rail/light rail/operating facilities etc including but not limited to acquisition of properties and any items or services needed to support the acquisition.	$22.83	$1.67	$1.67	$19.14	$15.43	Ongoing	Ongoing

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Portal Bridge North - T538	Funding is for the design, engineering, construction and other necessary initiatives or items to complete the proposed replacement of the existing Portal North Bridge with a new high-level, two track, fixed structure bridge on a new rail alignment. The new bridge will be approximately 1,200 feet long and will have a clearance that accommodates current and forecasted maritime traffic, thereby eliminating the need for a movable span that interrupts rail operations and results in delays due to mechanical failures. This will improve reliability, allowing NJ TRANSIT to operate longer and higher capacity trains. Additionally, trains will be able to cross the bridge at 90 miles per hour, up from 60 miles per hour today. $345M in Amtrak funds will be applied to the Portal North Bridge (PNB) project once the funds are administered to NJ TRANSIT. $57M in CMAQ funds are committed to purchase up to 25 commuter rail vehicles to support the PNB project. Refer to DB T112- Rail Rolling Stock Procurement where funds for supporting all rail rolling stock purchases are listed and explained. In addition, NJ TRANSIT is committing up to $14M in local match for the CMAQ funds (through NJTTF) to support the PNB project. NJ Transit has requested $811m under FTA's Section 5309 Capital Investment Grants Program, which would be applied to the STIP. $600M in New Jersey Economic Development Authority (NJEDA) proceeds are committed to the PNB Project.	$44.06	$39.00	$61.25	$361.95	$2.66	Ongoing	Ongoing
Preventive Maintenance-Bus - T135	This program provides funding for the overhaul of buses including preventive maintenance costs in accordance with federal guidelines as defined in the National Transit Database Reporting Manual and federal law.Toll Credit will be used as the non-federal match. An explanation of toll credit can be found in the Introduction Section of the STIP. In addition, expenditures are for costs of projects in specific years only.	$0.00	$112.69	$112.69	$1,119.52	$0.00	Ongoing	Ongoing

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Preventive Maintenance-Rail - T39	This program provides funding for the overhaul of rail cars and locomotives and other preventive maintenance costs in accordance with federal funding guidelines as defined in the National Transit Database Reporting Manual and federal law.Toll Credit will be used as the non-federal match. An explanation of toll credit can be found in the Introduction Section of the STIP.	$0.00	$249.33	$249.33	$1,776.64	$0.00	Ongoing	Ongoing
Private Carrier Equipment Program - T106	This program provides State funds for the Private Carrier Capital Improvement Program.	$38.52	$4.00	$3.00	$24.00	$35.15	Ongoing	Ongoing
Rail Capital Maintenance - T34	The Rail Capital Maintenance project includes Rail Maintenance of Way (MOW) activities and Rail Maintenance of Equipment (MOE) activities in accordance with TTF eligibility requirements.	$517.63	$98.80	$98.80	$790.40	$485.12	Ongoing	Ongoing
Rail Fleet Overhaul - T53G	This program provides funds for the mid-life overhaul and reliability/safety improvements of rail cars based on manufacturer recommendations and other rolling stock modifications to meet recently issued FRA and APTA mandated standards.	$143.49			$0.00	$104.47	Ongoing	Ongoing
Rail Park and Ride - T117	This program provides funding for land acquisition, design and construction of parking improvement projects at various locations. This project is funded under the provisions of Section 13 of P.L. 1995, c.108.	$0.45			$0.00	$0.37	Ongoing	Ongoing

