AMTRAK®

Five-Year Plans

Historic Opportunities | Amtrak's FY 2022-2027 Service and Asset Line Plans


Station Entr

AMTRAK

Five-Year Plans

Historic Opportunities | Amtrak's FY 2022-2027 Service and Asset Line Plans

National Railroad Passenger Corporation
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Amtrak.com

Historic Opportunities

2021 was a historic and consequential year for Amtrak. We celebrated our fiftieth anniversary, executed a plan to recover from COVID-19, and launched ambitious plans for the future of passenger rail directed at both the Northeast Corridor (NEC) and National Network (NN). And, the historic Infrastructure Investment and Jobs Act (IIJA) providing $66 billion for intercity passenger and freight rail was signed into law. The IIJA provides an outstanding opportunity for Amtrak and is truly transformative for passenger rail in the United States.

After more than a year in which Amtrak focused on survival and preservation, the upcoming years will be oriented toward revival and growth. While 2021's results showed an encouraging trend of recovery, COVID-19 remains a wild card regarding its impact on the economy and travel. However, the enactment of the IIJA provides a generational opportunity for Amtrak and passenger rail. Although the level of support for intercity passenger rail provided by IIJA is long overdue, it is also timely. As we grapple with climate change and the necessity of reducing greenhouse gas emissions; a COVID-19 ravaged economy; worsening congestion on highways and in our aviation system as our population grows; and diminishing airline and intercity bus service for those not traveling between major cities, the need to expand intercity passenger rail service has never been greater.

Within the next eighteen months, Amtrak and its state partners plan to add service to Roanoke and Norfolk, Virginia; to Burlington, Vermont; and between New Orleans and Mobile, Alabama. We also hope to finalize agreements and initiate construction of capital investments for new corridor service between Chicago and St. Paul, Minnesota. We also plan to continue our work with state partners on other service expansions, such as the development of the portion of the Southeast High Speed Rail Corridor between Petersburg, Virginia and Raleigh that will link, via a newly constructed, direct, and higher speed line, North Carolina's successful state-supported Charlotte-to-Raleigh Piedmont Corridor to Virginia's Petersburg-Richmond-Washington corridor and the Northeast Corridor.

In the next five years, Amtrak will also begin advancing our long-range plans for the NEC and National Network. Amtrak, in partnership with the NEC Commission, its partner NEC infrastructure asset owners, and other NEC partner agencies, developed a long-range, fifteen-year strategic investment plan for the NEC, entitled CONNECT NEC 2035 (C35) released in July 2021. We also released *Amtrak Connects US*, Amtrak's vision for the future of intercity passenger rail transportation system, in June 2021 after years of study and consultation with many states.

For fifty years, intercity passenger rail has been an essential and growing part of our transportation system for millions of Americans, for both business and leisure travel, despite chronic underfunding. We have delivered this service, through good times and bad, safely and with increasing efficiency. The Service and Asset Line Plans in this document summarize the opportunities and needs facing the company and our strategies for the next five years. These long-range plans, updated biennially after this year, inform our General and Legislative Annual Report, which serves as our budget request and justification to Congress for the upcoming year.


AMTRAK.COM
Train Information
11:19am
Time No. Train To Status Gate Track
10:55a 646 Keystone New York Now 11:28a
12:02p 95 N.E. Regional Norfolk On Time
12:03p 174 N.E. Regional Boston On Time
12:13p 2155 Acela Washington On Time
12:35p 91 Silver Star Miami On Time
12:42p 43 Pennsylvanian Pittsburgh On Time
12:58p 4627 NJ TRANSIT Atlantic City On Time
1:03p 125 N.E. Regional Newport News On Time
Messaging
train and banned from future travel in the event of non-
compliance. Do not travel while experiencing COVID19
symptoms or when you meet public health criteria for

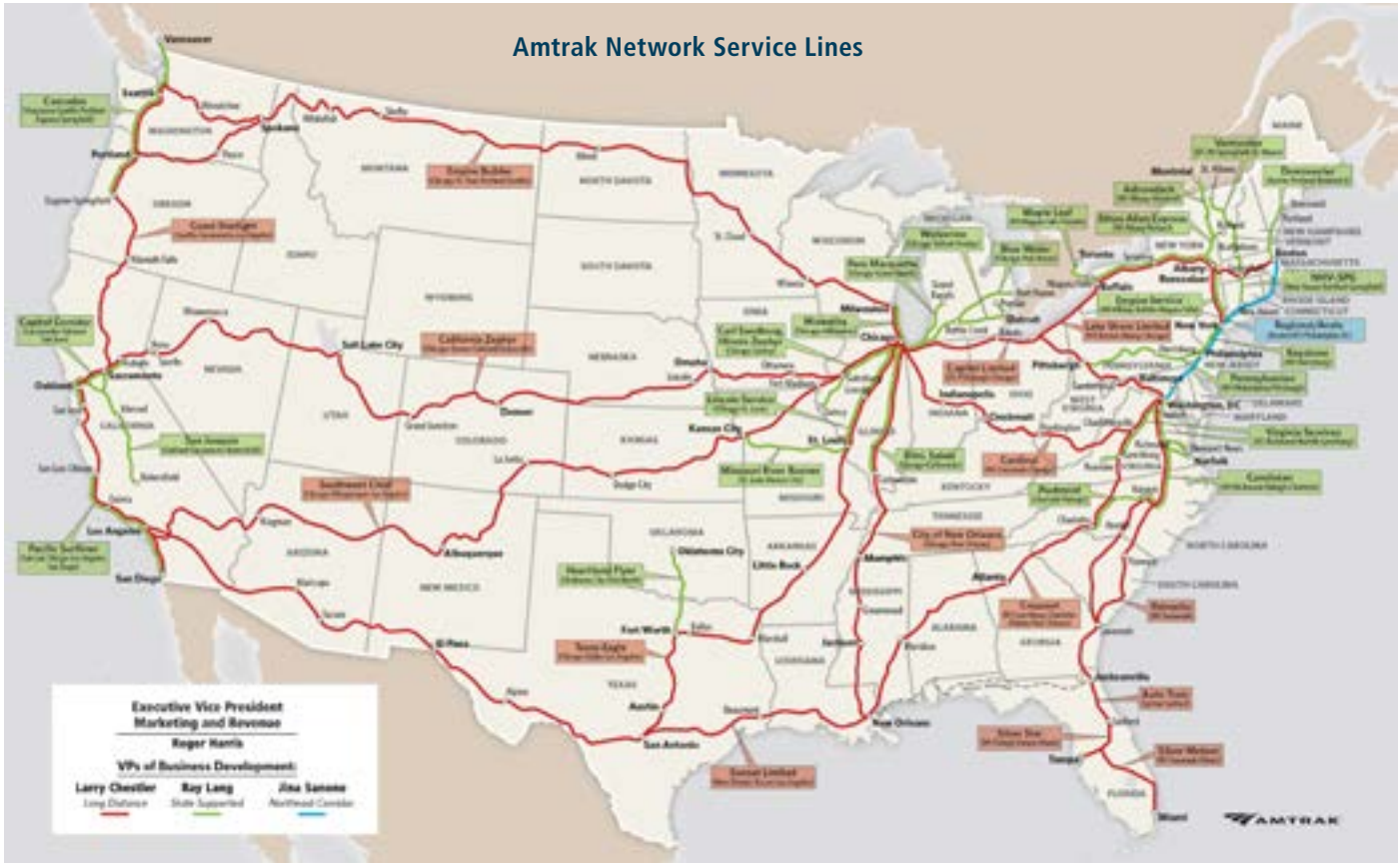
About Our Business

Amtrak is the nation's federally chartered intercity passenger rail operator and infrastructure provider. With safety as our highest priority, we aim to provide efficient and effective transportation consisting of friendly, high-quality service that is trip-time competitive with other intercity travel options and provides a public benefit to the American public.

We provide intercity passenger train services through our three operating service lines: Northeast Corridor, which operates Amtrak's high-speed Acela and Northeast Regional trains between Boston and Washington; State Supported, which provides service on corridor routes of less than 750 miles through cost-sharing agreements with State Partners; and Long Distance, which includes all routes over 750 miles nationwide, and receives financial support from the federal government.

We also provide commuter and freight railroads access to key infrastructure we own or control, such as right-of-way, stations, and facilities. Additionally, we conduct ancillary activities such as real estate and commercial development and serve as a contract operator for commuter train services to generate net financial contribution that is used to advance our statutory goals. We also perform reimbursable work for third parties such as other railroads, local and state governments and others that takes place on Amtrak property or requires our unique expertise.

Reliable, frequent intercity passenger rail service is an essential and growing part of our nation's multimodal transportation system. Amtrak enhances business productivity and supports the nation's long-term economic growth and global competitiveness. Our routes connect hundreds of smaller communities with major metropolitan areas, provide efficient transportation for business travelers, and offer a unique experience for leisure travelers.



Amtrak's Values

Do The Right Thing

This value is central to everything we do. It starts with always being safe—for ourselves, our co-workers and our customers. On a personal level, it means that we always act with integrity. Our stakeholders should know us as honest, trustworthy and reliable—and we must spend Amtrak's money, as well as partner contributions, with the same care we use for our own. In dealing with other people, we are always respectful—and we recognize that we create the best ideas when we include people of different cultures, backgrounds and viewpoints in our work. Finally, we do everything we can to protect our environment. We owe it to future generations to reduce waste and reduce our carbon footprint. A lot of "Do the Right Thing" comes down to the Golden Rule—namely, that we must treat others as we would like to be treated.

Put Customers First

This value speaks to why we exist. Prudently taking good care of our customers is the essence of our mandate from Congress. To "Put Customers First," all of us must be actively engaged in the needs of our customers, all the time. This means we don't wait for a customer to ask for help. If we see someone struggling with baggage or looking uncertain on where to find their gate, we provide whatever assistance they need. We are always courteous and helpful, and we keep our stations and trains clean. In short, every time we interact with a customer, we must exceed their expectations.

Excel Together

This value speaks to teamwork and performance. Many elements go into building a strong and high-performing team. It starts with communication. We must work toward the same goals together—and we need to be talking with each other all the time about what's important, what needs to be done now, and how we can improve. We must also seek to learn from each other. Each of us has a set of unique strengths and expertise that we need to maximize for Amtrak to achieve its goals. And we should always look to improve—ideally by being innovative. Our customers demand modern solutions, and today's business environment requires speed and simplicity. In doing all these things, we will "Excel Together"—and there will be no limits to what we can accomplish.

Our Amtrak Values make clear to everyone what they can expect when they interact with our company. We want Amtrak to be a place where our employees recognize, appreciate, and demonstrate our values in how they carry out their responsibilities. When this connection is made, we make Amtrak a great place to work—and we create a powerful and engaged team capable of achieving any goal.

FY 2021 Results & Accomplishments

The Amtrak team has a history of coming together and performing well when our stakeholders need us the most. In 2021, we celebrated our 50th anniversary during a global pandemic. When our fiscal year started last October, we had hoped the COVID-19 pandemic would end soon. Instead, it went all the way through 2021, and it will go into 2022.

Despite challenges, we had remarkable achievements this year. Preliminary results for fiscal year 2021 (Oct. 2020–Sept. 2021) include:

Safety

Since the COVID-19 vaccine offers the best way to keep employees and customers safe, Amtrak adopted a policy requiring employees to become vaccinated or be regularly tested, leading to approximately 96% of our applicable employees currently having received at least one dose.

Total Capital Spend

Advanced $2.2 billion in capital spending, including major milestone projects such as the Hudson Tunnel Project property acquisition and new multi-powered trainsets acquisitions.

Ridership

Provided 12.2 million customer trips, four million more than in 2020 and a 42% increase over our FY21 goal.

Adjusted Operating Earnings[1]

($1.08 billion) and $400 million ahead of plan due to strong ridership gains driven by new approaches to marketing and pricing that helped attract new riders.

Total Operating Revenue[2]

$1.9 billion, decreased 15.2% over FY 2020.

1. Unaudited
2. Includes payments from state partners for state-supported routes

Amtrak's 2021 Highlights

96%

Applicable Amtrak employees with at least one COVID-19 vaccine dose.

$2.2B

Capital spending

12.2M

Customer Trips

+4M

Trips compared to 2020

($1.08B)

Adjusted operating earnings

$1.9B

Total operating revenue

FY 2021 Results and Accomplishments, continued

Amtrak Connects US

Amtrak launched the company's vision to advance the development of more frequent, reliable and sustainable intercity passenger rail service to over 160 more communities and 20 million more passengers annually by 2035, as outlined in *Amtrak Connects US*. To be implemented in collaboration with states, local communities, the administration and many other stakeholders, *Amtrak Connects US* builds upon Amtrak's national network, integrating new and improved corridors to expand the existing system. The economic benefit of Amtrak's Corridor Vision could reach $8 billion annually by 2035, with an additional $195 billion in economic activity generated by additional capital investment between 2021 and 2035. More than 26,000 ongoing permanent jobs plus 616,000 person-years of employment supported by capital investments could also be created or supported by this vision during this time.

New Service

After more than five years of federally led studies and negotiations, Amtrak initiated a process before the U.S. Surface Transportation Board to require CSX Transportation and Norfolk Southern Railway to permit the operation of two daily Amtrak trains between New Orleans, LA and Mobile, AL. Amtrak has a legal right to use this route, which has sufficient capacity to host these trains, and there is over $66 million in funds from the federal government, states and Amtrak to support necessary improvements for the new intercity passenger rail service. These potential investments have been reviewed, approved, and funded by the Federal Railroad Administration (FRA), Amtrak and others. Amtrak also executed a historic $944 million agreement with Virginia to more than double the number of state-supported services in the Commonwealth during the next 10 years.

Equipment

Announced a contract with Siemens Mobility Inc. to manufacture a new fleet of up to 83 multi-powered modern trains that will be leveraged for state and Northeast Corridor services, with further options for up to 130 additional trains to support growth. Most of these trainsets will provide both electric and diesel power, as well as some with cutting edge battery power, to create a common platform for use across Amtrak's various routes and modern rail amenities to better serve all Amtrak customers. These new trains will replace the current Amfleet I, Metroliner cab and Cascades service fleets. Amtrak also continued to advance production of the new *Acela* trainsets that will transform travel on the NEC. Delivery of all 130 cars from our Viewliner II long-distance railcar order was completed, and we received the first new ALC-42 diesel locomotives for long-distance service, which are currently undergoing testing.

FY 2021 Results and Accomplishments, continued

Stations

Amtrak expanded its footprint and significantly upgraded the customer experience in New York City with the opening of Moynihan Train Hall, located inside the Farley Post Office building, between 31st and 33rd Street directly across 8th Avenue from New York Penn Station. At New York Penn Station, Amtrak installed new wayfinding signage and an Ultraviolet Germicidal Irradiation System in one of the Heating, Ventilation and Air-Conditioning units in the Amtrak concourse, refreshed platforms and completed the second and final phase of the Ticketed Waiting Area refresh in conjunction with NJ TRANSIT. Amtrak also achieved financial close with Plenary Infrastructure Philadelphia (PIP) on a lease and development agreement for the restoration and renovation of the William H. Gray III 30th Street Station in Philadelphia. Under the agreement, PIP will refurbish and improve the historic building, finance those improvements and maintain the station for a 50-year term. In collaboration with local, state and host railroad partners, we relocated our service in Fort Madison, Iowa to the city's historic downtown station following a city-led restoration effort, and announced a proposal for a new Americans with Disabilities Act (ADA)-compliant Brattleboro, Vermont Station.

Infrastructure

Amtrak unveiled new plans to enhance and advance the Baltimore & Potomac Tunnel Replacement Program together with the Maryland Department of Transportation. The new tunnel will be named after Frederick Douglass, the late Maryland-born and world-renowned abolitionist leader. Amtrak also broke ground on the Baltimore Penn Station redevelopment and platform improvements. To allow for greater operability of train service, Amtrak is rebuilding a low-level platform into an ADA-compliant high-level platform. This work, along with a renewed overhead electrical system and an upgraded 30-mile stretch of track between Baltimore Penn Station and Washington Union Station, will enable higher speed operations. Once fully completed, these upgrades will improve on-time performance for by providing route flexibility and allowing unimpeded travel.

Gateway

The Hudson Tunnel Project secured all necessary federal environmental approvals and permits, including the Final Environmental Impact Statement (EIS) and Record of Decision (ROD) from the FRA and Federal Transit Administration (FTA) and the Section 404/10 permit from the U.S. Army Corps of Engineers. Completion of the EIS and issuance of a ROD by the FRA and FTA is a major milestone for the project, permitting the Hudson Tunnel Project to qualify for FTA's Capital Investment Grants Program based on a new financial plan submitted by the Gateway Program project partners. The FEIS/ROD also allowed Amtrak to purchase a critical property in Manhattan, 260 12th Avenue, the site of the construction shaft and permanent ventilation plant for the tunnel. Also in 2021, the Portal North Bridge Project secured a Full Funding Grant Agreement from the FTA and NJ TRANSIT approved the award of the construction contract for the project, allowing commencement of construction in early 2022.

Product Upgrades

Amtrak launched and expanded several popular programs to provide customers with improved amenities. This included the debut of a refreshed food and beverage menu along with top-quality dining experience for customers riding in First Class onboard *Acela* trains. Amtrak also restored and reimagined traditional dining service on the *California Zephyr, Coast Starlight, Empire Builder, Southwest Chief, Sunset Limited,* and *Texas Eagle* (between San Antonio and Los Angeles) following pandemic-related suspension of the service. In addition, Amtrak initiated a multi-million-dollar and multi-year project aimed to improve the customer experience aboard long distance trains by refreshing over 450 railcar interiors. With an expanded carry-on bike program for state-sponsored trains operating in Virginia, customers can now store their bike in the passenger coach in a designated space.