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Rail Rolling Stock Procurement - T112	This program provide funds for the replacement of rail rolling stock, including engineering assistance and project management, to replace over-aged equipment including rail cars, revenue service locomotives, and expansion of NJ TRANSIT rolling stock fleet (cars and locomotives) to accommodate projected ridership growth and other system enhancements over the next ten years. Funding is provided to support vehicles\equipment (for rail operations). Annual funds are provided for Comet V single-level car lease payments, Electric Locomotive lease payments, Diesel Locomotive lease payments, Dual Power Locomotives and Multi-Level rail car lease payments and other upcoming rolling stock lease payments. Pay-as-you-go funding is also programmed for Multi-Level vehicles and other rolling stock. Toll Credit and/or State Transportation Trust Funds (TTF) will be used as the non-federal match. An explanation of toll credit and can be found in the Introduction Section of the STIP. CMAQ: Funding for Rail Rolling Stock Procurement will include CMAQ funds. Rail Rolling Stock Procurement is CMAQ eligible because it meets federal eligibility requirements. The project will provide funding for the purchase of 25 commuter vehicles to support the Portal North Bridge (PNB) project. Refer to DB T538 – Portal North Bridge where funds to support the design, engineering, construction and necessary initiatives are listed and explained. For the CMAQ justification see "CMAQ Report for NJ TRANSIT".	$378.40	$219.52	$369.49	$2,141.58	$307.86	Ongoing	Ongoing

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Rail Support Facilities and Equipment - T37	This program provides funds for rehabilitation and construction activities for yard improvements systemwide, improvements at support facilities necessary to perform maintenance work at rail yards including work at Port Morris Yard, rail capacity improvements including passing sidings, interlockings and electric traction improvements, signal and communication improvements at support facilities, right-of-way fencing, maintenance-of-way equipment and the installation of pedestal tracks necessary to perform maintenance work at rail yards. Funding is provided for systemwide crew quarters, the Meadows Maintenance Complex upgrade/expansion work required to support the new rail fleet. Also included is funding for NJ TRANSIT's capital cost-sharing obligations related to use of Amtrak/Conrail facilities including but not limited to acquisition of properties and any items or services needed to support the acquisition.	$171.42	$82.10	$33.29	$131.09	$110.30	Ongoing	Ongoing
River Line LRT - T107	This element provides funding for the River LINE LRT project from Camden to Trenton for annual EDA debt service payments required until FY19.Project cost of the River LINE is $1.0 billion.This project is funded under the provisions of Section 13 of P.L. 1995, c.108.	$470.06			$0.00	$470.06	Ongoing	Ongoing
Safety Improvement - T509	This program provides funding for safety improvement initiatives systemwide addressing bus, rail, light rail, Access Link and other identified safety needs. Funding includes investment in equipment, passenger and maintenance facilities, right of way improvements, and other initiatives that improve the safe provision of transportation services. Funding will support planning, engineering, design, construction, acquisitions and other associated costs.	$4.50	$1.00	$1.00	$8.00	$0.75	Ongoing	Ongoing
Section 5310 Program - T150	This program provides funds for the purchase of small buses or van-type vehicles for agencies that serve the elderly and persons with disabilities. This was formerly known as the Section 16 Program. MATCH funds are provided from the State.	$13.28	$8.80	$8.80	$70.40	$3.00	Ongoing	Ongoing
Section 5311 Program - T151	This program provides funding for rural public transportation program. MATCH funds are provided from NJ TRANSIT and local funds.	$0.40	$6.30	$6.30	$50.40	$0.00	Ongoing	Ongoing

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Security Improvements - T508	This program provides funds for continued modernization/improvements of NJ TRANSIT Police and other security improvements. Today, the NJ TRANSIT Police Department is the only transit policing agency in the country with statewide authority and jurisdiction. The Department was created on January 1, 1983, and it evolved as a result of the passage of the Public Transportation Act of 1979 and subsequent legislation on the state and federal levels.	$28.83	$2.61	$2.61	$24.88	$21.70	Ongoing	Ongoing
Signals and Communications/Electric Traction Systems - T50	This project provides funding for continued modernization/improvements to the signal and communications systems, including signal/communication upgrade of interlockings, and other communication improvements. This project also provides funding for systemwide electric traction general upgrades including: substation replacement, wayside hot box detection system, rail microwave system upgrades, replacement of substation batteries and electric switch heaters, emergency power backup systemwide, rehabilitation of systemwide overhead catenary structures and foundations including but not limited to acquisition of properties and any items or services needed to support the acquisition. In addition, funding will be provided for Positive Train Control training facilities including but not limited to equipment purchasing, engineering, design, planning, construction, acquisitions and other associated costs.	$590.32	$165.37	$47.96	$104.49	$468.46	Ongoing	Ongoing

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Small/Special Services Program - T120	Funding is provided for NJ TRANSIT efforts which initiate or promote transit solutions to reduce congestion, manage transportation demand and improve air quality. Included are State funds for the Vanpool Sponsorship Program, Transportation Management Association Program, and Federal funds for East Windsor Community Shuttle operating support. Funding is also provided for capital acquisition/operating expenses for the Community Shuttle Program, Bike/Transit facilitation, and other activities that improve air quality and help reduce congestion. Toll Credit will be used as the non-federal match. An explanation of toll credit can be found in the Introduction Section of the STIP.	$17.61	$1.47	$1.47	$11.78	$14.11	Ongoing	Ongoing
South Amboy Intermodal Facility - T530	Funding is provided for SAFETEA-LU earmarks for the South Amboy Intermodal Facility. Toll Credit will be used as the non-federal match. An explanation of toll credit can be found in the Introduction Section of the STIP. The total project cost for South Amboy High Level Platforms is anticipated to be $48 million. This project is funded under the provisions of Section 13 of P.L. 1995, c.108.	$9.34			$0.00	$9.29	Ongoing	Ongoing
Study and Development - T88	This element provides funds for system and infrastructure planning studies to ready projects for design, as well as demand forecasting and other related planning work.	$74.70	$5.60	$5.41	$43.27	$61.90	Ongoing	Ongoing

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Technology Improvements - T500	This element funds improvements to passenger communication and fare collection systems and other information technology improvements to meet internal and external customer needs. Funding is included for Public Address Upgrades/Onboard Communication Systems, Bus Radio System Upgrade Program, GIS Systems, TVM Replacement/Expansion, Smart Card Technology and improvements at stations systemwide, computer systems and services, photocopy lease payments, ADA Access Link computer upgrades and upgrades to increase efficiency and productivity of NJ TRANSIT's technology infrastructure to support services to customers.	$417.53	$12.55	$21.55	$133.44	$260.34	Ongoing	Ongoing
Track Program - T42	Funding is provided for an annual program of track rehabilitation including systemwide replacement of life-expired ties and other rail improvements, right-of-way fencing, equipment necessary to maintain a state of good and safe repair, purchase of long lead-time materials for next construction season, maintenance-of-way work equipment, interlocking improvements, passing sidings and other improvements.Toll Credit will be used as the non-federal match. An explanation of toll credit can be found in the introduction section of the STIP.	$200.05	$18.00	$18.00	$144.00	$175.51	Ongoing	Ongoing
Train Controls-Wayside Signals, Power & Communication Resiliency - T911	Funding is provided for the Train Controls infrastructure resiliency project. The project involves rail line resiliency efforts for certain assets that are vulnerable to storm events, including critical life-safety signal and communications systems. NJ TRANSIT's ten commuter rail lines and the light rail lines were impacted by Superstorm Sandy. They lie in coastal and inland floodplains where storms could overtop the trackbed and potentially flood and damage critical signal, power and communications systems used to control train speed, switches and track choice, and following distances for safe operations. The source of local funding is the State Transportation Trust Fund (TTF).	$23.48			$0.00	$0.31	Ongoing	Ongoing

APPENDIX E

Appropriation Line	Narrative Summary	Appropriation To Date Or, If Ongoing Programs (Last 11 Years)	Proposed Appropriation (FY21)	Proposed Appropriation (FY22)	Proposed Appropriation (FY23 - FY30)	Amount Expended Or, If Ongoing Programs	Project Status	Project Status Expected Completion
Transit Enhancements - T210	Funding is provided for projects or project elements that are designed to enhance mass transportation service or use and are physically or functionally related to transit facilities as outlined in FTA Circular 9030.1E., including funding for a Statewide Bus Signs and Shelter Maintenance Upgrade Program and historic restoration of NJ TRANSIT facilities. Toll Credit will be used as the non-federal match. An explanation of toll credit can be found in the introduction section of the STIP.	$3.25	$1.00	$1.00	$8.00	$3.18	Ongoing	Ongoing