Customers can also take advantage of a relaunched USA Rail Pass for a new and affordable way to take a multi-segment train journey. Additionally, Amtrak achieved record *Auto Train* ticket revenue following an expansion of private room capacity and development of new pricing and marketing tactics to promote this unique service. Lastly, Amtrak debuted its BidUp℠ program, offering upgrades to Business Class, First Class and private rooms, expanded the pet program, and introduced private rooms on select *Northeast Regional* trains.

Emergency Planning

Despite COVID-19 challenges, collaborated on training, exercises and emergency response planning. Working with multiple Federal agencies including the FRA, FBI, FEMA, and NTSB, trainings informed and improved Amtrak's ability to respond to and recover from emergency incidents.

Sustainability

Announced a contract for up to 83 multi-powered trains and received the delivery of the first new ALC-42 locomotive, which will lead to reduced greenhouse gas emissions. All passengers traveling on the NEC between Boston and Washington, DC are now provided their trip-specific carbon emissions savings. Savings achieved by taking Amtrak are shown as how much riders saved by not driving and flying.

On the NEC, travel with Amtrak produces 83% less emissions than driving alone and up to 73% less than flying.

Climate Resilience

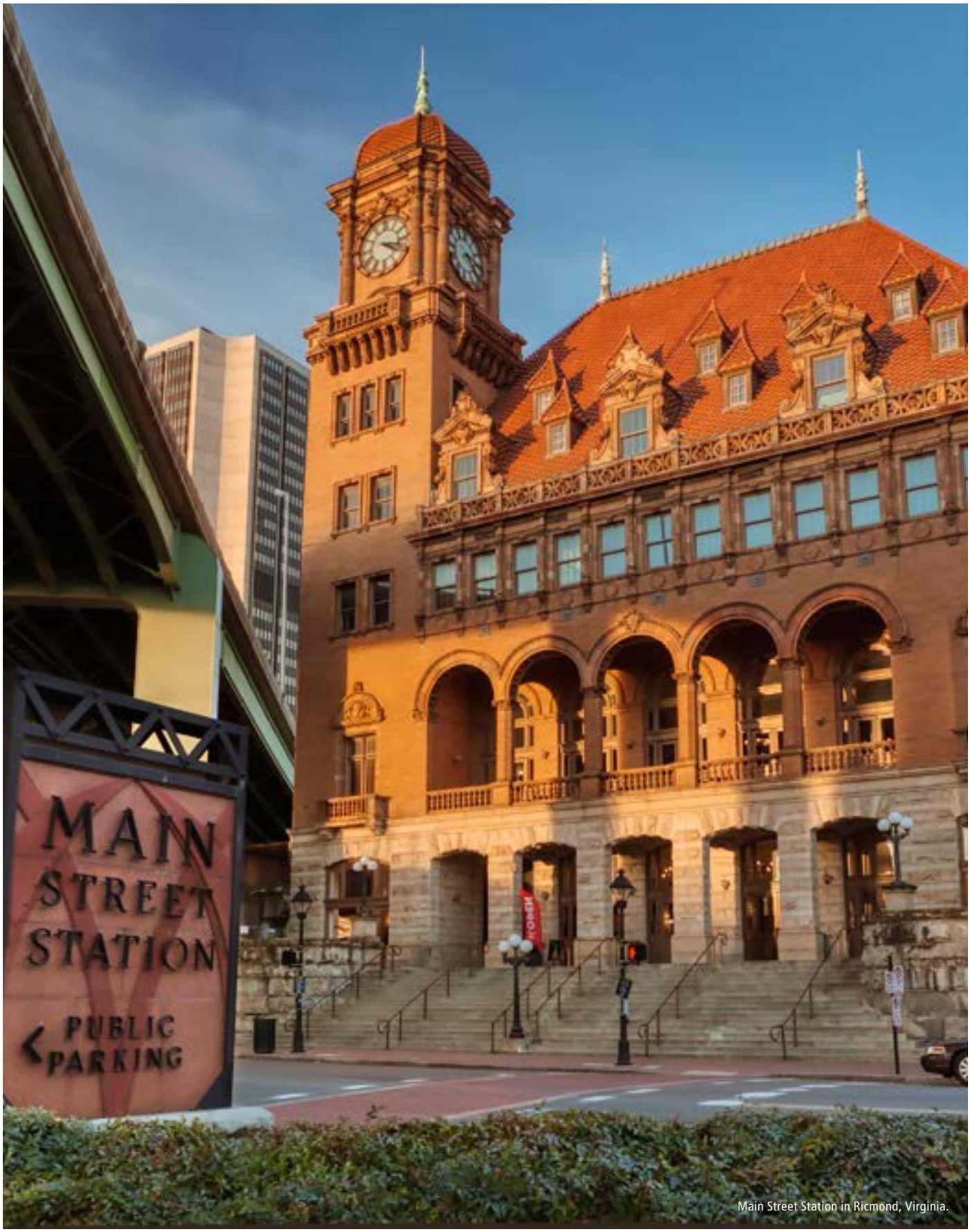
Amtrak developed and is implementing a Climate Resiliency Strategic Plan, including a climate vulnerability assessment for the NEC, and is establishing a path for long term substantial reductions in greenhouse gas emissions across the company's operations. The climate vulnerability assessment will identify NEC assets and segments where heat, sea level rise, wind, and heavy precipitation events could notably affect the Amtrak business by mid-century and 2100. Along with the vulnerability assessment, Amtrak created a resilience strategic plan to integrate climate considerations into business practices and planning efforts.

Safety

Successfully implemented Positive Train Control on all required routes across the Amtrak system in advance of new regulations. Increased Amtrak Police Department presence in stations and onboard trains to help enforce the federal transportation mask mandate. Nearly 500 Police and Sheriff's departments across 43 states and the District of Columbia joined the Amtrak Police Department and Operation Lifesaver Inc. to conduct "Operation Clear Track," the single largest railroad safety law enforcement detail in the U.S. Amtrak also trained 3,052 employees in Safety Starts with Me, an internal safety program.

COVID-19 Vaccine

To encourage all employees to become fully vaccinated against COVID-19, Amtrak provided onsite vaccine clinics, was among the first companies to introduce a compensation allowance for employees who provided proof they had been vaccinated and provided compensation for time off due to vaccine recovery. Amtrak also held town halls devoted to providing information about the vaccines explained by Amtrak's medical director and established the first business-to-business relationship with a national pharmacy to ensure vaccine access. Amtrak coordinated 48 COVID-19 vaccine clinics across the country for Amtrak employees and their families, resulting in an employee vaccination rate well ahead of many major businesses.



Main Street Station in Ricmond, Virginia.

FY 2021 Results and Accomplishments, continued

Accessibility

Amtrak continued its aggressive approach to making stations accessible, with 155 stations now fully or partially ADA-compliant. Progressing work at 95 stations, Amtrak expended over $93 million on ADA station projects; this includes five assessments, 28 station designs, 20 station construction projects, 16 Passenger Information Display System (PIDS) designs, and three PIDS deployments. Aiming to expand accessibility to passengers across all equipment fleets, Amtrak continued efforts on the ADA Fleet Compliance project, which comprises 12 separate rail car modifications. These modifications include installing onboard wheelchairs for quick evacuation, applying non-skid vestibule floor coating, and modifying the first floor of bi-level Long Distance cars to create an accessible path of travel to ADA compliant restrooms. In FY21, more than 1,000 employees completed Amtrak's enhanced accessibility training, ensuring that customer-facing employees receive intensive 8-hour, in-person training. Despite impacts due to the COVID-19 pandemic, Amtrak still hosted 130 accessibility classes across 19 U.S. cities.

Technology

Began offering new digital payment options on the Amtrak mobile app and Amtrak.com. Introduced app improvements, including the expansion of push notification capabilities for gate and track information, new notification offerings featuring tips and information during service disruptions or cancellations, a text service to speak directly to an agent (also available on Amtrak.com), and the ability to cancel (and initiate a refund) or modify a trip. Amtrak has also introduced digital timetables that provide customers with real-time schedule information for a given city pair. Amtrak also began deploying 200 new kiosks in more than 150 stations across the country. New kiosks provide easy access to booking, information, and support capabilities on an Omni-channel platform for a modern and intuitive experience.

State-Supported Services

Launched expanded rail service from Richmond to the Northeast Corridor. Announced a $944 million Amtrak investment in the Commonwealth of Virginia's $3.7 billion Transforming Rail in Virginia program to expand and improve passenger, commuter, and freight rail in Virginia, and create a vital connection in America's national rail network between the Northeast and Southeast corridors.

Diversity & Inclusion

Amtrak implemented numerous initiatives to improve diversity, inclusion and belonging for Amtrak employees. Amtrak increased targeted recruiting efforts, launched seven Employee Resource Groups to support our diverse workforce and achieved a 9.2% increase in women hired. The company added Juneteenth as a holiday for all employees, and established four scholarships to support minority students attaining higher education or a college degree, or a woman pursuing a STEM degree.

Talent/People

Amtrak extended 1,744 employment offers and scaled up recruitment, hiring and retention efforts. Continued company-wide COVID-19 response and remote working efforts, including developing a process for accommodation requests. Amtrak invested in talent and advanced technology through Market Competitive Benefits with offerings to managers that are simpler, personal, relevant, and competitive. Amtrak also successfully defended its new Drug & Alcohol-Free Workplace Policy in arbitration and recalled more than 1,200 furloughed employees after receiving COVID-19 relief funding.

Purpose

Amtrak employees raised over $50k to support charitable organizations through our United Way Campaign.

Leadership

Amtrak named Laura Mason as Executive Vice President of Major Program Delivery to lead a new organization responsible for delivering Amtrak's largest infrastructure, fleet and station programs. Stephen Gardner was appointed CEO in addition to President to replace retiring CEO Bill Flynn, to ensure that Amtrak enjoys continuity of leadership to be well positioned for success.

Strategy

These service and asset line plans describe our strategic efforts and establish the metrics and outcomes we will track to monitor performance. The company's strategic initiatives will continue to support our mission and six Strategic Pillars, which are the foundation of our plans. Four areas will be our focus for the next 12 months: to Serve With Safety, Empower Our People, Grow Our Business and Launch the Future. Pillar initiatives will support these strategies, while key initiatives within each Strategic Focus area are designed to help us achieve the Annual Operating Plan (AOP).

Strategic Focus

Amtrak's primary initiatives will continue to support the six pillars that organize our strategy. While those strategies continue to drive our long-term direction, we have focused our efforts around **four near-term aims:**

Serve with Safety

Safety is a bedrock principle of our operation. Amtrak continues its dedication to safe operation for our customers, employees, and the public. In FY 2021, Amtrak devoted great attention to customer and employee health as we weathered the pandemic. That attention will continue in FY 2022, as we will follow the guidance of health authorities, navigate through a fragile recovery, and communicate our results to our stakeholders. While Amtrak preserved mobility throughout the nation in FY 2021, continuing service on nearly all of the routes on our network, we will be dedicated to maintaining and enhancing safe, efficient, customer-focused operation as we increase service and introduce new equipment in FY 2022.

Empower our People

The strains of COVID-19 combined with the challenge of seizing the opportunities before us require an intense focus on our employees. A higher level of operations and ramped-up capital activity will require more resources at a time when the market for talent has become significantly more competitive. To retain existing and attract new employees, we will need to invest in talent through increased recruiting efforts; training, and development opportunities; strengthening our culture; and fostering diversity, inclusion, and a sense of belonging for all our people. To achieve our goals, we will look for opportunities to optimize our organization and our processes, so that we can best leverage the resources we have.

Grow the Business

Emerging from the pandemic, Amtrak is on a recovery and growth path. As expected, travel patterns have been altered by the pandemic, with business travel recovery lagging. Amtrak will continue to emphasize efforts to gain new customers, including identifying new customer segments (e.g., younger riders) and pivoting to a higher mix of leisure travelers. To attract these and other customers, Amtrak will continue to evolve our products, including onboard service, the overall customer experience, and innovative purchase offerings such as the USA Rail Pass. Digital access and communications tools will improve the customer experience and facilitate customer service. To extend our capabilities, we will continue to develop our partnerships with states, communities, and private enterprises.

Launch the Future

Amtrak will adopt a more forward posture in FY 2022 and beyond. After rolling out our corridor development vision in FY 2021, we will advance its implementation, through ongoing collaboration with our state partners and the Federal Railroad Administration. Key initiatives will modernize fleet, infrastructure, facilities, and technology. To support several of these initiatives and prepare for future ones, we have launched the Fast Forward initiative to task a team with developing the required tools and processes, and we will continue to develop the Major Projects Delivery organization. Amtrak will also help secure the future by expanding our more climate-friendly mode of transportation while advancing sustainability efforts within the company.

Our Vision

We will double Amtrak ridership by 2040 by becoming the preferred mode of intercity travel within the corridors connecting America's major metropolitan areas and support the growth of multimodal travel choices by providing infrastructure, services, and capabilities to passenger railroads nationwide.

We will deliver industry-leading safety and operational performance and consistent and courteous customer service.

Our Mission

Amtrak is the nation's intercity passenger rail operator and infrastructure provider. We provide safe, efficient, and effective intercity passenger rail mobility consisting of friendly high-quality service that is trip-time competitive with other intercity travel options.

Amtrak's Six Pillars

1

Safety and Operations

Focus will be on continuing to provide a safe and secure environment to Amtrak's customers and employees in everyday operations and in the COVID-19 environment. This will include maintaining diligence in executing a safe operation and adapting procedures and policies that comply with the latest public health guidance. Amtrak will continue implementation of the Safety Management System (SMS) Roadmap. As we aim to grow capacity closer to pre-COVID-19 levels, we must engage the workforce to execute the Level of Operations safely and reliably. We will execute Operations Transformation initiatives and ensure that we safely and efficiently integrate new fleet and trainset methodology.

Amtrak remains focused on improving operations, increasing customer on-time performance (OTP) and continuing route-focused OTP improvement plans on the National Network. Amtrak will also continue to focus on minimizing Amtrak-Caused Delays to improve Customer OTP.

2

Customer Impact

A key focus in our recovery from COVID-19 is to attract and retain new customers across the network. In response to changing market conditions, Amtrak is adapting our *Acela* offering and tactics to drive volume, as leisure demand recovery leads business demand. Amtrak is continuing to focus on improving the customer experience with roll-out of Long Distance product improvements and an enhanced Customer Satisfaction Index (CSI) Survey to drive continuous improvement.

3

People

Consistent with our strategic focus, Amtrak's objectives under the People pillar aim to Empower our People. Achievement of our objectives in all the Pillars relies on our ability to attract, develop, retain, and empower a diverse and inclusive workforce and leadership. Efforts center around enhancing employee engagement, with every leader tasked with acting based on our latest Employee Engagement survey, as well as leveraging digital tools to connect employees. A key focus is managing our post-pandemic work site strategy and ensuring a successful return to Amtrak worksites. In addition, negotiations with our labor unions over new agreements will commence in FY 2022, and our conduct of these negotiations will be critical to support all our Pillar initiatives.

4

Financial

The Financial pillar supports the strategic focus to Grow the Business. Amtrak will exercise discipline to significantly reduce adjusted operating loss with a goal of recovering ticket revenue to two-thirds of pre-pandemic level in FY 2022. We are also focusing on our future by delivering our core capital plan with increased spend year-over-year. To overcome financial challenges, efforts will aim to maintain healthy cash balances and drive optimization and savings generation.

5

Strategy

Amtrak's strategy continues to include promoting efforts towards transforming the network to meet future intercity travel needs. On the heels of the release of Amtrak's vision for intercity passenger rail growth, *Amtrak Connects US*, we will continue to advance and execute the National Network corridor development strategy. To achieve network growth, we will nurture relationships with current and future state partners, work in collaboration with the Federal Railroad Administration to implement infrastructure funding provisions, and advance strategies to ensure host railroad network access. Amtrak will continue to implement our strategy for sustainability and climate resiliency through a climate commitment, developing an operational plan for significant carbon reductions, and publicly promoting Amtrak's credentials as the clear sustainable transportation choice. Additionally, we will update our strategy blueprint that summarizes our long-term objectives.

6

Assets

The Asset pillar includes initiatives and activities that help Amtrak to Launch the Future. Fleet modernization continues, highlighted by advancing the Intercity Trainset program and taking delivery of new *Acela* trainsets. We will advance NEC bridge and tunnel projects, including Gateway, and build on and refine the Northeast Corridor Commission's Connect NEC 2035 blueprint, planning and executing key state-of-good-repair projects with our partners on the Corridor. We will also carry out major station and facilities programs, including Baltimore Penn Station redevelopment and a significant increase in ADA stations compliance work. Last, we will enhance efforts to improve our National Network infrastructure to support the development of our National Network corridor strategy.

Challenges, Risks, and Opportunities

We face challenges and risks to achieving our performance goals, as well as new opportunities. While these plans discuss the impact that these issues have on our business and how we propose to manage them, the issues themselves are not entirely within our control. Forecasted performance could therefore suffer or improve depending on external events.

COVID-19 Pandemic

The COVID-19 pandemic remains a wild card and poses major near- and short-term risks to Amtrak's ridership and revenues and to realization of many of our goals.

Changing Demographics and Travel Demand

Many Amtrak routes date to the company's opening in 1971 and have operated continually ever since. Since Amtrak's inception, however, there have been significant population and demographic changes in the U.S.—but Amtrak's National Network map has remained largely the same. The static nature of our network has led to a growing mismatch between likely demand for intercity passenger rail services and Amtrak's routes and frequency levels.

Our greatest opportunity is in growing corridors and regions where we can offer a competitive product that provides an alternative to driving or flying. However, our service to some of the nation's biggest and fastest growing cities and regions is minimal and, in some cases, non- existent. The only Amtrak service in many cities is Long Distance trains that have poor OTP, offer only one or at most a couple of round trips a day with slow trip times, and arrive when nearly all potential customers are asleep.

Changing demographics mean the services and products that Amtrak provides must be modernized if we want to stay relevant. The service and experience Amtrak provided in 1971 or even in 2000 is no longer desirable to our current and future customers. Millennials, the largest population cohort, seek travel experiences that are inexpensive, with seamless Wi-Fi capability for any work or leisure/social activity. By contrast, Baby Boomers gravitate toward luxury experiences with differentiated amenities, yet also value seamless connectivity.

We are also closely monitoring how COVID-19 is impacting current ridership and potential future trends. While overall ridership levels are down, we have seen a higher percentage of new customers on *Acela* and *Northeast Regional* during the COVID-19 pandemic. The current new customer base contains a higher proportion of younger customers who are driving a supportive opinion on passenger rail, exhibiting more sustainable travel mode decision tendencies, and appearing to have higher trust in the safety level of Amtrak travels during COVID-19.

Challenges, Risks, and Opportunities, continued

On-Time Performance

One of the biggest challenges and risks we face is poor on-time performance (OTP) on many of the National Network routes which operate on tracks owned by host railroads. Long distance routes are particularly affected. Over the past several years, OTP on most long-distance routes has been abysmal. In FY 2021, long distance customer OTP was only 52%, a seven percentage point drop from FY 2020. On five long distance routes more than half of our customers arrived at their destination late. This creates a massive challenge to our strategy to attract and retain customers when we are unable to deliver the advertised service.

The leading cause of delays to our National Network trains is freight train interference caused by the failure of some of our host railroads to comply with their longstanding legal obligation to provide Amtrak trains with preference over their freight trains.

Only the U.S. Department of Justice (DOJ) has been able to enforce this law—and it has brought only one enforcement action against a freight company in Amtrak's history, and that was 40 years ago!

A freight train on the NEC.

Congress intended to give the Surface Transportation Board authority to enforce Amtrak's preference rights when it enacted the Passenger Rail Investment and Improvement Act of 2008, but the STB's enforcement powers were stymied by a decade-long legal challenge by the Association of American Railroads (AAR) that sought to prevent the STB from exercising its authority. That challenge was ultimately unsuccessful, and we are gratified that the STB is finally empowered to exercise the authority it received in PRIIA to investigate substandard Amtrak on-time performance and to award damages and prescribe other relief if it results from preference violations. However, we expect the freight railroads to mount challenges when Amtrak seeks to enforce its preference rights under metrics and standards issued by the Federal Railroad Administration (FRA).

A high level of on-time performance on trains operating over Amtrak's host railroads is crucial to attracting customers and realizing the benefits of public investments in rail.

Host Railroad Access

As Amtrak looks to expand and improve operations over rail lines owned and dispatched by our host railroads, which account for about 95% of our current route network, our goal is to negotiate win-win agreements with our hosts that include investments benefiting both Amtrak and freight service. Amtrak, our state partners, and the federal government have invested or committed to invest billions of dollars in rail lines owned by our host railroads to upgrade infrastructure and provide additional capacity to facilitate new or increased Amtrak service, such as our recent $944 million commitment to infrastructure improvements in Virginia.

In most cases, the operation of additional Amtrak trains and routes has been addressed under our agreements with host railroads. However, some host railroads have impeded exercise of Amtrak's statutory right to add trains to our network. During FY 2021, following years of unsuccessful negotiations with two host railroads, Amtrak for the first time initiated a proceeding before the STB under the "Additional Trains" provision of the Rail Passenger Service Act, which is codified at 49 U.S.C. 24308(e). In that still pending proceeding, Amtrak, supported by FRA, is seeking an order that would allow restoration of state-supported Amtrak service along the Gulf Coast between New Orleans and Mobile, Alabama.

Access to all host railroad lines on reasonable terms, without lengthy delays or exorbitant and unjustified demands for capital investments, is an essential prerequisite to using the funding provided by the IIJA to grow our network as Congress intended, so we can bring Amtrak service to routes and communities that we do not serve, or do not serve well, today.

Aging Fleet and Infrastructure

Much of our equipment fleet needs to be replaced given its age, reliability, and functional obsolescence. Re-fleeting is essential to offering a viable product in a competitive travel environment and offers additional benefits such as lower emissions and a sustainable spare parts supply chain for maintenance.

Since 2010, we have ordered (and in some cases, taken delivery of) new electric locomotives, a new generation of *Acela* trainsets, single-level Long Distance equipment that replaced the remaining cars we acquired from private railroads a half century ago, and, most recently, new diesel locomotives for our long-distance trains. We have underway a procurement process for new Intercity Trainsets to replace some 600 locomotives and passenger cars that are at the end of their useful lives, including railcars from the 1960s and 1970s and diesel and dual- mode locomotives from the 1990s. The Equipment Asset Line Plan describes our current plans, reflecting today's system, in greater detail and outlines the actions underway to replace and improve our equipment fleet.

We also face the challenge of aging infrastructure on the NEC that is deteriorating and, in many cases, has reached or exceeded its useful life and/or the practical limits of its capacity to accommodate additional trains when the COVID-19 pandemic is behind us. Our capital program includes planned and ongoing investments to major infrastructure assets like the Baltimore and Potomac (B&P) Tunnels in Maryland (built in 1873), the Portal Bridge in New Jersey (built in 1910), and the Hudson River Tunnels (also built in 1910) that contain aging components that impede reliability and have severe capacity limitations that restrict ridership growth.

Environmental Impacts and Climate Change Adaptation

Amtrak continues to strengthen its position as a key part of the nation's post-pandemic recovery and low-carbon transportation future. According to the 2021 U.S. Department of Energy Transportation Energy Data Book, Amtrak is 46 percent more energy efficient than traveling by car and 34 percent more energy efficient than traveling by airplane on a per-passenger-mile basis. To continue being the low-emission travel option, we have set and achieved annual reduction goals by purchasing more energy efficient locomotives, completing facility upgrades, and improving train handling.

Compared to other modes of transportation, passenger rail offers greater support to local and regional economic development, lower greenhouse gas emissions, reduced highway congestion, quick access to city centers and, in some cases, travel time savings. Amtrak is the most established and cleanest option to drive the modal shift away from cars and planes toward intercity passenger rail.

To build customer awareness, we launched a new feature on NEC tickets. Now, customers riding between Boston and Washington, DC can see their travel emissions on Amtrak compared to driving and flying. The next phase is to expand this feature beyond the NEC to all city pairs.

While ridership was on the rise, but below FY19 levels, fuel use was well below the -5% reduction goal at -14% and electricity use was down -3.5%, also outperforming the -1.5% goal.

Challenges, Risks, and Opportunities, continued

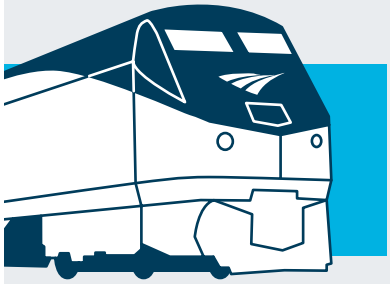
A greater focus on excessive idling and train handling techniques contributed to fuel savings, and for the second year, Amtrak's amended train service and remote work for office employees resulted in significant greenhouse gas emissions reductions (-25%). This performance helped Amtrak make progress toward the long-term GHG emissions reduction goal of 40% by 2030. However, as a mainly carbon-based company, we're making a concerted investment to drive down our reliance on fossil fuels by exploring more on-site renewable energy generation, alternative locomotive propulsion technologies, and driving greater efficiencies in major station projects.

Over the last year, Amtrak's Sustainability and Climate Resilience program remained focused on both reducing our contribution of greenhouse gas emissions and ensuring the preparations we take today protect our infrastructure to withstand impacts from a changing climate. We drafted the framework for a Carbon Transition Plan, revised an existing Green Power Purchasing Policy, and initiated the most focused and comprehensive climate resilience efforts to date, including the completion of a vulnerability assessment of Amtrak assets along the Northeast Corridor.

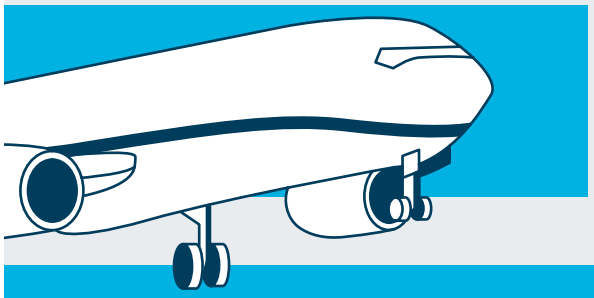
In the coming year, the Climate Resilience Strategic Plan will guide the company to implement priority actions into our current business practices. We will expand our climate vulnerability research to include the national network and our focus on emissions reduction will continue as we evaluate more ambitious targets to align with the Executive Administration's net zero goals.

Energy Consumption by Transportation Mode (BTU/PM)

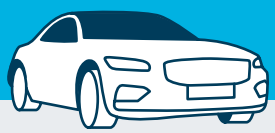
Nationwide, Amtrak trains consume less energy on a per passenger mile basis than other modes.



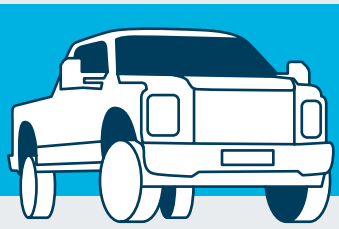
Amtrak
1,535



Airplane
2,341



Automobile
2,840



Truck
3,278

Energy measured in British Thermal Units per Passenger Mile (BTU/PM)
Source: Transportation Energy Data Book, Edition 39, 2021

Implementation and Delivery

The increased funding provided by the IIJA provides many welcome opportunities and challenges as we work towards implementation and delivery. Some of these challenges and opportunities include maintaining momentum, growing our workforce and supplier base, and developing new state partnerships.

Maintaining Momentum

The comprehensive, prioritized processes the IIJA establishes for funding and implementation of both NEC capital investments and expansion of corridor services are a welcome development, particularly since they are accompanied by funding that will make the lists of prioritized projects more than a wish list. It is essential that FRA, Amtrak, states and the NEC Commission work together to ensure that the funding the IIJA appropriates for infrastructure investments and corridor development is made available for that purpose as quickly as possible. Work on already well-advanced, shovel-ready projects to improve intercity passenger service, and on vital state-of-good repair projects such as rehabilitating the East River Tunnels damaged by Superstorm Sandy, must not be delayed.

Growing Our Workforce and Supplier Base

Making good and timely use of the funding provided by the IIJA will require educating, hiring, training, and developing career paths for thousands of additional workers who will be needed to fill jobs requiring high levels of skill that provide good wages and benefits. These new workers will not be easy to come by at a time when finding qualified personnel is a challenge in all industries, let alone an industry like passenger rail that, because of historic underfunding, does not have a strong pipeline of prospective employees with the necessary, and in many cases unique, skills that will be required.

For the same reason, finding qualified suppliers and contractors for many of the products and services necessary for modernization and expansion of our passenger rail network will also be a challenge. For example, no U.S.-based company manufactures passenger railcars, and the United States has a limited pool of engineers with expertise in designing, rebuilding, and constructing rail infrastructure.

But these challenges also create opportunities: opportunities to develop partnerships with universities, community colleges, labor organizations and community groups to attract, educate and train the new people we need to develop the skilled, diverse Amtrak workforce of the future. In October, Amtrak entered into a national agreement with North America's Building Trades Unions (NABTU), the labor organization representing more than three million skilled craft professionals, under which Amtrak and NABTU will work together to ensure a consistent construction workforce pipeline that will accelerate apprenticeship readiness programs, promote diversity, and ensure fair wages and benefits for the workers who will build the infrastructure that IIJA funding to Amtrak will construct. We also plan to create a Community Engagement Office that will allow us to develop closer ties with the communities we serve, which would facilitate local hiring and provide many other benefits.

The IIJA will also provide opportunities to grow and expand—and importantly, to diversify—our industry's limited supplier base. The investments the IIJA will fund will provide new business opportunities for thousands of companies, including many existing and new small businesses and disadvantaged business enterprises. We will be augmenting our Supplier Diversity Program to provide additional staffing, employee training, supplier outreach and improvements in technology and ease of doing business with Amtrak that will enable us not only to meet the demands of an exponential increase in Amtrak procurement activity but also to increase our corporate goal of spending with Disadvantaged Business Enterprises (DBE), Small Business (SB) concerns, Minority and Women Business Enterprises (M/WBEs), Veteran and Service Disabled Veteran Owned Businesses (VOB/SDVOB) and Labor Surplus Area firms (LSA) to 15%.

Developing New State Partnerships

Throughout our history, states and Amtrak have partnered to launch corridor services that have proven so beneficial that state Legislatures and Congress have continued to find the funding necessary to cover their costs, even during periods of severe funding constraints and the COVID-19 pandemic. However, achieving state commitments to begin funding intercity passenger rail service is always a challenge amidst all the competing transportation priorities facing state capitals. It is a particular challenge during periods of economic uncertainty such as we face today as a result of the COVID-19 pandemic. It will remain so despite the significant, multi-year federal funding the IIJA authorizes, which for the first time will place intercity passenger rail on a more even footing with other modes when states are deciding how to spend their limited transportation dollars.

The provisions in the IIJA that provide funding for the Restoration & Enhancement program to cover a portion of the operating costs of new and expanded services in their initial years, and that authorize Amtrak to use a portion of its National Network grants for both initial capital and operating costs of new or expanded routes, could significantly reduce initial state funding requirements for service expansion. However, challenges in securing even relatively small initial state funding from states with fiscal constraints that are not accustomed to funding intercity passenger rail service will remain, and Amtrak is gearing up to partner with interested states to help make the case for long-term state funding commitments for service growth.

Future Funding

The enactment of the IIJA provides, for the first time since Amtrak's creation, adequate funding to begin the long overdue modernization and expansion of the U.S. passenger rail network.

Because of the magnitude and long lead times of the investments required to accomplish that, the funding levels provided by the IIJA—which are, in essence, a down payment—must continue beyond its five-year horizon. Addressing the $117 billion in infrastructure investments required to implement the NEC C35 Plan or developing a network of new corridor services like *Amtrak Connects US*, whose estimated capital cost is $75 billion, will require assured, long-term funding, such as the trust funds that fulfill that purpose for other transportation modes.

With the enactment of IIJA, the need for a trust fund or similar long-term, assured funding mechanism has never been greater. Developing and operating a larger rail corridor network serving all regions of the United States will require an ongoing federal funding commitment. Enactment of long term, assured funding is an essential prerequisite to any expansion of Amtrak's long-distance network, whose significant capital and ongoing operating costs are virtually all federally funded, unlike our state-supported and NEC services.

> "For 50 years, the nation has been waiting for the Federal government to provide Amtrak with the resources we need to fully deliver on our mission to serve the American people. The Bipartisan Infrastructure Deal fulfills this promise and we are ready to start rebuilding and expanding passenger rail to meet the service demands and sustainable transportation goals of the future."
>
> - Amtrak Board Chair Tony Coscia

Plan Highlights

The next five years are a historic opportunity filled with promise for Amtrak. The IIJA will allow Amtrak and our state and commuter partners, in partnership with the Federal Railroad Administration (FRA), to begin modernizing our Northeast Corridor (NEC) and National Network assets. It will also provide the funding and process improvements that are needed to set in motion the expansion and improvement of our network to cities and smaller communities that are currently underserved, or not served at all, by Amtrak.

The IIJA provides advance appropriations of $66 billion for rail. Amtrak will receive $22 billion of this amount, and $36 billion is designated for competitive grants under an updated version of FRA's Federal-State Partnership Program. The IIJA also appropriates $5 billion for the existing FRA Consolidated Rail Infrastructure and Safety Improvements (CRISI) program and $3 billion for grade crossing elimination projects: intercity passenger rail projects are among those eligible for competitive grants under both programs. To put the scale of this investment in context, the $58 billion the IIJA designates for intercity passenger rail is roughly equivalent to the total federal funding for Amtrak in the 50-plus years since its creation.

Renewing and Replacing Our Assets

The IIJA will fund long deferred investments in Amtrak's infrastructure, equipment, stations, facilities, and information technology. These types of investments, along with investments to expand service, will also be eligible for competitive grants that will be awarded by FRA under the augmented Federal-State Partnership program originally created by the Fixing America's Surface Transportation (FAST) Act, which is now called the Federal-State Partnership for Intercity Passenger Rail. The IIJA provides advance appropriations of $36 billion for Federal-State Partnership grants, of which no more that $24 million may be used for NEC projects.

Infrastructure

On the NEC Main Line from Boston to Washington, the IIJA funding appropriated directly to Amtrak will enable advancement and acceleration of both the sole-benefit critical infrastructure projects and state-of-good repair (SOGR) work that are urgently needed after decades of underinvestment despite growing use. These appropriations will also advance State-of-Good-Repair (SOGR) projects on the Amtrak-owned Keystone Corridor and Springfield Line, Amtrak-owned trackage in Chicago and on the Michigan Line, and the portions of the Albany Line of the Empire Corridor that are owned or leased by Amtrak.

The primary source of funding for the large-scale NEC infrastructure investments will be the FRA's Federal-State Partnership grants, which will provide Amtrak and its state partners with a reliable, programmatic source of 80% federal funding for these critical, once-in-a-century projects, and the additional federal transit funding the IIJA provides to our commuter partners. These projects include the construction of the long-sought Hudson Tunnel Project between New York City and New Jersey, which has just received from the Army Corps of Engineers the final federal regulatory approval required for construction; the replacement of the 148-year-old Baltimore and Potomac Tunnel in Baltimore by the new Frederick Douglass Tunnel; and the replacement of major bridges like the Connecticut River and Susquehanna River Bridges that have exceeded their useful lives.

The IIJA directs FRA to create a prioritized list of NEC capital projects that includes their proposed federal funding levels by November of 2022, and to update every two years thereafter. The NEC Commission, comprised of representatives of Amtrak, NEC states, USDOT and FRA, is already engaged in completing the groundwork that will inform the Project Pipeline. In July of this year, the NEC Commission completed CONNECT NEC 35 (C35), a comprehensive, 15-year NEC reinvestment implementation plan. The NEC Commission is currently working on an update to C35, CONNECT NEC 37 (C37), that will be issued in mid-2022. It will further refine C35 into an implementable, fiscally-constrained program that will include additional detail on project plans and assessments of project readiness, address service impacts during implementation, and consider the availability of funding, equipment, and workforce.