APPENDIX E

Appropriation Line	Narrative Summary	Appropriation To Date Or, If Ongoing Programs (Last 11 Years)	Proposed Appropriation (FY21)	Proposed Appropriation (FY22)	Proposed Appropriation (FY23 - FY30)	Amount Expended Or, If Ongoing Programs	Project Status	Project Status Expected Completion
Transit Rail Initiatives - T300	This program provides funding for transit expansion projects, including River Line Glassboro-Camden Light Rail Improvements, new station construction, ferry program, fixed guideway improvements (Rail, Light Rail, BRT, and Ferry), and related vehicle and equipment acquisition. Also included are FTA new starts projects authorized under New Jersey Urban Core or SAFETEA-LU. Potential projects in this category include (in no rank order): Northern Branch Rail; HBLR Extension to Secaucus; HBLR Secaucus-Meadowlands Connector; Passaic-Bergen rail service on the NYS&W east of Hawthorne using Diesel Multiple Unit (DMU) passenger equipment; Restoration of commuter rail service on the NYS&W west of Hawthorne; Port Morris Improvements; West Shore--Hoboken to West Haverstraw; NERL Elizabeth Segment from NJ TRANSIT'S Northeast Corridor Midtown Elizabeth Station to Newark Liberty International Airport via the Elizabeth Waterfront; Restoration of commuter rail service on the West Trenton line; River LINE LRT Capitol Extension; Second Phase of River LINE LRT/PATCO Extension; Glassboro-Camden Light Rail; Route 1 BRT, Second Phase of NERL (Newark Penn Station to Newark Liberty International Airport); Commuter rail extension in Monmouth and Ocean Counties; Lehigh Third Track Capacity Improvements; Extension of Cape May Seashore Line north to Hammonton (to Atlantic City Rail Line); Commuter Rail extension to Phillipsburg, improvements on the Atlantic City Rail Line, new rail station improvements such as Atlantic City Line/River LINE connection, Moynihan Station, Penn Station New York access improvements and platform extensions, Penn Station New York Central Concourse, Penn Station New York West End Concourse, E-yard expansion, Bus Rapid Transit Initiatives, Park and Rides and Smart Card Technology Program along with other new systemwide, rail, bus, and light rail initiatives arising during the year. The narrative above governs how the state Transportation Trust Funds that are appropriated in the state budget to "Transit Rail Initiatives" can be used. The Transit Rail Initiatives project is a state funded effort	$292.84	$8.25	$2.25	$237.40	$289.12	Ongoing	Ongoing