Renewing and Replacing Our Assets, continued

When fully funded and completed over the next 15 years, the infrastructure investments included in the C35 plan will cut down travel time by nearly 30 minutes for passengers traveling between New York City and both Washington or Boston.

Maintaining the reliability and service frequency of Amtrak and commuter rail services along the NEC amid all the work required to construct these investments will be a major challenge requiring close coordination with our commuter rail partners. While some disruption of and adjustments in services will be necessary while work is underway, passengers will see incremental improvements in trip times and reliability as projects are completed.

Infrastructure investments on other Amtrak-owned/leased lines using IIJA funds could also produce significant improvements in trip times and increased ridership. For example, maximum speeds on the Philadelphia-to-Harrisburg Keystone Corridor, the only electrified portion of Amtrak's network other than the NEC Main Line, which were increased to 110 mph because of investments jointly funded by Amtrak and the Commonwealth of Pennsylvania, could be increased further to 125 mph.

Stations

The IIJA's advance appropriations to Amtrak, Federal-State Partnership grants that Amtrak will seek, and IIJA transit funding provided to our commuter partners will allow advancement of the Major Station Amtrak Development Programs we have already commenced, in collaboration with commuter railroads and other public and private partners, at Amtrak-owned station facilities in New York City, Washington, DC, Philadelphia, Baltimore, and Chicago. For example:

New York Penn Station

At New York Penn Station, IIJA funding could accelerate efforts to use the opportunity created by the shift of most Amtrak passenger-facing services to the new Moynihan Train Hall and the advancement of the Hudson Tunnel Project to expand track and platform capacity to the south of the current station and transform Penn Station into a 21st Century terminal befitting the legions of passengers who use it today.

Moynihan Train Hall

Washington Union Station

IIJA funding could advance the Washington Union Station Expansion Project to transform that vital transportation hub, whose current size, configuration, and customer facilities are woefully inadequate to serve much larger volumes of Amtrak, commuter rail, Metro, and intercity bus passengers than it was designed to accommodate when it was restored 32 years ago.

Additional Projects

IIJA funding will also allow us to advance station SOGR and improvement projects at our more than 500 other stations throughout the country in collaboration with state partners, communities, and private entities. It will enable us to accelerate work to bring all our stations throughout the country into full compliance with the Americans with Disabilities Act (ADA). During FY 2022 and 2023, we expect to complete projects to make 96 stations fully compliant with the ADA.

Fleet Modernization

Much of the Amtrak passenger train fleet is nearing the end of its useful service life. This aged fleet limits Amtrak's ability to incorporate technological innovations for service efficiency, modern amenities for its customers, and constrains its abilities to grow service to meet demand. Amtrak will face significant fleet investment needs in the coming years to sustain its existing network of NEC, state-supported and long-distance services, let alone expand into new corridors nationwide.

Providing funding for replacement of obsolete equipment used on Amtrak's state-supported and long-distance routes is one of the primary purposes of the $16 billion in additional National Network funding the IIJA provides to Amtrak. By 2031, we expect to have replaced nearly 40% of the passenger rail cars we are currently operating across the entire network, and all the Amtrak-owned diesel locomotives used on our state-supported and long-distance services.

The IIJA specifies that the National Network and NEC advance appropriations shall be used to fully fund Amtrak's replacement program for the single-level equipment Amtrak operates on the NEC in *Northeast Regional* service and on state-supported routes, providing the resources to cover both the Amtrak share and the state share that would otherwise be required under the Section 209 cost allocation methodology. This roughly $5.5 billion program for 83 state-of-the-art, U.S.-built, flexible trainsets and related maintenance facility investments to replace the 45-year old Amfleet I cars will create jobs across America, redefine the experience we offer customers, improve reliability and equipment availability, and reduce operating and future capital costs.

The National Network funding will also allow Amtrak to initiate a procurement process to replace long-distance passenger cars that have reached the end of their useful lives, and exercise options to acquire additional ALC-42 (Amtrak Long-Distance Charger, 4,200 horsepower) locomotives, on top of the 75 we have already ordered, to replace the 20- to 30-year old Genesis diesel locomotives that power our long distance trains.

In addition to offering more modern customer amenities—like electronic passenger information boards throughout the trains and onboard wheelchair lifts—the new equipment we are acquiring will be more sustainable, producing significantly lower emissions per passenger mile than the equipment it replaces. This will increase the environmental benefits of growing Amtrak ridership by attracting passengers who would otherwise drive or fly. Each passenger who shifts from driving alone to taking the train along Amtrak's electrified Boston-to-Washington Northeast Corridor reduces their carbon footprint by 83%. That is an enormous public benefit, even before considering the resulting reduction in traffic on I-95 and on the congested streets of the major Northeastern cities.

Expanding Intercity Passenger Rail Service

Earlier this year, Amtrak released Amtrak Connects US, a vision for developing and expanding corridor services throughout the United States over the next 15 years. Amtrak Connects US, the product of more than two years of study and analysis and consultation with states and other stakeholders, identified approximately 30 new corridors with high demand and potential for intercity passenger rail service, and an additional 20 existing corridors that were prime candidates for service expansion. Expansion projects include improving service on existing routes through reducing trip time, improving on-time-performance, adding stations, and/or increasing frequency as well as creating entirely new routes to reach areas without rail passenger service.

The current Amtrak route network is about the same size, and serves most of the same routes and places, as Amtrak's route network 50 years ago. It does not reflect the roughly 120 million increase in the U.S. population since then, much of which has occurred in now large, fast growing states with diverse populations, such as Florida, Texas, and Georgia, that Amtrak barely serves. Operation of new routes and services included in Amtrak Connects US is projected to produce 26,000 permanent jobs and $6.9 billion annually in additional economic activity, while the capital investments it would require are projected to result in $195 billion in economic activity and 616,000 person years of employment over the 15-year construction period.

Amtrak has a vision to better serve the nation by working with states and localities to add new routes and frequencies to connect a greater number of people in more places, without resorting to costly investments in tapped-out highway and aviation systems.

Amtrak's Corridor Vision

This map reflects coordination with state rail plans but is not a final proposal.

Stakeholder Coordination

Coordination with our partners will be critical to successful implantation of our plans. In developing our service and asset line plans, Amtrak has consulted with FRA, the Northeast Corridor Commission and SAIPRC.

Amtrak maintains regular communication with our state, commuter, and host railroad partners both on a bilateral basis and through our membership in entities such as the Northeast Corridor Commission and SAIPRC. We are in continual communication with the federal government through the Federal Railroad Administration's management of our NEC and National Network grants and its membership in both the Commission and SAIPRC. We also communicate regularly with Congress regarding current and planned activities. Current efforts to improve or maintain Amtrak's assets that involve collaboration with stakeholders include Amtrak's fleet acquisition process, managing investment in shared-use infrastructure on the Northeast Corridor, and in developing the *Amtrak Connects US* vision.

Coordination on Fleet Acquisition with FRA and SAIPRC

Amtrak reached the conclusion that our current fleet will need large-scale replacement in coming years thanks to both internal efforts and the help of external stakeholders such as the Federal Railroad Administration (FRA) and engineering firms, whose commissioned technical studies included the Amfleet I Life Extension Study that set forth the process for Amfleet replacement. Additionally, we have engaged our State Partners through the State-Amtrak Intercity Passenger Rail Committee (SAIPRC) to determine their preferences regarding new equipment, and they are active partners in our acquisition process for the new equipment, both directly and through SAIPRC.

Coordination on Investments in Northeast Corridor Infrastructure

In addition to participating in the NEC Commission's development of the C35 and C37 strategic investment plans, Amtrak is continuing efforts to improve alignment between the Amtrak Infrastructure Asset Line Plan (IALP) and the NEC Commission's Capital Investment Plan (CIP). We are also working with the NEC Commission to renew the NEC cost allocation policy and to create a more inclusive process for plan development and review.

Key Business Drivers

	FY 2021 ACTUAL	FY 2022 GOAL	FY 2027 GOAL
Adjusted Ticket Revenue (Millions)	$888.0	$1,619.00	$2,803.2
Ridership (Millions)	12.2	23.2	37.8
Customer Satisfaction Index	82.40%	80.5%	-
Customer On-Time Performance[1]	78.0%	77.0%	-
Revenue Per Available Seat Mile (Cents)	24.1	21.9	28.8
Cost per Available Seat Mile (Cents)	36.9	30.3	36.6
Passenger Miles (Millions)	2858.6	4895.5	7383.1
Average Load Factor	36%	40%	51%
Cost Recovery	65%	72%	79%

1. Customer OTP measures the actual on-time performance of our customers, instead of endpoint OTP. FY 2021 CSI scores based on three-year average.

Food and Beverage (F&B) Financial Performance

($s in Millions)	PLAN FY 2022	FIVE-YEAR PLAN					% GROWTH INC/(DEC) VS PRIOR YEAR				
		FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY22/23	FY23/24	FY24/25	FY25/26	FY26/27
Cash Sales	$46.5	$59.7	$71.4	$74.9	$78.4	$82.1	28.3%	19.7%	4.9%	4.6%	4.7%
Total Revenue	**$46.5**	**$59.7**	**$71.4**	**$74.9**	**$78.4**	**$82.1**	**28.3%**	**19.7%**	**4.9%**	**4.6%**	**4.7%**
OBS Labor & Support	101.2	108.1	116.1	122.0	129.4	134.8	6.85%	7.41%	5.10%	6.07%	4.12%
Commissary Provisions and Management	85.5	90.4	95.9	99.5	103.4	101.3	5.70%	6.05%	3.75%	3.90%	-2.01%
Total Expense	**$186.7**	**$198.5**	**$212.0**	**$221.5**	**$232.8**	**$236.1**	**6.3%**	**6.8%**	**4.5%**	**5.1%**	**1.4%**
Direct Contribution/(Loss)	**$(140.2)**	**$(138.8)**	**$(140.6)**	**$(146.6)**	**$(154.4)**	**$(154.0)**					
Cost Recovery	**25%**	**30%**	**34%**	**34%**	**34%**	**35%**					
F&B Portion of Ticket Revenue	52.4	67.3	80.5	84.5	88.4	92.6	28.3%	19.7%	4.9%	4.6%	4.7%
State Contribution to Food & Beverage	22.5	23.9	25.6	26.7	28.1	28.5	6.3%	6.8%	4.5%	5.1%	1.4%
Cost Recovery with State Contribution	**65%**	**76%**	**84%**	**84%**	**84%**	**86%**					
Cost Management, Revenue Generation Initiatives, and Ticket Revenue Allocation	65.3	47.6	34.5	35.4	37.9	32.9	(27.0%)	(27.6%)	2.5%	7.2%	(13.2%)
Adjusted Contribution/(Loss)	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**N/A**	**N/A**	**N/A**	**N/A**	**N/A**

Plan Organization

Account Structure Framework

Amtrak's Five-Year Plans support the account structure and improvements to accounting methods originally prescribed by the FAST Act to promote efficient use and stewardship of Amtrak funds and enhance transparency. The account structure is designed around the service lines and asset lines. In addition to its core functions, each service and asset line requires strategic and operational leadership, management, and administrative support to carry out its functions.

The IIJA authorizes a Northeast Corridor grant for the NEC main line between Washington and Boston, and a National Network grant for State Supported and Long Distance routes that fund operating and capital expenses. Segregation of this funding and the revenues from each service line ensures that the financial and planning elements of both networks can be clearly understood; net NEC revenues (pre-pandemic) are retained for reinvestment in the NEC network; and National Network needs are not overshadowed by the NEC's large capital requirements.

The purpose of the Account Structure is to show the comprehensive and complete view of Amtrak's revenues and funding and expenditures in a manner that focuses on the services that Amtrak customers buy or fund.

Amtrak's Service & Asset Lines

ASSET LINES	NEC SERVICE LINES			NATIONAL NETWORK SERVICE LINES			
	NEC	Infrastructure Access	Ancillary	State Supported	Long Distance	Infrastructure Access	Ancillary
Transportation							
Equipment							
Infrastructure							
Stations							
National Assets/ Corporate Services							

Amtrak's Service and Asset Lines

Amtrak performs a range of business activities for its customers in different capacities. Amtrak's customers include intercity rail passengers and public and private sector entities that contract for, partner with, or invest in Amtrak's business activities.

Amtrak's Service Lines share a common mission and core customers. Service Lines are responsible for meeting the needs of the respective customers to fulfill their mission.

NEC Intercity Operations

Sponsor: Jina Sanone, VP NEC Service Line

Provides premium and regular intercity rail passenger service along the NEC while seeking to maximize operating surplus. Its customers are intercity train travelers on the NEC.

State Supported

Sponsor: Ray Lang, VP State Supported Services

Provides intercity rail passenger service and supporting services under contract to States on corridor routes of not more than 750 miles. Its primary customers are State Departments of Transportation and authorities, and intercity travelers.

Long Distance

Sponsor: Larry Chestler, VP Long Distance

Provides intercity rail passenger service on routes of more than 750 miles. Its primary customers are travelers and communities across the national network and the Federal Government.

Infrastructure Access

Sponsor: Tom Moritz, AVP Infrastructure Access & Investment

Plans, develops, manages, and provides access to users of Amtrak-owned or Amtrak-controlled infrastructure. Its primary customers are Amtrak's NEC, State Supported and Long Distance Service Lines, commuter and freight railroads, and third-parties such as States and localities, utilities, and others that seek to make use of Amtrak's infrastructure and fixed assets.

Ancillary Services

Sponsors: Chris Hartsfield, AVP Properties, and Paul Vilter, AVP Planning & Commercial Services

Competes to operate commuter rail services, performs reimbursable work for States and railroads, and leverages Amtrak owned real-estate and commercial (Real Estate & Commercial Services).

Amtrak's Asset Lines support Service Lines by providing the resources necessary to produce revenue and support our mission and goals.

Transportation

Sponsor: Scot Naparstek, EVP Service Delivery & Operations

Transportation refers to assets related to the operation and movement of the trains, onboard services, and amenities.

Equipment

Sponsor: George Hull, VP Chief Mechanical Officer

Amtrak-controlled rolling stock, locomotives, and mechanical shop facilities that are used to maintain and overhaul equipment.

Stations

Sponsor: George Holz, AVP Stations & Facilities

All passenger rail stations served by Amtrak trains, with a focus on Amtrak-controlled stations and elements of other stations for which Amtrak has legal responsibility or where it intends to make capital investments.

Infrastructure

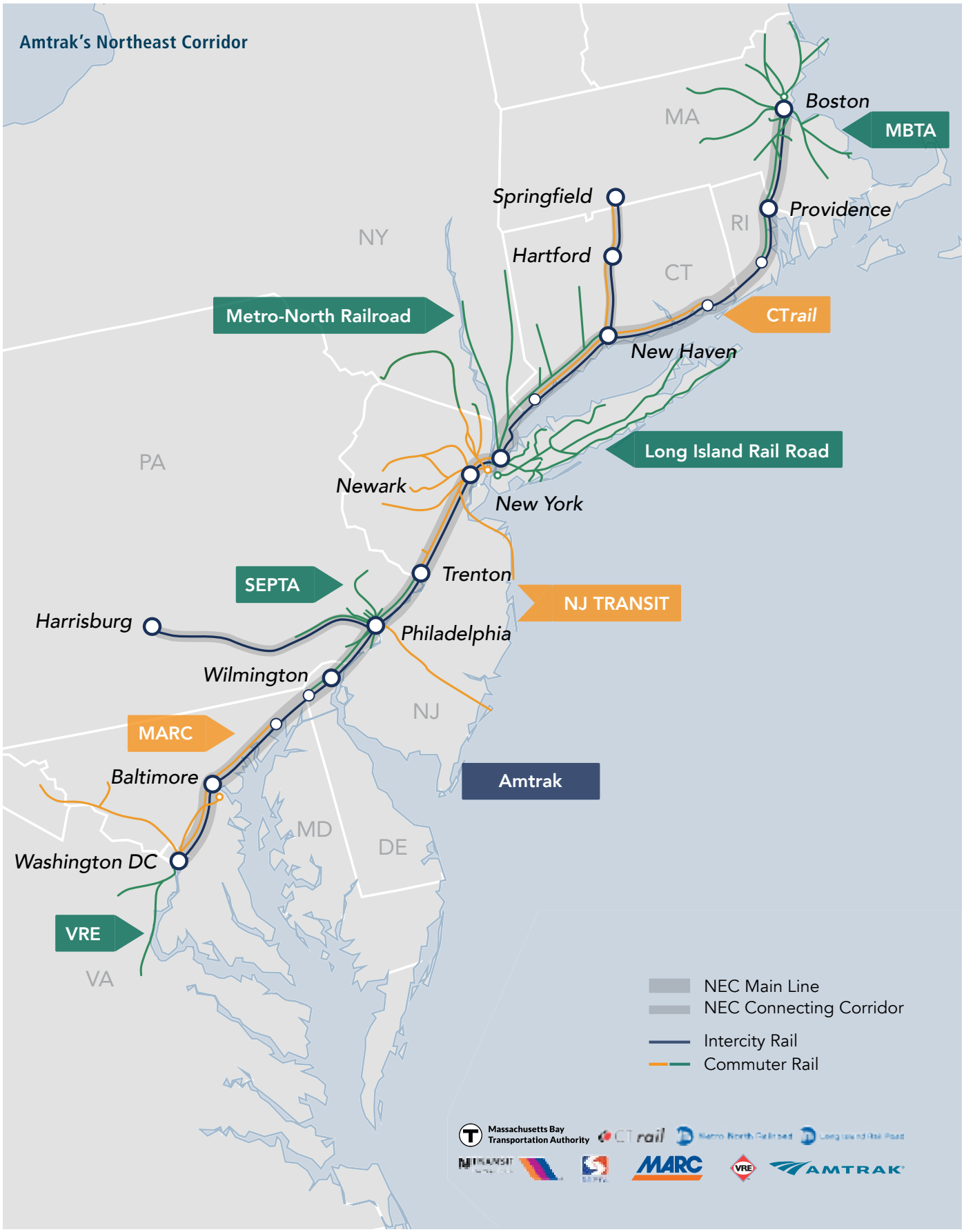
Sponsor: Gerhard Williams, SVP Service Delivery & Operations

All Amtrak-controlled Northeast Corridor infrastructure assets and other Amtrak-controlled infrastructure, along with the associated facilities that support the operation, maintenance, and improvement of those assets.

National Assets and Corporate Services

Sponsor: Christian Zacariassen, EVP Digital Technology & Innovation

Cross-cutting assets such as systems for reservations, security, training, training centers, and others associated with Amtrak's national rail passenger transportation system. Corporate Services include company-wide functions such as legal, finance, government affairs, human resources, and information technology.


Amtrak's Northeast Corridor
Boston
MBTA
MA
Springfield
Providence
RI
NY
Hartford
CT
Metro-North Railroad
CTrail
New Haven
Long Island Rail Road
PA
Newark
New York
SEPTA
Trenton
NJ TRANSIT
Harrisburg
Philadelphia
Wilmington
NJ
MARC
Amtrak
Baltimore
MD
DE
Washington DC
VRE
VA
NEC Main Line
NEC Connecting Corridor
Intercity Rail
Commuter Rail
Massachusetts Bay Transportation Authority
CTrail
Metro-North Railroad
Long Island Rail Road
NJ TRANSIT
SEPTA
MARC
VRE
AMTRAK

Recovering from the worst disruption to the transportation industry in modern history, Amtrak's Northeast Corridor is preparing for the most transformative decade in its history. Train travel is well-positioned not only to weather the current storm, but to emerge as the premier transportation mode choice along the NEC in the 2022-2027 timeframe and beyond.

Northeast Corridor Service Line

Amtrak's NEC Service Line (NECSL) provides intercity passenger rail transportation on the NEC between Washington and Boston. The mission of the NECSL is to transform the NEC into a world class high-speed rail corridor while growing and expanding ridership from its high-speed *Acela* and *Northeast Regional* (NER) services, culminating in Amtrak becoming the preferred choice of travel in the Northeastern United States.

Amtrak's NECSL offers two distinct intercity products: *Acela*, Amtrak's premiere, limited stop service that operates at speeds up 150 mph (soon to be 160 mph with the introduction of the next generation *Acela* equipment), and *Northeast Regional*, which serves additional communities and operates at speeds up to 125 mph. *Acela* trainsets have 44 seats in first class and 264 seats in business class, and NER consists vary from 288–566 seats depending on overall demand, time of day, and day of week. Several Amtrak Long Distance and State Supported services also traverse the NEC. The population density in the northeastern United States helps make Amtrak's Northeast Corridor the most heavily traveled portion of the American passenger rail system. Due to the region's economic activity and output, the NEC serves a vital role in the regional and national economies.

During 2021, the NEC experienced the beginning of a transformation, with a number of key projects that were underway or completed, key milestones in equipment replacement for both *Acela* and *Northeast Regional* fleets, and a transformation of its business approach due to recovery efforts associated with the COVID-19 pandemic. One of these key projects was the opening of the new Moynihan Train Hall at Penn Station, offering passengers at Amtrak's busiest station a beautiful, modern concourse and transforming the customer experience in New York City. Further, a historic groundbreaking for the redevelopment of Baltimore Penn Station and the signing of a development agreement for Philadelphia William H. Gray III 30th Street Station will advance significant concourse and station improvements at these other major NEC stations.

On the equipment side, Amtrak continued to advance efforts to support the new *Acela* fleet with its expected launch in the near future, as well as the procurement of Intercity Trainsets (ICT) to replace Amfleet I equipment used on *Northeast Regional* trains. The ICT program achieved a milestone with the award of a contract to Siemens for up to 83 new, modern trainsets for the NEC and in many other key corridors. These equipment and station transformations are expected to increase ridership, revenue and customer satisfaction.

The onset of the COVID-19 pandemic resulted in massive reductions in travel demand, particularly business travel, and required Amtrak to adjust its overall pricing, scheduling, and service offerings to generate ridership. While enhancements in remote technology mean flexible work arrangements are here to stay, business travel demand began to recover in 2021, picking up speed in the fall, and further growth is expected in 2022. At the same time, leisure travel has recovered very well, and Amtrak has used this opportunity to further advance NEC product positioning, including offering lower fares. Future NEC strategy will continue to evolve to attract new types of riders.

In light of this, our strategy focuses on NEC's ability to:

- Position Amtrak's Northeast Corridor as **the preferred method of transportation** in the Northeast.
- Anticipate and plan for the **advancement of major infrastructure projects,** including the Gateway Program, B&P Tunnel replacement, and state-of-good-repair and trip time improvement projects.
- Re-position Amtrak's NEC products, including leveraging the introduction of the new *Acela* to **serve wider segments of the general population,** including seniors, younger adults, and members of minority groups.
- **Capture new customers** and more traffic to utilize increased capacity that will be available with the introduction of the new *Acela* fleet, followed a few years later by the introduction of the new ICT *Northeast Regional* fleet.

NEC Infrastructure

The NEC Main Line is 457 miles long, connecting major northeastern cities including Washington, DC, Baltimore, Philadelphia, New York City and Boston. With the addition of connecting corridors to Harrisburg, PA, Springfield, MA, Albany, NY and Richmond, VA, served by State Supported trains, the NEC spans 899 miles. Most of the NEC infrastructure is owned by Amtrak, with approximately 56 miles owned by the Connecticut Department of Transportation and Metro-North Railroad (MNR) that is dispatched and maintained by MNR between New Rochelle, NY and New Haven, CT. Thirty-eight miles of the route in MA are owned by the Commonwealth of Massachusetts and maintained and dispatched by Amtrak.

The Northeast's five major metropolitan regions—Boston, New York, Philadelphia, Baltimore and Washington, DC—rely on Amtrak services for a significant share of business and leisure passenger travel, and on the NEC infrastructure for the daily commuting needs of their workforces, with multiple commuter railroads relying on using parts of the NEC to operate their service.

In addition to operating the *Acela*, *Northeast Regional*, State Supported and Long Distance trains, Amtrak serves as the infrastructure manager for most of the NEC. Amtrak provides dispatching services and electric propulsion power and maintains and improves the infrastructure and facilities used by Amtrak as well as commuter and freight rail services. The NEC is the most complex and heavily used railroad territory in the country. While commuter services operate the majority of trains running on the NEC, Amtrak accounts for about half of the train miles actually traveled on the NEC and is the only operator to provide end-to-end service between Boston and Washington, DC.

NEC Infrastructure, continued

Before COVID-19, more than 260 million passenger trips were made on the NEC each year, of which 17.1 million annual trips in FY 2019 were Amtrak passengers. The balance of trips is made on trains operated by Amtrak's eight commuter railroad partners that share the NEC: the Massachusetts Bay Transportation Authority, Shore Line East, Metro-North Railroad, the Long Island Rail Road, New Jersey Transit, Southeastern Pennsylvania Transportation Authority, MARC and Virginia Railway Express. Prior to COVID-19, approximately 820,000 weekday trips were made on the NEC and more than 2,100 passenger trains and 60 freight trains operated on some portion of the NEC every weekday. While pre-COVID-19 ridership levels have not yet returned as travel demand continues to recover, NEC passenger trips are expected to eventually exceed the previous baseline as population growth and overall demand continues to increase.

NEC Infrastructure and Capacity Challenges

The Northeast is a highly productive and densely inhabited region, supporting 17 percent of the nation's population on two percent of its land area and generating 20 percent of its GDP. About 80 percent of this population lives within 25 miles of the NEC. This population is expected to grow significantly, and that growth is expected to generate increased demand for passenger rail service. In its current state the NEC's infrastructure cannot accommodate all the anticipated demand over the next few decades.

This heavy traffic volume is carried on an aging and capacity-constrained infrastructure, with much of the NEC approaching the limits of its capacity and also in need of rehabilitation. Many rail assets need renovation or replacement to provide the capacity needed both to support likely growth and to provide safe, reliable, and convenient commuter, regional and high-speed rail service into the next century.

As required by the Passenger Rail Investment Improvement Act of 2008 (PRIIA), the NEC Commission has adopted a cost allocation policy to share operating and normalized replacement of the NEC's basic infrastructure costs based on each NEC railroad's proportional use. The capital funding that Amtrak and states provide under this policy is the NEC's first dedicated, predictable capital funding. However, this funding is insufficient to restore the NEC to a state-of-good-repair, let alone make improvements for the future.

During 2021, the NEC Commission announced the release of Connect NEC 35 (C35), a long-term vision for the NEC that would make significant improvements to rail service for both Amtrak and commuter rail partners. C35 is a 15-year plan representing the most ambitious reinvestment program in the NEC's history and a new way of planning: a multi-agency, multi-year, shared action plan guided by a long-term vision. The NEC states, the federal government, eight commuter rail agencies, and Amtrak worked together through the NEC Commission to develop a sequencing of infrastructure investment covering 150 projects along the corridor. If fully funded, implementation of C35 will result in a modern and resilient railroad with safe, reliable, and more frequent service; connections to new markets; and reduced travel times .

In November 2021, President Biden signed the Infrastructure Investment and Jobs Act (IIJA) into law. The IIJA will provide the largest investment in passenger rail since the creation of Amtrak, including up to $30 billion in additional funding over the next five years to Amtrak and FRA that is allocated to the NEC. The IIJA funding will allow Amtrak to replace obsolete bridges, tunnels, catenary and make other improvements to the NEC. This includes funding large infrastructure projects such as the completion of the Gateway program and Hudson Tunnel, replacement of the Connecticut River Bridge, and other essential state-of-good-repair projects, for which the IIJA will provide stable and reliable funding for the near future.

More detail on the IIJA and NEC infrastructure can be found in the Infrastructure Asset Line Plan.

While the NEC travel market has seen significant reduced business demand, Amtrak is optimistic about continued growth for leisure travel and other trip purposes, allowing ridership to increase beyond pre-COVID-19 levels in this decade.

Market Overview

The Northeast Corridor is prepared to adapt to the new and radically changed travel environment in the wake of a major pandemic, including adapting to changes in travel patterns and customer sentiment on the NEC. Looking ahead, Amtrak continues to position its *Acela* and *Northeast Regional* services as a world-class railroad while also being receptive to changing customer preferences. Many of the enhancements developed during the COVID-19 pandemic, such as greater touchless options, improved cleaning, and other technology enhancements are here to stay, resulting in a more efficient and seamless travel experience for NEC customers.

Thanks to a widely available vaccine, increased comfort level of travel, and an uptick in economic and leisure activity, the NEC has continued to rebound with many signs of growth. Business demand, while initially severely impacted, has begun to return, with additional growth expected in 2022 and beyond. Bookings, an indication of demand, have rebounded and are routinely down only a third versus pre-pandemic levels. As we approach 2022, many signs of leisure activity show signs of increasing, and many businesses are in the process of developing plans to bring workers back to offices and restore some level of business travel.

While the NEC travel market has seen significant reduced business demand, Amtrak is optimistic about continued growth for leisure travel and other trip purposes, allowing ridership to increase beyond pre-COVID-19 levels in this decade.

FY 2021 Performance and Results

Recovering from a challenging FY 2020 that saw travel demand ground to a halt, Amtrak was able to pivot and achieve meaningful ridership restoration during the second half of the FY 2021. Amtrak carried 4.4 million passengers on the NEC during FY 2021 versus 12.5 million in pre-pandemic FY 2019, while operating on a significantly curtailed schedule for the first portion of the fiscal year, with much of the service not restored until the late spring and early summer periods. While ridership on the NEC was significantly below plan, by September 2021 NEC ridership had reached 61% of FY 2019 levels. For the entire FY 2021, NECSL ridership was 35% and revenue 26% of FY 2019 levels. Amtrak looks to rebuild its ridership and customer base in the coming years as recovery from the COVID-19 pandemic continues.

NEC Ridership Levels FY21 vs. FY19 (Pre-COVID-19)

	Oct*	Nov*	Dec*	Jan*	Feb*	Mar	Apr	May	Jun	Jul	Aug	Sept
Acela	10.0%	8.5%	7.4%	7.8%	9.0%	13.1%	18.6%	27.4%	43.5%	53.7%	52.9%	44.6%
NER	22.6%	20.6%	18.6%	20.9%	23.0%	28.1%	31.8%	41.2%	53.8%	65.0%	66.7%	66.9%

*For the months of October – February in FY21, Amtrak uses FY20 as a comparison base to represent more typical data points.

Strategy

Emerging from the COVID-19 pandemic has enabled Amtrak to re-focus efforts on making the NEC the transportation preference for the Northeast. Driven by its overall efficiency and convenience, rail transportation will serve as a powerful tool for the region's economic comeback, offering a mobility solution that more and more consumers appreciate. To meet the challenges of the new environment and capitalize on the inherent competitive advantages of train travel, Amtrak's NECSL will advance the key strategies described below.

Primary Initiatives

Provide a Safe and Enhanced Customer Experience

Safety is foundational to Amtrak's mission. This includes an intense focus on employee training, railroad safety protocols, and ensuring a safe environment for customers. With its 'New Standard of Travel' (details at right), Amtrak will consistently demonstrate its commitment and dedication to providing the highest levels of health-related safety. Amtrak will continue to expand touchless and contactless technologies such as reserved seating, increased mobile options, and other new and innovative enhancements for customers. Throughout this process, Amtrak will monitor and comply with all safety requirements and mandates at the Federal and State levels.

Onboard, Amtrak has been working to enhance cleaning and safety protocols, utilizing EPA-registered cleaning products and expanding our en-route cleaner program. Additionally, all trains are equipped with onboard filtration systems that change the air up to 15 times per hour.

Customers traveling in the NEC in the years ahead will experience an improved customer experience with enhanced offerings. These include things such as new rolling stock through the next generation *Acela* and Intercity Trainset (ICT) equipment, new or modernized major stations, improved ride quality through track surfacing upgrades, enhanced Wi-Fi, and more personalized customer service culminating in an improved journey for our customers.

Amtrak's New Standard of Travel

- ✓ Touch-free/no hassle experience.
- ✓ New predeparture boarding information.
- ✓ New gate boarding process.
- ✓ "Never a Neighbor" seating capacity indicator and all reserved seating on *Acela*.
- ✓ Shared information with customers about Amtrak's ventilation systems, providing information about fresh air exchanges and filtration to customers.

1. Source: Table 10, https://www.epa.gov/sites/default/files/2021-04/documents/emission-factors_apr2021.pdf

Primary Initiatives, continued

Acela Program

Acela—Amtrak's most commercially successful product and flagship high speed service—marked a major milestone in December 2020, celebrating 20 years of service. More than 52.5 million passengers have traveled on the fleet of 20 *Acela* trainsets since it entered service. *Acela* appeals to customers for its faster trip time and punctuality, industry leading comfort, first-class offerings, and overall premium experience. Furthermore, the all-electric *Acela* fleet is increasingly attractive to travelers attentive to the carbon footprint of travel.

The next generation of *Acela* trains being manufactured by Alstom Transportation in Hornell, New York is scheduled to begin entering revenue service in the next several years. The acquisition of 28 next generation high speed trainsets will expand the *Acela* fleet by 40% and offer 25% more seats (386 versus 304) per train, as well as offering improved ride quality, increased reliability, and modern contactless features.

According to calculations based utilizing the EPA's Emission Factors for Greenhouse Gas Inventories, traveling on Amtrak in the all-electric Northeast Corridor produces up to 83% fewer greenhouse gas emissions than driving and up to 72% fewer emissions than domestic air travel.[1]

New Product Launches

Beginning in the Spring of 2021, Amtrak re-introduced overnight sleeping car service on *Northeast Regional* trains 65/66/67 between Washington, DC, New York, and Boston. This service, which last operated approximately 20 years ago, provides NEC customers with a practical, safe, and efficient option for overnight travel, allowing them to arrive at their destination in time for an early meeting. For the first six months of operation, the sleeping car proved to be even more popular than expected, with many customers specifically seeking private rooms. The longer-term performance of this service will help Amtrak gain insights in longer-term product offerings in the NEC.

In late Summer 2021, Amtrak also re-introduced chef-inspired, at-seat meals in *Acela* First Class that had been removed at the beginning of the pandemic due to health concerns. In addition to rotating, chef-inspired menu items, customers can select from a variety of premium quality beverages and spirits to help enhance their journey.

Innovate and Offer New Pricing

Historically, NEC customers seeking economical fares have been conditioned to seek *Northeast Regional* service, while business customers have gravitated towards Amtrak's *Acela* product. With the collapse and slow recovery of the business travel market as a result of the pandemic, Amtrak will need to assess the impact that changes in travel demand will have on the customer mix for both the *Northeast Regional* and the *Acela* products.

Expand the Customer Base

The NEC customer mix has undergone some impactful changes in the wake of the COVID-19 pandemic. One in five NEC customers are new customers, twice the pre-pandemic level, who are choosing Amtrak for its comfort, safety, and convenience.

Capitalizing on these emerging customer segments will be critical in positioning Amtrak and the NEC as the preferred method of transportation in the Northeast. Continued investments in high-speed Wi-Fi, interactive communications, and the ability to get real-time information on all aspects of the trip will be required to provide expected amenities and maintain the relevance and competitiveness of Amtrak's NEC services. To address the dramatic shifts in the travel behavior described above, Amtrak must focus on driving ridership and creatively reaching and winning new NEC customers in both the near and long term in preparation for the new *Acela* revenue service launch.