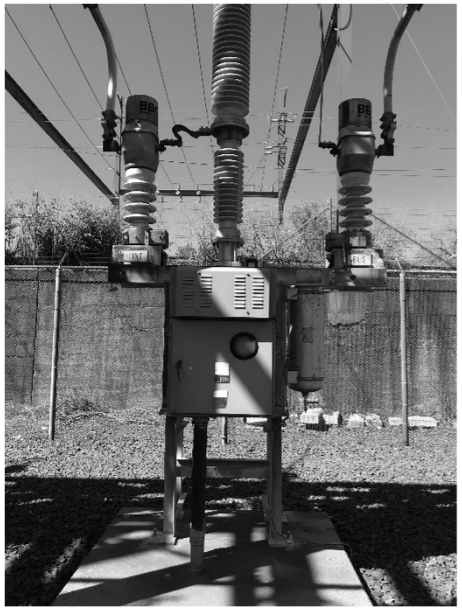
APPENDIX E

Appropriation Line	Narrative Summary	Appropriation To Date Or, If Ongoing Programs (Last 11 Years)	Proposed Appropriation (FY21)	Proposed Appropriation (FY22)	Proposed Appropriation (FY23 - FY30)	Amount Expended Or, If Ongoing Programs	Project Status	Project Status Expected Completion
	that is displayed here only for information purposes in order to give a better understanding of total transportation funding. As shown below, there is no Federal funding allocated to the Transit Rail Initiatives project in the first four constrained years. In compliance with the state budget and the language above, state Transit Rail Initiatives funds will be used to advance the projects listed above, some of which are also authorized under Federal law, but not yet funded with Federal dollars. Funding is also provided to advance projects dependent on other non-federal (including private) funding, and/or state resources available beyond planned levels including but not limited to acquisition of properties and any items or services needed to support the acquisition.							
Walter Rand Transportation Center - T303	The Water Rand Transportation Center (WRTC) is the regional transit hub for southern New Jersey, located across from Cooper University Hospital and Cooper Medical School of Rowan University, in the center of the Business District. WRTC services the Port Authority Transit Corporation (PATCO) high speed line, NJ Transit RiverLINE and proposed Glassboro-Camden Line (GCL), as well as serving as the hub for 26 regional NJ Transit bus lines that connect to Philadelphia, New Jersey and New York. Proposed changes include significant improvements to the building façade, renovations to the interior waiting area (including retail amenities) and new way finding signage. In addition, bus, taxi and train access may be consolidated and made more efficient. Critical to the concept development phase of this project is a focus on improved pedestrian and vehicular traffic flow, which will be accomplished by consolidating all of the existing bus lines inside an expanded and redesigned bus terminal. The redesign of the WRTC will provide better connections for parking, buses, taxis, public transit and retail space making it easier for pedestrians to navigate the transit center and the surrounding area.	$2.00			$0.00	$0.00	Ongoing	Ongoing

APPENDIX E

Appropriation Line	Narrative Summary	Appropriation To Date Or, If Ongoing Programs (Last 11 Years)	Proposed Appropriation (FY21)	Proposed Appropriation (FY22)	Proposed Appropriation (FY23 - FY30)	Amount Expended Or, If Ongoing Programs	Project Status	Project Status Expected Completion
Wood Ridge Maintenance of Way Facility Relocated Projects - T38	Funding will support the acquisition, relocation, improvements and any other scope or item associated with the relocation of the Wood Ridge Maintenance Of Way facility. This project is funded under the provisions of Section 13 of P.L. 1995, c.108.	$10.00			$0.00	$0.00	Ongoing	Ongoing
Total No. of Appropriation Line Item: 67		**$7,897.88**	**$1,433.94**	**$1,433.99**	**$11,517.91**	**$6,381.01**		

ITEM 2010-62
MORRIS & ESSEX LINE TRACTION POWER CIRCUIT BREAKER REPLACEMENT PROJECT, CONTRACT NO. 19-011X





Seeking authorization to enter into NJ TRANSIT Contract No. 19-011X with **Asplundh Construction LLC** to perform design build services to replace 126 single pole and 35 two pole circuit breakers at 16 traction power high voltage substations and to provide 20 single pole and 12 two pole spares, not to exceed $30,825,671.06, plus 5% for contingencies, subject to availability of funds.

- Source of Funds: State – TTF (Transportation Trust Fund)
- Total cost of $30.825M + 5% Contingency
- This project is vital to ensure NJ TRANSIT's traction power system continues to operate reliably by replacing obsolete breakers that reached their useful life. The existing breakers are discontinued by the manufacturer.
- The new diagnostic features on the breakers will incorporate condition-based maintenance technology to increase NJ TRANSIT's preventative maintenance efficiency.