Station Development Projects

The opening of the Moynihan Train Hall at New York Penn Station in January 2021 has transformed the station experience for Amtrak passengers traveling to or from New York City. Amtrak is continuing to advance station redevelopment programs at the four major Amtrak owned or controlled NEC stations: New York Penn Station, Philadelphia William H. Gray III 30th Street Station, Baltimore Penn Station and Washington Union Station. Underway and planned improvements and enhancements at these stations are described in the Station Assets Line Plan.

Equipment Modernization

In addition to the introduction of new *Acela* equipment, Amtrak is acquiring new ICT equipment to replace the existing, aged Amfleet I cars operating on *Northeast Regional* trains. The 455 Amfleet I cars were built between 1975 and 1977. Although regular overhauls of mechanical components and refreshes of interior appointments have kept them commercially useful, they are overdue for replacement with an equipment fleet that provides an updated modern train experience for today's customers.

In April 2021, Amtrak announced Siemens as the preferred bidder for an initial order of up to 83 trainsets for the NEC and multiple state corridors. The new ICTs will feature the latest design features in comfort and safety, providing customers with a safe, comfortable ride. Their dual-mode capabilities will allow for seamless switching between electric operation on the NEC and off-NEC diesel operation, providing a quicker and more seamless ride for travelers on NEC trains that continue to destinations in Virginia and Vermont and on the Keystone and New Haven-Springfield Lines, greatly expanding the potential market for these services. These replacement trainsets will offer modern amenities that our customers expect, and Amtrak looks forward to introducing them in the NEC later this decade.

Sustainability and climate compatibility are also increasingly important to the traveling public. Train travel routinely ranks among the most sustainable, environmentally friendly mode of travel.[2] Amtrak can capitalize on this competitive advantage and leverage it to greatly expand its customer base.

2. Source: Table 10, https://www.epa.gov/sites/default/files/2021-04/documents/emission-factors_apr2021.pdf

Five-Year Plan

The initiatives, projects and proposals for the NEC are outlined with one purpose in mind: positioning Amtrak to be the first choice for travel in the NEC. With a special focus on an improved customer experience to grow ridership and revenue, the next five years will be transformative.

However, roadblocks remain, given uncertainties with recovery from COVID-19 and impacts on travel behavior, as well as aging infrastructure challenges. With sufficient funding and a continued focus on collaboration and good business practices, Amtrak has the expertise, partnerships and determination to navigate each of these challenges to achieve a transformed NEC for the benefit of the nation.

Key Business Drivers

	FY 2021 ACTUAL	FY 2022 GOAL	FY 2027 GOAL
Adjusted Ticket Revenue (Millions)	$345.9	$742.3	$1,670.6
Ridership (Millions)	4.4	9.0	14.7
Customer Satisfaction Index	Acela: 84.0% NER: 80.9%	Acela: 82.6% NER: 78.9%	-
Customer On-Time Performance[1]	Acela: 82.8% NER: 84.3%	84%	-
Revenue Per Available Seat Mile (Cents)	18.1	24.2	39.9
Cost per Available Seat Mile (Cents)	34.2	26.7	32.0
Passenger Miles (Millions)	754.1	1485.6	2515.2
Average Load Factor	36%	46%	58%
Cost Recovery	53%	90%	123%

1. Customer OTP measures the actual on-time performance of our customers, instead of endpoint OTP. FY 2021 CSI scores based on three-year average.

Profit & Loss Analysis

NEC Service Line (FY 2022–FY 2027)

($s in Thousands)	FY 2022	FY 2023	FY2024	FY 2025	FY 2026	FY 2027	Total
Financial Sources:							
Passenger Related Revenue							
Ticket Revenue (Adjusted)	743,782	1,002,899	1,328,441	1,446,586	1,570,952	1,670,629	7,763,289
Charter/Special Trains	1,500	-	-	-	-	-	1,500
Food and Beverage	14,724	18,751	23,015	24,710	26,490	27,978	135,669
Contractual Contribution (Operating)							
PRIIA 209 Operating Payments	-	-	-	-	-	-	-
PRIIA 212 Operating Payments	-	-	-	-	-	-	-
Commuter Operations	357	-	-	-	-	-	357
Reimbursable Contracts	7,056	956	1,093	1,138	1,193	1,193	12,628
Access Revenue	-	-	-	-	-	-	-
Commercial Revenue (incl. Pipe/Wire, Real Estate, Parking)	701	-	-	-	-	-	701
All Other Revenue (incl. Insurance Revenue, Cobranded Commissions, etc.)	9,686	17,757	20,284	21,126	22,147	22,147	113,146
Operating Sources Subtotal	**777,806**	**1,040,364**	**1,372,833**	**1,493,560**	**1,620,782**	**1,721,947**	**8,027,290**
Contractual Contribution (Capital)							
PRIIA 209 Capital Payments	-	-	-	-	-	-	-
PRIIA 212 Capital Payments	-	-	-	-	-	-	-
Other State/Local Mutual Benefit	30,961	-	-	-	-	-	30,961
Amtrak Internal Cash	108,956	19,583	4,182	1,257	3,078	5,790	142,846
Financing Proceeds Applied	425,240	-	-	-	-	-	425,240
Other Capital and Special Grants (incl., state/local sources)	-	-	-	-	-	-	-
Capital Sources Subtotal	**565,157**	**19,583**	**4,182**	**1,257**	**3,078**	**5,790**	**599,047**
Federal Grants to Amtrak							
Prior Year Carryover Grant Funds	129,951	156,108	67,318	-	-	-	353,377
Current Year FAST Sec 11101 Grants							
Operating	84,537	-	-	-	-	-	84,537
Capital	507,894	-	-	-	-	-	507,894
IIJA Supplemental	-	-	-	-	-	-	-
IIJA Discretionary	-	736,867	1,703,251	2,137,762	2,165,117	2,505,642	9,248,639
Other Federal Grants (incl., FRA/OST, FTA, DHS)	8,384	15,991	29,734	27,663	17,546	41,264	140,583
Federal Grants to Amtrak Subtotal	**730,767**	**908,966**	**1,800,303**	**2,165,425**	**2,182,663**	**2,546,906**	**10,335,030**
Total Financial Sources	**2,073,729**	**1,968,912**	**3,177,318**	**3,660,241**	**3,806,523**	**4,274,643**	**18,961,367**
Financial Uses (Operating):							
Service Line Management	1,351	5,002	5,580	5,963	6,324	6,688	30,907
Transportation	223,702	301,325	336,177	359,227	380,979	402,913	2,004,324
Equipment	191,059	235,686	262,946	280,975	297,989	315,144	1,583,799
Infrastructure	105,397	104,796	116,917	124,933	132,498	140,126	724,669
Stations	56,492	61,262	68,348	73,034	77,456	81,916	418,507
National Assets and Corporate Services	284,837	325,597	363,257	388,164	411,668	435,368	2,208,891
Total Operating Uses	**862,838**	**1,033,668**	**1,153,224**	**1,232,297**	**1,306,915**	**1,382,155**	**6,971,096**
Operating Surplus/Deficit *(Operating Sources - Operating Uses)*	**(85,032)**	**6,696**	**219,608**	**261,263**	**313,867**	**339,792**	**1,056,194**
Available for Capital Uses *(Capital Sources + Federal Grants to Amtrak + Operating Surplus/Deficit - Debt Service Payments)*	**1,210,891**	**935,245**	**2,024,094**	**2,427,944**	**2,499,609**	**2,892,489**	**11,990,271**
Financial Uses (Capital):							
Service Line Management	1,431	-	-	-	-	-	1,431
Transportation	123,900	40,607	6,205	4,773	2,680	2,652	180,816
Equipment	491,796	562,990	211,605	422,197	407,363	326,453	2,422,404
Infrastructure	452,610	695,002	899,477	1,062,230	1,264,474	1,540,519	5,914,312
Stations	88,875	199,486	238,862	320,046	264,398	237,937	1,349,603
National Assets and Corporate Services	53,884	36,624	23,480	14,718	12,686	15,575	156,968
Capital Expenditures	**1,212,498**	**1,534,708**	**1,379,629**	**1,823,964**	**1,951,601**	**2,123,135**	**10,025,535**
Debt Repayments	230,772	203,343	187,794	187,302	186,293	184,846	1,180,350
Total Capital Uses	**1,443,270**	**1,738,052**	**1,567,422**	**2,011,266**	**2,137,894**	**2,307,981**	**11,205,885**
Remaining Carryover Balance	**$ (232,379)**	**$ (802,807)**	**$ 456,672**	**$ 416,678**	**$ 361,715**	**$ 584,508**	**$ 784,386**

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The mission of Amtrak's State Supported Service Line (SSSL) is to grow ridership and passenger utility from Amtrak's State Supported Routes. Amtrak's primary stakeholders are our State Partners and regional partners that fund the service, the passengers we serve and the Federal government. To meet our stakeholders' goals, we utilize our commercial and transportation expertise to deliver and evolve our exceptional service while achieving State Partner financial and transportation objectives.

State Supported Service Line

Amtrak operates 28 State Supported routes. Train operations on these routes are funded by 19 partners from 17 states, including state departments of transportation and regional authorities chartered specifically to administer individual rail corridors.

Collectively, these transportation departments and other entities are referred to as State Partners, and the routes they fund are referred to as State Supported routes. All such routes are under 750 miles in length as defined by statute.

The service characteristics of existing and planned high-potential corridors align with Amtrak's statutory goals and mission. They are trip time competitive, operate efficiently, and maximize the benefits of federal investments. These corridors occupy rail's "sweet spot" in terms of distance, serving markets where their unique characteristics allow them to compete with other travel modes and align with population growth, urban densification, and demographic trends. Based on pre-COVID-19 operations, the state routes carry just under half of Amtrak's total ridership. The different service variations operating today provide multiple models that can be applied across the country to seed new corridor services and grow existing ones.

SSSL has two primary customers: the passengers who use the services and the states that provide funding. State Supported services have been the fastest growing segment of Amtrak's rail network for many years, linking urban areas with frequent, reliable rail service. They are also a vital developer of travel and patronage habits, having the highest share of passengers between 18–34 years old of any of Amtrak's service lines.

Amtrak's State Supported Routes

SSSL in 2021

15,000

Daily Riders on State Supported Routes

+80%

Direct Tickets

1.2 Million

Engineer and Conductor Hours

12 Million

National Amtrak Guest Rewards Members

Amtrak's State Supported Routes

REGION	ROUTE	CITIES SERVED	FUNDING PARTNER(S)
Northeast	**The Downeaster**	Boston–Portland–Brunswick	Northern New England Passenger Rail Authority (NNEPRA)
	Hartford Line / Valley Flyer	New Haven–Springfield	Connecticut, Massachusetts
	Vermonter	Washington–St. Albans, VT	Vermont, Connecticut, Massachusetts
	Empire Service	New York–Albany–Niagara Falls	New York State
	Maple Leaf	New York–Toronto	New York State
	Adirondack	New York–Montreal	New York State
	Ethan Allen Express	New York–Rutland, VT	Vermont, New York State
	Keystone Service	New York–Philadelphia–Harrisburg	Pennsylvania
	Pennsylvanian	New York–Philadelphia–Pittsburgh	Pennsylvania
South	**Washington–Roanoke**	Boston–Roanoke	Virginia
	Washington–Newport News	Boston–Newport News	Virginia
	Washington–Norfolk	Boston–Norfolk	Virginia
	Washington–Richmond	Boston–Richmond	Virginia
	Carolinian	New York–Charlotte	North Carolina
	Piedmont	Charlotte–Raleigh	North Carolina
	Heartland Flyer	Oklahoma City–Fort Worth	Oklahoma, Texas
Central	**Lincoln Service**	Chicago–St. Louis	Illinois
	Illini / Saluki	Chicago–Carbondale	Illinois
	Illinois Zephyr / Carl Sandburg	Chicago–Quincy	Illinois
	Hiawatha	Chicago–Milwaukee	Wisconsin, Illinois
	Wolverines	Chicago–Detroit	Michigan
	Blue Water	Chicago–Port Huron	Michigan
	Pere Marquette	Chicago–Grand Rapids	Michigan
	Missouri River Runner	St. Louis–Kansas City	Missouri
West	**Pacific Surfliner**	San Diego–Los Angeles–San Luis Obispo	Los Angeles–San Diego–San Luis Obispo (LOSSAN) Rail Corridor Agency
	San Joaquins	Oakland/Sacramento–Bakersfield	San Joaquin Joint Powers Authority (SJJPA)
	Capitol Corridor	San Jose–Oakland–Sacramento–Auburn	Capitol Corridor Joint Powers Authority (CCJPA)
	California-owned equipment	Various	California Department of Transportation
	Cascades	Vancouver, BC–Seattle–Portland–Eugene	Washington State, Oregon

Market Overview

In FY 2021, State Supported routes carried 5.5 million riders, comprising 42% of Amtrak's total ridership (this is in comparison to 2019 pre-COVID-19 where we carried 15.4M passengers, comprising 47% of Amtrak total ridership). As capacity was reinstated in the second half of 2021, increasing from 64% of 2019 seat miles in Q1 to 79% of 2019 seat miles in Q4 in combination with customers beginning to resume travel, Amtrak saw a significant improvement in ridership, which increased from 22% of 2019 in Q1 to 56% in Q4. This created favorable momentum as we headed into 2022, and put us on a good trajectory to reach our 2022 forecast of 70% pre-pandemic ridership recovery.

Amtrak Markets

Our SSSL corridors create transportation options and choice, providing passengers a unique value proposition with very competitive fares, low environmental impact, high comfort, no stress planning, and convenient connections to other modes. To deliver this compelling value proposition we leverage our pooled investments, our unique access rights, safety, and operational expertise across the full Amtrak network to deploy solutions that would be challenging to deliver if not at scale. This has created a solid foundation across the major areas of our SSSL—infrastructure, transportation, product, and commercial delivery.

Amtrak believes State Supported corridors are the future of rail passenger service in the U.S. and offer the best opportunities for growth.

FY 2021 Performance and Results

The State Supported Service Line began FY 2021 during the height of the pandemic, with most state supported services either completely suspended or heavily reduced. With the approval of vaccines which were made widely available to the traveling public, the Service Line worked with the state partners to restore frequencies and services methodically, and safely. By the end of the fiscal year, most services were completely restored, with only a handful of services not operating at pre-COVID-19 levels. Ridership began to recover almost immediately, with some services now approaching pre-COVID-19 ridership levels.

During the year, the Service Line worked to administer the emergency relief funds made available for state supported services by the Federal government, helping our partners successfully preserve all routes and services. The Service Line is now seeing a robust recovery of both ridership and revenue on most services.

The Service Line also began work on a comprehensive rewrite of the PRIIA Section 209 cost methodology in partnership with states and the FRA. This important effort will continue into 2022, with the goal of having a new methodology ready for FY 2023.

The State Supported Service Line began FY 2021 with a significant decline in ridership versus pre-pandemic FY 2019 levels; the first three months of the year were at 20–25% of 2019 levels. Over the coming months the gap has been closing, with September ridership recovering to 55% of 2019 levels. In the aggregate, 2021 ridership was 5.5M, down 9.7M versus 2019. Farebox revenue for FY 2021 was $185M, down $276M versus FY 2019 (40% recovery of FY 2019 ridership).

State Supported Service Line Ridership Comparison for FY 2021 as a Percent of FY 2019

Oct*	Nov*	Dec*	Jan*	Feb*	Mar	Apr	May	Jun	Jul	Aug	Sept
25%	21%	19%	21%	24%	27%	33%	39%	48%	58%	56%	55%

*For the months of October – February in FY21, Amtrak uses FY20 as a comparison base to represent more typical data points.

Strategy

Amtrak's five year plan has two primary objectives: grow ridership from our pre-pandemic 2019 level of 15.4M, to our 2027 goal of 18.2M passengers and invest in the future of rail in America. To achieve these significant ambitions, we will need to build on our core strengths with continued innovation and investments across all areas of our business.

Primary Areas of Focus

Build On Our Strong Transportation Expertise

- Amtrak anticipates restoring Gulf Coast service between Mobile and New Orleans; adding a third Washington-Norfolk and a second Washington-Roanoke round trip; extending the Ethan Allen service to Burlington Vermont; adding new Twin Cities – Milwaukee – Chicago (TCMC) service; continued speed increases on the Chicago – Detroit and Chicago – St. Louis routes; and increasing frequencies on the Chicago – Milwaukee route over the next five years.

- The $12B IIJA Federal – State Partnership for Intercity Passenger Rail grant program will provide significant capital investment funding for developing intercity corridors. We anticipate the funding will unlock many new corridors, and Amtrak is excited to partner with the FRA and states on this opportunity. The IIJA also increased funding available for the CRISI capital grant program and the Restoration & Enhancement (R&E) grant program for transitional operating support for new services, while extending the period for which R&E funding can be used in place of state funding to six years.

- As detailed in our Equipment Asset Line Plans, plans for replacement of equipment used on East Coast and Amtrak Cascades routes with new Intercity Trainsets (ICTs) were finalized in 2021 and phased delivery will begin towards the end of the five year plan period. The trainsets that will traverse the NEC will have dual electric / diesel locomotion, reducing trip times when they transition between the NEC and unelectrified corridors by eliminating engine changes. The reduction in trip time will provide future opportunities for growth.

- We will continue to focus on online/intermodal connectivity, supporting state partner intermodal facility development, facilitating easy transfers with rideshare providers, and developing seamless online connecting experiences.

Further Evolve Our Commercial Delivery

- Continue digital transformation across our business. In the short term this will manifest itself in continued rollout of new ticketing kiosks, leveraging technology to improve reservations call quality, and creating frictionless loyalty program enrollment. In the longer term we will implement technology solutions to create seamless cross partner ridership, and industry leading solutions in service recovery, and further minimize friction in all our transactions.

- Further develop our pricing and revenue management strategies and capabilities that are available to State Partners to create more choice for consumers seeking differentiated experiences.

Elevate Our Excellent Product and Customer Experience

- Continue fleet replacement, with our Midwest and California partners receiving remaining Venture cars over the next few years and new intercity trainsets beginning to be phased in on East Coast routes. The new equipment will significantly elevate comfort with improved Wi-Fi, in-seat USB access, increased natural lighting via larger windows, weather protected vestibules, and overall modernization.

- Relentless focus on growing customer satisfaction that embraces Amtrak's biggest asset, its people, combined with data driven customer feedback. This combination will allow us to further understand core Customer Satisfaction Index (CSI) drivers and create action plans implemented by our people.

- The IIJA National Network grant program provides $16B in funding that, among other things, can be used to accelerate our efforts to improve and modernize many of our stations that serve state corridors and improve access for customers of differing abilities.

Primary Areas of Focus, continued

Nourish Sustainable and Mutually Beneficial State Partnerships

- Through SAIPRC (the State-Amtrak Intercity Passenger Rail Committee comprised of representatives of states, the FRA and Amtrak), the PRIIA 209 cost allocation policy that governs the allocation of costs of State Supported routes between states and Amtrak is being updated and revised. The revised policy will build upon the foundation of consistent and equitable treatment of state partners but add features that help route financial performance benefit from economies of scale and asset utilization, while creating more predictability in state invoices. Additionally, because of the passage of the IIJA and increased recognition of the environmental, economic, and social benefits of rail travel, we anticipate adding new routes and new state partners, and a future of continued change and evolution. As such, it will be critical the new model has the flexibility to adapt quickly and seamlessly.
- Continue to support planning and management efforts underway at the state level for existing services by proactively collaborating with states on cost saving opportunities and annual and multi-year strategy plans, and measuring performance to assure that Amtrak meets the goals set forth by the states.
- Continue to focus on leveraging transportation and safety expertise, capital investments, and technology solutions to capture operating efficiencies and facilitate cost containment.
- The IIJA capital and operating grant programs, USDOT discretionary capital grants and state capital grant programs will be the primary sources of funds for capital investments on existing corridors and developing new corridors in the United States. We will continue to collaborate with our state partners to secure the needed funding to support these outcomes.

Risks and Environmental Factors

Funding

Our success depends in large part on a reliable funding stream from our State Partners and Congress. In many states, operating and capital funding is subject to annual state appropriations. We recognize the challenges states face in providing adequate funding for their passenger rail services, particularly at a time when COVID-19 has decimated states' revenues and increased funding needs for other programs. We will continue to work with state transportation departments and agencies on initiatives to improve ridership, revenues, and cost efficiency of State Supported services, and to ensure that state legislatures and local governments are informed and educated about the benefits of intercity passenger rail. We will likewise continue to inform and educate Congress and the Administration on the importance of adequate, consistent federal funding for Amtrak to continue our operating and capital contributions to State Supported services and increase capital investments to permit greater Amtrak investment in route expansion, fleet, technology and station and facility improvements in partnerships with states.

Host Railroad Performance

OTP and reliability remain challenges due to freight train interference. Host railroads are also resistant to accommodating new, additional, or rerouted Amtrak trains on their lines, even though capital improvements to support new passenger service often bring joint benefits to freight operations. Host railroads typically seek large up-front capital investments to increase capacity, which places a major constraint on Amtrak's ability to optimize and expand its network and services. Potential host railroad downgrading or abandonment of rail lines used by Amtrak also pose a threat to several State Supported routes.

Five-Year Plan

Forecasting FY 2022 has been difficult given the unprecedented nature of the pandemic and that post-COVID-19 travel behaviors have not yet reached equilibrium. Given this uncertainty, we believe the initiatives laid out above, which focus on transportation, commercial delivery, product/customer experience, and building financially sustainable and mutually beneficial partnerships, will allow us to navigate many different environments in the future.

Key Business Drivers

	FY 2021 ACTUAL	FY 2022 GOAL	FY 2027 GOAL
Adjusted Ticket Revenue (Millions)	$209.8	$405.2	$616.2
Ridership (Millions)	5.5	10.7	18.3
Customer Satisfaction Index	85.0%	83.5%	-
Customer On-Time Performance[1]	82.4%	80.0%	-
Revenue Per Available Seat Mile (Cents)	18.3	16.7	20.9
Cost per Available Seat Mile (Cents)	21.4	19.5	22.6
Passenger Miles (Millions)	809.6	1,479.6	2,361.8
Average Load Factor	25%	31%	41%
Cost Recovery	86%	86%	83%

1. Customer OTP measures the actual on-time performance of our customers, instead of endpoint OTP. FY 2021 CSI scores based on three-year average.

Profit & Loss Analysis

State Supported Service Line (FY 2022–FY 2027)

($s in Thousands)	FY 2022	FY 2023	FY2024	FY 2025	FY 2026	FY 2027	Total
Financial Sources:							
Passenger Related Revenue							
Ticket Revenue (Adjusted)	405,229	491,682	561,098	579,472	594,775	616,242	3,248,496
Charter/Special Trains	71	-	-	-	-	-	71
Food and Beverage	13,522	19,563	24,096	25,213	26,154	27,605	136,152
Contractual Contribution (Operating)							
PRIIA 209 Operating Payments	372,744	404,330	417,535	459,035	498,933	533,424	2,686,000
PRIIA 212 Operating Payments	-	-	-	-	-	-	-
Commuter Operations	295	-	-	-	-	-	295
Reimbursable Contracts	5,826	777	808	808	808	826	9,853
Access Revenue	-	-	-	-	-	-	-
Commercial Revenue (incl. Pipe/Wire, Real Estate, Parking)	578	-	-	-	-	-	578
All Other Revenue (incl. Insurance Revenue, Cobranded Commissions, etc.)	6,286	13,869	14,416	14,416	14,416	14,736	78,138
Operating Sources Subtotal	**804,551**	**930,220**	**1,017,951**	**1,078,943**	**1,135,085**	**1,192,832**	**6,159,583**
Contractual Contribution (Capital)							
PRIIA 209 Capital Payments	3,511	20,391	60,921	59,407	58,458	59,045	261,732
PRIIA 212 Capital Payments	-	-	-	-	-	-	-
Other State/Local Mutual Benefit	8,010	-	-	-	-	-	8,010
Amtrak Internal Cash	49,144	4,840	2,706	645	814	771	58,920
Financing Proceeds Applied	-	-	-	-	-	-	-
Other Capital and Special Grants (incl., state/local sources)	-	-	-	-	-	-	-
Capital Sources Subtotal	**60,665**	**25,231**	**63,627**	**60,052**	**59,272**	**59,816**	**328,662**
Federal Grants to Amtrak							
Prior Year Carryover Grant Funds	241,280	89,851	193,559	-	-	-	524,691
Current Year FAST Sec 11101 Grants							
Operating	127,414	110,000	107,000	105,000	103,000	100,000	652,414
Capital	431,555	599,775	703,838	776,748	928,540	834,417	4,274,873
IIJA Supplemental	-	-	-	-	-	-	-
IIJA Discretionary	-	1,168	-	-	23,240	15,656	40,064
Other Federal Grants (incl., FRA/OST, FTA, DHS)	4,230	6,284	10,164	15,647	2,689	2,652	41,667
Federal Grants to Amtrak Subtotal	**804,479**	**807,079**	**1,014,562**	**897,395**	**1,057,468**	**952,726**	**5,533,709**
Total Financial Sources	**1,669,695**	**1,762,530**	**2,096,140**	**2,036,391**	**2,251,825**	**2,205,373**	**12,021,954**
Financial Uses (Operating):							
Service Line Management	5,888	5,643	6,103	6,423	6,716	7,013	37,787
Transportation	372,270	458,704	496,067	522,081	545,956	570,097	2,965,174
Equipment	231,007	220,729	238,709	251,227	262,715	274,332	1,478,719
Infrastructure	15,771	21,629	23,391	24,617	25,743	26,881	138,033
Stations	101,772	103,065	111,460	117,305	122,669	128,093	684,364
National Assets and Corporate Services	205,751	230,451	249,222	262,291	274,286	286,414	1,508,416
Total Operating Uses	**932,460**	**1,040,220**	**1,124,951**	**1,183,943**	**1,238,085**	**1,292,832**	**6,812,492**
Operating Surplus/Deficit *(Operating Sources - Operating Uses)*	**(127,909)**	**(110,000)**	**(107,000)**	**(105,000)**	**(103,000)**	**(100,000)**	**(652,909)**
Available for Capital Uses *(Capital Sources + Federal Grants to Amtrak + Operating Surplus/Deficit - Debt Service Payments)*	**737,235**	**722,310**	**971,188**	**852,447**	**1,013,740**	**912,541**	**5,209,462**
Financial Uses (Capital):							
Service Line Management	1,414	-	-	-	-	-	1,414
Transportation	112,788	5,001	2,566	2,527	2,069	1,942	126,892
Equipment	204,651	245,509	271,705	535,273	524,036	416,531	2,197,705
Infrastructure	228,485	343,952	562,333	681,386	795,120	772,982	3,384,258
Stations	147,349	156,887	173,355	208,390	211,121	176,612	1,073,713
National Assets and Corporate Services	43,044	28,256	16,004	8,232	5,820	4,860	106,217
Capital Expenditures	**737,730**	**779,604**	**1,025,963**	**1,435,808**	**1,538,167**	**1,372,928**	**6,890,200**
Debt Repayments	3,817	2,075	1,916	1,911	1,901	1,886	13,507
Total Capital Uses	**741,547**	**781,679**	**1,027,879**	**1,437,719**	**1,540,068**	**1,374,814**	**6,903,706**
Remaining Carryover Balance	**$ (4,312)**	**$ (59,370)**	**$ (56,690)**	**$ (585,272)**	**$ (526,327)**	**$ (462,273)**	**$ (1,694,245)**

For 50 years Amtrak has been the national provider of intercity passenger rail services in the U.S., and much of Amtrak's identity is tied to its long distance trains. Their rich heritage has played a major role in providing transportation service across the nation and in developing some of today's high-frequency corridors.

Long Distance Service Line

The Long Distance Service Line (LDSL) provides a safe and unique intercity transportation experience, one that connects the nation's major metropolitan regions with over 300 diverse and varied communities across the country. An alternative to automobiles, buses and airplanes, Long Distance routes offer convenient and comfortable transport that contributes to the economic vitality of the communities and regions they serve.

While customer demographics, traveler preferences and the competitive landscape have all evolved during this period, Amtrak's Long Distance network continues to provide essential service to many rural communities and offers a unique and treasured travel excursion experience supporting many leisure destinations. Amtrak continues to work to address long-standing reliability issues particularly with host railroad partners and is addressing customer service challenges resulting from operating an aging fleet. In addition to interior refreshes and the upcoming entry of new locomotives into service, Amtrak is beginning to plan formally for the replacement of the fleet of passenger cars serving the Long Distance network.

The LDSL includes a portfolio of 15 long distance routes—each running at least 750 miles, end-to-end, and operating through 39 states. With connecting trains and Thruway buses, Long Distance services reach 47 of the 48 contiguous states. In FY 2021, these routes carried more than 2.2 million riders and generated $331 million in ticket revenue, while operating most routes in the network at limited day-of-week frequency for much of the fiscal year due to the pandemic. Long Distance service accounted for 17% of Amtrak network wide totals for ridership and over 37% of total ticket revenue.

Because of its national reach, Congress plays a pivotal role in support of the Long-Distance network. In FY 2020, the Amtrak National Network received $1.826 billion in federal support. Of this amount, $645 million was required to support the operation of Long-Distance routes.

Market Overview

The LDSL customer profile is primarily driven by "purpose trips"—visits to family and friends or personal business—and leisure travel. Fewer than 10% of trips are taken for business.

Overall, the LDSL skews more female than male and nearly a third of customers are over the age of 65. But even within the LDSL, there are striking differences between the two primary classes of service. While Coach class represents 82% of trips, private Sleeper rooms account for 38% of ticket revenue. In addition, the average trip in Coach is, on average, less than half of the distance traveled by a customer in a room: 457 vs. 990 miles.

FY 2021 Performance and Results

At the start of the fiscal year, the country was eight months into the COVID-19 pandemic, which had significantly curtailed ridership and revenue performance. In response to the decrease in demand, service on most LDSL routes was curtailed to less-than-daily service for the majority of the first three quarters of the year.

Following a winter peak in COVID-19 cases and commencement of the vaccine rollout, demand began to increase and LDSL routes and their peak legs were regularly operating at high occupancy rates during the spring season, with some services sold out on this reduced schedule. The second half of the fiscal year saw the restoration of daily service on all curtailed routes, strong demand in the summer travel months and ridership and revenue performance that was down only modestly compared to the same travel period in FY 2019—with more favorable results than those experienced in Amtrak's other two service lines.

For FY 2021, the LDSL ended the year with a 17% reduction in riders versus FY 2020. Ticket revenue increased 7% because of a mix of riders that was more heavily weighted toward customers traveling in higher-priced private rooms compared to FY 2020.

Long Distance Service Classes

Coach Class

Available on all trains, offering 2x2 reclining seats, big picture windows and access to power outlets.

Private Rooms

Sleeping cars are available on all LDSL routes except the Palmetto. Customers in private rooms enjoy several premium class amenities including complimentary onboard meals, turndown service, access to private restrooms and showers, and entry into Amtrak Metropolitan Lounges located at major stations.

Business Class

Available on three LDSL routes (Coast Starlight, Lake Shore Limited and Palmetto), Business class provides additional amenities such as a dedicated car, extra legroom, lounge access at select stations, flexibility regarding cancellations and a 25% point bonus for Amtrak Guest Rewards members.

Long Distance Service Line Ridership Comparison for FY 2021 as a Percent of FY 2019

Oct*	Nov*	Dec*	Jan*	Feb*	Mar	Apr	May	Jun	Jul	Aug	Sept
40.7%	31.0%	26.7%	33.3%	33.8%	35.7%	41.0%	48.1%	73.6%	74.3%	67.5%	75.2%

*For the months of October – February in FY21, Amtrak uses FY20 as a comparison base to represent more typical data points.

Amtrak's National Network

Amtrak operates 15 Long Distance trains whose routes range in length from 780 miles to 2,728 miles. These trains provide the only rail service at nearly half of the stations in the Amtrak system and are the only Amtrak trains in 23 of the 46 states in the network.

Major Initiatives

Reduction and Restoration of Daily Service

At the start of FY21, most long distance route schedules were revised to a frequency of three times per week (tri-weekly) driven by the pandemic-related decrease in travel demand. Only the *Auto Train* maintained a daily frequency, though schedules for the *Silver Meteor* and *Silver Star* were combined to offer daily service between the Northeast and Florida.

Immediately coinciding with congressionally-approved relief funds and in conjunction with a planned workforce recall, restoration of daily service for these routes was announced in March 2021. Service restoration was implemented in three waves in late May and early June—enabling customers seeking summer travel to book a trip on a pre-pandemic schedule, which offered the most LDSL departures since June 2020.

Reimagining Traditional Dining

At the onset of the pandemic, a service change was made to suspend traditional dining on LDSL routes on which it was offered (except for the *Auto Train*). In lieu of traditional dining service, flexible dining was introduced for sleeping car passengers on six western routes. For the company and its front line staff, flexible dining required fewer food service employees to be on each train during the height of the pandemic. For customers, the dining service offered a more portable and more room service-friendly product. Café service was maintained on each route, providing additional onboard food and beverage options.

As part of its COVID-19 recovery effort and workforce recall, Amtrak restored and reimagined traditional dining service in June 2021—complete with a redesigned menu and new pleasantries aimed to improve customer satisfaction and drive ridership on these LDSL routes.

Traditional dining for sleeping car passengers was restored on the *California Zephyr*, *Coast Starlight, Empire Builder, Southwest Chief, Sunset Limited* and *Texas Eagle* (between San Antonio and Los Angeles). The new menu featured selections for breakfast, lunch and dinner selections, with the latter incorporated into a three course meal as well as the addition of a complimentary alcoholic beverage.

Major Initiatives, continued

Auto Train

Prior to the start of the pandemic, Amtrak announced several changes and enhancements to its flagship long distance route, the *Auto Train*—aimed to both bolster the customer experience and keep fares attractive. This included upgrading the in-room experience, no longer including the cost of a complimentary dinner in Coach fares, introducing an extended vehicle fare for SUVs, trucks and minivans, refreshing all onboard menus and improving the booking experience in self-service channels. While these changes were not made in anticipation of the pandemic, they allowed the route to thrive during it—accelerating recovery at a faster pace compared to other routes.

In FY21, additional sleeping cars were added to the Auto Train consist to match demand for this higher class of service. This move proved important given that Coach selling capacity was reduced during the initial months of the fiscal year to facilitate COVID-19-related physical distancing. The new consist also set the foundation for new pricing strategies—including the formation of a series of Auto Train-specific flash sales, offering ultra-low fares in both coach and rooms during lower demand travel periods. This strategy not only led to increased load factors in off-peak directions but also successfully generated bookings for return trips on peak dates. At the same time, the company began to expand its advertising reach—exploring new media markets in Florida as an investment to reach new customers.

These consist planning, product, pricing and marketing strategies, along with a favorable travel market to/from Florida, enabled Auto Train to become Amtrak's strongest performing route. By the end of fiscal year, the route had achieved record revenue levels—bucking the downward trend of its peer set.

Enhancements to Fleet

Near the start of FY 2021, Amtrak introduced a new car type to the long-distance fleet. As part of the procurement of 130 single-level long-distance cars from CAF USA for use primarily on eastern trains, the new Viewliner II sleeping car debuted on the *Silver Meteor*—with adoptions in subsequent months on the *Silver Star* and *Lake Shore Limited*. Like the Viewliner I, these cars offer three types of accommodations: Roomettes, Bedrooms and Accessible Bedrooms. The in-room experience upgrades are substantial—featuring increased in-room luggage storage, improved lighting, extra electrical outlets and larger, studier tray tables. For Roomette customers, the location of the restroom aligns to the Superliner experience: shifting from an in-room toilet to two private restrooms located in the car. Additionally, customers in Accessible Bedrooms now use a first-of-its-kind automatic sliding door to access their space. The Viewliner II launch represented the first new addition to the Amtrak sleeper fleet in over 25 years.