ITEM 2010-62: MORRIS & ESSEX LINE TRACTION POWER CIRCUIT BREAKER REPLACEMENT PROJECT

WHEREAS, NJ TRANSIT is responsible for maintaining exactly 126 single pole and 35 two pole high voltage traction power circuit breakers that provide isolation and protect from electrical faults the Morris & Essex passenger rail line electrical infrastructure; and

WHEREAS, the scope of this effort is to replace the existing Gould-Brown Boveri live tank ELF 72.5 n1v and the dead tank 69 KS 2500-12D2P breakers installed during the mid 80s. Both types of breakers are obsolete and have been discontinued. The project will provide 20 single pole and 12 two pole spares. Through this project a comprehensive maintenance program will need to be created; and

WHEREAS, the new breakers will have an integrated condition-based monitoring system that will diagnose automatically the respective maintenance activities. This will help NJ Transit perform all maintenance activities efficiently; and

WHEREAS, on June 11, 2019, a Special Prequalification for this project was advertised and the seven (7) firms that submitted the Prequalification forms were prequalified. Asplundh Construction LLC is the lower bidder at 30,825,671.06 according to the June 18, 2020 bid opening; and

WHEREAS, upon completion of a competitive procurement process, the NJ TRANSIT Office of Business Development (OBD) assigned a 13% SBE Category 6 goal for this contract. NJ TRANSIT OBD reviewed and approved the 16.81% SBE utilization commitment identified by the lowest bidder firm Asplundh. This firm provides the most competitive solution providing value to NJ TRANSIT and has been prequalified for the Morris & Essex Traction Power Breaker Replacement Project to be completed 1160 days from NTP estimated for March 2024;

NOW, THEREFORE, BE IT RESOLVED that the Chair or President & CEO is authorized to enter into NJ TRANSIT Contract No. 19-011X with Asplundh Construction LLC, to provide design build services to replace 126 single pole and 35 two pole high voltage traction power circuit breakers; provide 20 single pole and 12 two pole spares; a comprehensive maintenance plan based on the integrated condition based diagnostic unit at a cost not to exceed $30,825,671.06, plus five percent contingencies, subject to the availability of funds.

ITEM 2010-63
MARKET STREET BUS GARAGE REHABILITATION

The Market Street Bus Garage Rehabilitation will include upgrades to key components of the building, improving the facility's serviceability.

- Seeking authorization to enter into:
  - NJ TRANSIT Contract No. 19-021 with **DMR Construction Services, Inc.** of Waldwick, New Jersey, for the construction of the Market Street Bus Garage Rehabilitation Project in the amount not to exceed **$18,319,341.23**, plus ten percent for contingencies, subject to the availability of funds.
  - NJ TRANSIT Contract No. 19-056 with **AECOM Tishman** of Piscataway, New Jersey, for the construction management of the Market Street Bus Garage Rehabilitation Project in the amount not to exceed **$2,857,155.00**, plus five percent for contingencies, subject to the availability of funds.



ITEM 2010-63
MARKET STREET BUS GARAGE REHABILITATION

- Authorization of this construction and construction management contract will allow for upgrades to many outdated areas in the bus garage.
- These upgrades will improve the conditions of the historic facility and allow it to operate more efficiently, as well as accommodate for anticipated fleet growth.





ITEM 2010-63: MARKET STREET BUS GARAGE REHABILITATION PROJECT – CONSTRUCTION CONTRACT AND CONSTRUCTION MANAGEMENT SERVICES CONTRACT AWARD

WHEREAS, the Market Street Bus Garage, located in the City of Paterson, NJ, is part of the Northern Division of NJT Bus Operations; and

WHEREAS, built in 1903 to operate as a trolley barn, the historic garage stores 150 buses, and makes an average of 1,795 weekly revenue trips, serving an annual ridership of 9.9 million people; and

WHEREAS, located in the Old Great Falls Historic District, the garage is in a need of renovations to maintain serviceability; and

WHEREAS, the updated garage will include a new floor slab in the main barn, sub-surface monitoring system upgrades, upgrades to mechanical, electrical, and plumbing systems, life safety system upgrades, the installation of an elevator, the installation of a backup generator for the entire facility, interior renovations, repointing and repair of brick exterior, installation of public art and an approximately 3,232 square-foot building addition; and

WHEREAS, an Invitation for Bid (IFB) was advertised on BID EXPRESS, NJ TRANSIT's electronic bid system, and in *The Star-Ledger* and *Trenton Times* on Monday, March 3, 2020; and

WHEREAS, bids were received electronically from five firms and opened on Wednesday, June 4, 2020 at NJ TRANSIT Headquarters in Newark; and

WHEREAS, NJ TRANSIT Office of Business Development (OBD) assigned a 27 percent Small Business Enterprise (SBE) Category 6 goal for the Market Street Bus Garage Rehabilitation Project - General Construction Contract 19-021X; and

WHEREAS, OBD reviewed the bid and approved the 78.61 percent SBE utilization commitment identified by the SBE Prime, DMR Construction Services, Inc.; and

WHEREAS, upon completion of a competitive procurement process, DMR Construction Services, Inc. of Waldwick, New Jersey, was determined to be the lowest responsive and responsible bidder; and

WHEREAS, a Request for Proposal was solicited from several firms to provide Construction Management Services, Contract No. 19-056, for the Market Street Bus Garage Rehabilitation Project; and

WHEREAS, proposals were received on Thursday, June 11, 2020; and

WHEREAS, on June 17, 2020, AECOM Tishman was chosen to provide construction management services for Contract 19-056 Market Street Bus Garage Rehabilitation Project; and

WHEREAS, NJ TRANSIT OBD assigned a 25 percent SBE Category 3 goal utilization commitment for NJ TRANSIT Contract No. 19-056; and

WHEREAS, OBD reviewed the proposal and approved the 25.275% SBE commitment identified by AECOM Tishman; and

WHEREAS, the Transportation Trust Fund and Federal Transit Administration are the anticipated sources of funding for this project;

NOW, THEREFORE, BE IT RESOLVED that the Chair or President & CEO is authorized to enter into NJ TRANSIT Contract No. 19-021x with DMR Construction Services, Inc. of Waldwick, New Jersey, for the construction of the Market Street Bus Garage Rehabilitation - General Construction Contract in the amount not to exceed $18,319,341.23, plus ten percent for contingencies, subject to the availability of funds; and

BE IT FURTHER RESOLVED that the Chair or President & CEO is authorized to enter into NJ TRANSIT Contract No. 19-056 with AECOM Tishman, to provide construction management services for the Market Street Bus Garage Rehabilitation Project in the amount not to exceed $2,857,155.00, plus five percent for contingencies, subject to the availability of funds.

ITEM 2010-64: NJ TRANSIT RESILIENCE PROGRAM – NJ TRANSITGRID MICROGRID CENTRAL FACILITY STIPEND PROGRAM

WHEREAS, Superstorm Sandy highlighted the need for infrastructure improvements to increase regional transit system resilience; and

WHEREAS, NJ TRANSIT partnered with the U.S. Department of Energy and other federal and state agencies to evaluate opportunities to develop an independent power generating system to permit operation of core train services in the event of power outages; and

WHEREAS, the resulting NJ TRANSITGRID project will construct generation facilities and other infrastructure improvements to provide resilient power to support extension of passenger service on critical rail lines and at selected rail stations and terminals and bus maintenance facilities in the event of a major power disruption; and

WHEREAS, the Federal Transit Administration selected the NJ TRANSITGRID project through a competitive process to receive $409,764,814 in Disaster Relief Appropriations Act of 2013 funding; and

WHEREAS, the design and construction of the NJ TRANSITGRID Microgrid Central Facility requires engineering, design, construction, commissioning and operations and maintenance support as well as other technical services; and

WHEREAS, NJ TRANSIT staff have determined that the development and institution of a stipend program in support of a two-step procurement process for the NJ TRANSITGRID procurement is in the best interest of and provides the best value to NJ TRANSIT;

NOW, THEREFORE, BE IT RESOLVED that the Chair or President & CEO are hereby authorized to direct NJ TRANSIT staff to develop and institute a stipend program to support the NJ TRANSITGRID Microgrid Central Facility procurement process, as detailed in enabling legislation and corresponding regulations, N.J.A.C. 16:72-4.1, at a cost not to exceed $3,000,000, subject to the availability of funds;

BE IT FURTHER RESOLVED, that the Chair or President & CEO are hereby authorized to direct NJ TRANSIT staff to review eligible submissions and administer and cause to pay stipends to eligible proposers.

ITEM 2010-65: CONTRACTING OUT – MONMOUTH COUNTY LOCAL BUS SERVICE EXTENSION

WHEREAS, staff has determined it is appropriate to provide local bus service in Monmouth County; and

WHEREAS, Transdev Services, Inc. has provided Monmouth County Local Bus Service under Contract #13-025 since September of 2013; and

WHEREAS, the current Monmouth County Local Bus Contract #13-025 expires effective December 12, 2020; and

WHEREAS, a Request for Proposal (RFP 20-018) was issued to seek competitive proposals from private motorbus carriers to provide these services; and

WHEREAS, the award of the new contract and contract start-up process has been delayed to appropriately address procurement and turn-over processes; and

WHEREAS, a temporary extension of the current contract is appropriate to ensure continued service to the riding public and facilitate continuity during the transitional period entering into the new contract;

NOW, THEREFORE, BE IT RESOLVED that the Chair or President & CEO is authorized to extend NJ TRANSIT Contract No. 13-025 with Transdev Services, Inc. of Lombard, Illinois, to operate the Monmouth County Local Bus Service for an additional three-month period of December 13, 2020 through March 19, 2021 at a cost not to exceed $1,745,836, plus five percent for contingencies, for a total contract authorization of $1,833,128, subject to the availability of funds and Board approval of NJ TRANSIT's operating budget.

ITEM 2010-66: PERSONAL INJURY CLAIM OF THE ESTATE OF ANNIE ELIZABETH MCALLISTER

WHEREAS, Article VI, Section II of the By-Laws requires Board Authorization for settlement of claims in excess of $500,000; and

WHEREAS, the Estate of Annie Elizabeth McAllister has presented a claim with a probable settlement cost greater than $500,000; and

WHEREAS, staff has reviewed the claim and recommends settling this case out of court;

NOW, THEREFORE, BE IT RESOLVED that the Chair or President & CEO is authorized to settle the claim of The Estate of Annie Elizabeth McAllister through the estate's attorney, at an amount discussed in executive session. The Attorney General has approved the proposed settlement, subject to the availability of funds.

ITEM 2010-67: PERSONAL INJURY CLAIM OF RICKY WILLIAMS

WHEREAS, Article VI, Section II of the By-Laws requires Board Authorization for settlement of claims in excess of $500,000; and

WHEREAS, Ricky Williams has presented a claim with a probable settlement cost greater than $500,000; and

WHEREAS, staff has reviewed the claim and recommends settling this case out of court;

NOW, THEREFORE, BE IT RESOLVED that the Chair or President & CEO is authorized to settle the claim of Ricky Williams through his attorney, at an amount discussed in executive session. The Attorney General has approved the proposed settlement, subject to the availability of funds.

ITEM 2010-68: PERSONAL INJURY CLAIM OF CANDY MARCHAN

WHEREAS, Article VI, Section II of the By-Laws requires Board Authorization for settlement of claims in excess of $500,000; and

WHEREAS, Candy Marchan has presented a claim with a probable settlement cost greater than $500,000; and

WHEREAS, staff has reviewed the claim and recommends settling this case out of court;

NOW, THEREFORE, BE IT RESOLVED that the Chair or President & CEO is authorized to settle the claim of Candy Marchan through her attorney, at an amount discussed in executive session. The Attorney General has approved the proposed settlement, subject to the availability of funds.

EXECUTIVE SESSION AUTHORIZATION

BE IT HEREBY RESOLVED pursuant to N.J.S.A. 10:4-12 and N.J.S.A. 10:4-13 that the Board of Directors of the New Jersey Transit Corporation hold an executive session to discuss personnel matters, contract negotiations, the status of pending and anticipated litigation, and matters falling within the attorney-client privilege; and

BE IT FURTHER RESOLVED that it is expected that discussions undertaken at this executive session could be made public at the conclusion of these matters as appropriate.