Major Initiatives, continued

The in-room experience was further enhanced by the installation of new soft goods at the end of the fiscal year. Initially piloted on the *Auto Train*, the program was expanded to all overnight trains and offers new blankets, pillows, linens and towels. These new soft goods were added in all four private room classes of service: Roomettes, Bedrooms, Family Bedrooms and Accessible Bedrooms. Initial customer feedback has been favorable.

Amtrak also formally commenced the next major milestone in its multi-year fleet refurbishment initiative: Following interior refreshes of *Acela*, Amfleet and Horizon equipment in recent years, the company embarked on the next major phase of the program by beginning interior refurbishment of the Superliner fleet. This endeavor is significant for the LDSL, as Superliner equipment operates on nine of the 15 long distance routes. Additionally, this latest phase formally expanded the scope of the refresh beyond Coach and Business Class cars by including sleeping cars, diners, and Superliner bi-level sightseeing lounges in its cope. The work will also include a refresh of all Viewliner I sleeping cars—better aligning the in-room experience between a Viewliner I and the new Viewliner II sleeping cars.

During FY 2021, Amtrak received the first delivery of a new generation of long-distance diesel electric engines—aimed to increase reliability and lower emissions.

The ALC-42 from Siemens Mobility is equipped with the latest safety systems, including positive train control and crash energy management. The new engines offer alternating current propulsion for a maximum speed of 125 mph. The 16-cylinder engine has emissions technology to reduce nitrogen oxide by more than 89 percent and particulate matter by 95 percent, while providing a savings in diesel fuel consumption and reaching Amtrak sustainability goals.

The initial order of 75 new locomotives was first announced by Amtrak in December 2018, with deliveries expected through 2024.

New Product Launches

Late in the spring of 2021, Amtrak introduced two new products to the marketplace—with long distance routes the major beneficiary. The timing also coincided with the start of the peak summer travel season and the restoration of daily long-distance service.

BidUp

First, Amtrak launched the BidUp program—an auction for customers who hold qualifying reservations to upgrade from a lower class of service to a higher class of service. Initially limited to seat-only upgrades (e.g., from Coach to Business Class), the program was expanded to include private rooms—both Roomettes and Bedrooms. BidUp introduced new ancillary revenue opportunities for the long-distance portfolio, opened an avenue to promote premium class seats and rooms that otherwise would be left unsold and developed a new engagement opportunity for customers prior to their travel date.

USA Rail Pass

In June, Amtrak relaunched the USA Rail Pass—a multi-segment pass product that allows customers to hop on/off trains and tour the country for one fixed fare. The enhanced product enabled pass purchase and travel booking via self-service on Amtrak.com and the Amtrak app. Previously, the pass required interaction with two different groups of agents and the issuance of a paper ticket. The new rail pass offers customers a simple, compelling, and economically-friendly way to tour the country while touting the breadth and depth of the Amtrak network. The product launch commenced with a flash sale, resulting in over 12,000 customers purchasing a rail pass.

Strategy

Utilizing Amtrak's four strategic focus areas, the LDSL has outlined several strategic initiatives aimed at generating demand while still in a pandemic, controlling the considerable costs of long-distance operation that are attributable to higher staffing levels and equipment requirements, and positioning Amtrak as a compelling choice for travel.

Primary Initiatives

Sustain the Company

Full service restoration on long distance routes in the spring of FY 2021 was accomplished as the pandemic was brought under greater control and vaccinations of employees and the public had begun. In addition to protecting the safety of Amtrak employees by reducing the size and of the operation and service requirements (thus allowing employees to limit their potential COVID-19 exposure), the service reductions played an essential role in sustaining the company by reducing operating losses during a period of uncertain federal funding for Amtrak.

Gain New Customers

Ridership trends during the pandemic have shown that Amtrak possesses a unique opportunity to spotlight its private room product. More customers are opting to travel in private rooms given the benefits provided by this highest class of service: physical distance-friendly space, superior comfort and an elevated travel experience with club access, complimentary meals, priority boarding and more. Efforts to promote these benefits to both new and existing customers include strategic flash sales offering the opportunity to have a private room companion travel free, an experiential landing page on Amtrak.com, new emphasis on private rooms in paid, earned, and owned media and more prominent display of room choices when passengers book travel on Amtrak.com and the Amtrak app.

The next major enhancement on Amtrak.com and the Amtrak app, slated for release in 2022, expands on the existing search result experience by presenting a seven-day calendar of available fares: those of the requested date as well as the lowest fare up to three days prior and three days forward. In addition to offering customers more—and potentially lower—fare options with a single search, this solution will provide a better path for long distance customers to find available travel dates on trains operating less than daily.

To ensure Amtrak continues to offer attractive onboard amenities, the LDSL and other teams are developing plans to install Wi-Fi equipment on its Superliner fleet. Currently available only on *Auto Train*, Wi-Fi deployment on Superliners would achieve two goals: offering connectivity for western LDSL routes that riders in the east already enjoy and eliminating the final gap that would enable free Wi-Fi to become a network-wide value proposition.

Primary Initiatives, continued

Build for the Future: Fleet Planning and Acquisition

As a result of funding made available to Amtrak in the IIJA, the LDSL is accelerating planning and evaluation of replacing the aging and obsolete long distance railcar fleet of coaches, sleepers, diners, and lounge/café cars. In partnership with other Amtrak departments, the LDSL is developing a long-term vision of product and customer experience attributes to drive the operating and financial impacts of replacing equipment to build a business case.

The acquisition of new equipment will provide the opportunity to accomplish several goals, including:

- **Modernizing equipment and amenities** to match updated service models and improve customer satisfaction.
- **Redesigning train consists** to match passenger demand, create operating efficiencies, and reduce capital needs.
- **Reducing car and locomotive maintenance** and turnaround costs.
- Reducing engine and car related mechanical delays to **improve OTP.**
- **Reducing fuel consumption and emissions** of greenhouse gases and other pollutants.

The Equipment Asset Line Plan provides additional information about Amtrak's efforts. Its highlights include:

Diesel Locomotives. A contract was awarded in December 2018 for 75 new, more reliable, and greener locomotives. Delivery of new ALC-42 locomotives began in FY 2021 and first in-service use is expected beginning in 2Q FY 2022. Deliveries will be completed by FY 2024, and a proposal for exercising options to acquire an additional 50 ALC-42 locomotives is in approval stages in early FY 2022. This option exercise is expected to fully address the locomotive needs of the LDSL for the existing route network and allow for a degree of future planning flexibility.

Superliners. The Superliner fleet is the primary focus of equipment replacement for the LDSL. Close to 60 percent of the approximately 450 Superliner railcars were built more than 40 years ago and are rapidly approaching the end of their useful life. The remaining 40 percent of the Superliner railcars are about 25 years old.

Viewliner I. Fifty Viewliner I sleeping cars are in service on single-level LDSL routes in the eastern U.S. These railcars are also about 25 years old and will be included as part of the Superliner replacement planning process.

Amfleet II. Amtrak's recent decision to acquire new Inter-city Trainsets (ICT) as a replacement for the Amfleet I fleet may provide the basis for an Amfleet II replacement solution. Amfleet II railcars are nearly as old as the oldest of the Superliner fleet (~40 years) and are the primary Options included in the ICT procurement may be exercised for this purpose if determined to be optimal. Otherwise, a separate procurement would be needed, or included with plans for Superliner replacement.

Address Reliability and On-Time Performance

On-time performance has a significant impact on customer satisfaction. OTP weighs heavily in a customer's decision to travel on Amtrak and is a factor for future travelers when deciding to make travel plans by train. Long Distance has the lowest OTP of Amtrak's service lines and—not coincidentally—the highest level of freight train interference delays, driven by some host railroads' failure to give Amtrak trains preference over freight trains, as required by law.

As an example: the host responsible delays on the six major host railroads accounted for nearly 70% of the total delays to Amtrak trains on their railroads in CY 2021. Of their share, 47% of host-responsible delays were caused by freight train interference. The cause alone resulted in approximately 511 minutes (over 8.5 hours) of delay per 10,000 train-miles for Amtrak customers.

The release of revised Metrics and Standards for measuring the performance of Amtrak services by the FRA in FY 2021 and the requirement of all host railroads and Amtrak to either certify or dispute the viability of Amtrak operating schedules is providing a much-anticipated framework for enforcing Amtrak's right of preference over freight transportation and offering a positive step in right direction on the path of addressing chronic OTP issues impacting LDSL performance and customer service. Amtrak has collaborated in detailed evaluation and fine-tuning of operating schedules with host railroads to enable certification of schedules on most LDSL routes.

Amtrak will continue to use a data-driven approach to address LDSL host railroad and Amtrak-related delays, and work with the host railroads to understand the causes of host railroad and Amtrak responsible delays, opportunities to mitigate them, and the actions required to improve OTP.

Key data points that are examined include route, segment, initial terminal departure date, customer OTP along route, delays by host, delay location and cause for delay.

Key Business Drivers

	FY 2021 ACTUAL	FY 2022 GOAL	FY 2027 GOAL
Adjusted Ticket Revenue (Millions)	$332.2	$455.6	$516.3
Ridership (Millions)	2.2	3.6	4.7
Customer Satisfaction Index	72.80%	72.8%	-
Customer On-Time Performance[1]	51.70%	52.0%	-
Revenue Per Available Seat Mile (Cents)	13	11.5	12.6
Cost per Available Seat Mile (Cents)	30.1	25.5	32.7
Passenger Miles (Millions)	1294.9	1930.3	2506.1
Average Load Factor	47%	46%	57%
Cost Recovery	43%	45%	38%

1. Customer OTP measures the actual on-time performance of our customers, instead of endpoint OTP. FY 2021 CSI scores based on three-year average.

Profit & Loss Analysis

Long Distance Service Line (FY 2022–FY 2027)

($s in Thousands)	FY 2022	FY 2023	FY2024	FY 2025	FY 2026	FY 2027	Total
Financial Sources:							
Passenger Related Revenue							
Ticket Revenue (Adjusted)	468,441	476,922	487,274	496,766	506,432	516,314	2,952,149
Charter/Special Trains	-	-	-	-	-	-	-
Food and Beverage	18,241	21,347	24,289	25,010	25,752	26,518	141,156
Contractual Contribution (Operating)							
PRIIA 209 Operating Payments	-	-	-	-	-	-	-
PRIIA 212 Operating Payments	-	-	-	-	-	-	-
Commuter Operations	284	-	-	-	-	-	284
Reimbursable Contracts	5,620	630	630	630	630	630	8,772
Access Revenue	-	-	-	-	-	-	-
Commercial Revenue (incl. Pipe/Wire, Real Estate, Parking)	560	-	-	-	-	-	560
All Other Revenue (incl. Insurance Revenue, Cobranded Commissions, etc.)	4,949	10,535	10,535	10,535	10,535	10,535	57,623
Operating Sources Subtotal	**498,097**	**509,434**	**522,728**	**532,941**	**543,349**	**553,996**	**3,160,545**
Contractual Contribution (Capital)							
PRIIA 209 Capital Payments	-	-	-	-	-	-	-
PRIIA 212 Capital Payments	-	-	-	-	-	-	-
Other State/Local Mutual Benefit	5,730	-	-	-	-	-	5,730
Amtrak Internal Cash	46,164	3,735	1,516	666	1,090	2,434	55,606
Financing Proceeds Applied	-	-	-	-	-	-	-
Other Capital and Special Grants (incl., state/local sources)	-	-	-	-	-	-	-
Capital Sources Subtotal	**51,894**	**3,735**	**1,516**	**666**	**1,090**	**2,434**	**61,336**
Federal Grants to Amtrak							
Prior Year Carryover Grant Funds	477,468	38,335	111,827	-	-	-	627,629
Current Year FAST Sec 11101 Grants							
Operating	572,256	709,706	759,537	803,438	846,717	889,084	4,580,738
Capital	351,891	562,164	689,247	778,102	869,764	765,048	4,016,217
IIJA Supplemental	-	-	-	-	-	-	-
IIJA Discretionary	-	-	-	-	-	-	-
Other Federal Grants (incl., FRA/OST, FTA, DHS)	5,178	7,902	10,686	10,804	8,190	15,220	57,980
Federal Grants to Amtrak Subtotal	**1,406,793**	**1,318,107**	**1,571,297**	**1,592,344**	**1,724,671**	**1,669,351**	**9,282,563**
Total Financial Sources	**1,956,784**	**1,831,276**	**2,095,541**	**2,125,952**	**2,269,110**	**2,225,781**	**12,504,444**
Financial Uses (Operating):							
Service Line Management	3,554	3,024	3,180	3,314	3,447	3,579	20,098
Transportation	533,106	595,775	626,624	653,069	679,304	705,212	3,793,090
Equipment	211,995	244,363	257,016	267,862	278,623	289,249	1,549,109
Infrastructure	20,252	19,017	20,001	20,846	21,683	22,510	124,309
Stations	76,617	81,696	85,926	89,552	93,150	96,702	523,643
National Assets and Corporate Services	225,324	275,265	289,518	301,736	313,858	325,828	1,731,528
Total Operating Uses	**1,070,848**	**1,219,139**	**1,282,265**	**1,336,379**	**1,390,066**	**1,443,080**	**7,741,777**
Operating Surplus/Deficit *(Operating Sources - Operating Uses)*	**(572,751)**	**(709,706)**	**(759,537)**	**(803,438)**	**(846,717)**	**(889,084)**	**(4,581,232)**
Available for Capital Uses *(Capital Sources + Federal Grants to Amtrak + Operating Surplus/Deficit - Debt Service Payments)*	**885,936**	**612,136**	**813,276**	**789,572**	**879,044**	**782,702**	**4,762,667**
Financial Uses (Capital):							
Service Line Management	1,233	-	-	-	-	-	1,233
Transportation	13,731	8,323	4,811	2,165	1,184	933	31,147
Equipment	308,295	283,266	214,019	345,327	236,269	244,552	1,631,728
Infrastructure	153,807	132,527	164,072	164,685	207,201	228,604	1,050,896
Stations	56,239	212,252	253,847	297,131	314,305	208,907	1,342,681
National Assets and Corporate Services	41,943	30,700	15,719	9,147	7,102	7,537	112,147
Capital Expenditures	**575,248**	**667,069**	**652,467**	**818,454**	**766,061**	**690,532**	**4,169,831**
Debt Repayments	3,817	2,075	1,916	1,911	1,901	1,886	13,507
Total Capital Uses	**579,065**	**669,144**	**654,383**	**820,365**	**767,962**	**692,418**	**4,183,338**
Remaining Carryover Balance	**$ 306,871**	**$ (57,008)**	**$ 158,893**	**$ (30,793)**	**$ 111,082**	**$ 90,283**	**$ 579,329**

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Amtrak pursues opportunities for the company to provide services at market-based prices to commuter rail authorities and commercial entities and seeks to develop business partnerships that can be leveraged to grow Amtrak's own ridership and revenues.

Ancillary Service Line

The overall objective of the Ancillary Service Line is to support Amtrak's strategy by identifying, selecting, developing, competing for, and implementing market-based services, projects, programs and initiatives that satisfy three key tenets: (1) Provide positive financial contribution to Amtrak; (2) Provide clear strategic value for Amtrak; and (3) Do not distract from or impede Amtrak's core activities.

Amtrak's departments work together to achieve these outcomes. When opportunities are pursued and new business is won, Amtrak's functional departments work together to deliver the service, while appropriate departments manage the profits and losses and seek additional business opportunities with the customer or in the marketplace. Amtrak currently pursues opportunities in four major areas that will be discussed in this Plan: Contract commuter operations; Thruway connecting services; Charter trains and private cars; and Multimodal connections and other opportunities.

Key Highlights

Amtrak's contract commuter business has opportunities to grow existing and new commuter services for which contracting opportunities will become available during the period of this Five-Year Plan.

Amtrak offers a network of connecting motorcoach routes branded as "Thruway" services. Thruway routes are operated by contractors or interline partners such as Greyhound Lines. Before the COVID-19 pandemic, Thruway buses carried approximately 1.5 million Amtrak-ticketed passengers per year, generating approximately $42 million in incremental operating revenue for connecting trains. However, COVID-19 impacts have reduced ridership by approximately 75 percent from pre-COVID-19 levels. Several Thruway bus routes were completely suspended or are operating at reduced frequency. Expansion of Thruway bus service can provide a means to grow Amtrak ridership and revenue in the near term while concurrently working toward expanding intercity passenger rail service. This Five-Year Plan assumes a gradual recovery in net Thruway revenue and cost as suspended transportation services are restored and travel demand returns to more normal levels.

The charter train and private car portfolios were significantly restructured during FY 2018 and are now on a sustainable footing. Both services generated revenues in excess of both fixed and variable costs in FY 2021, in spite of the strongly unfavorable conditions generated by COVID-19 in the second half of the fiscal year. This allowed them to play the role envisioned by statute, that of making a positive financial contribution to Amtrak's bottom line.

Amtrak Product Offerings

Commuter Train Contract Services

Amtrak provides services such as train and engine crews to commuter rail authorities on a market-based contract basis. (Commuter rail authorities' access to Amtrak infrastructure is managed separately by the Infrastructure Access group.)

Based on annual billing revenue, there are approximately $950 million worth of commuter contracts in the U.S. Each contract comes up for bid at various times, often only every five to ten years. Of these total potential contracted services, Amtrak's commuter revenues in FY 2022 will be approximately $137 million. When evaluating opportunities for potential Amtrak response when services are put up for bid, Amtrak refers to its key tenets and does not pursue opportunities that do not fit these criteria.

Current Amtrak Commuter Customers

Agency	Southern California Regional Rail Authority (Los Angeles, CA)	Maryland Transit Administration (Baltimore, MD)	Connecticut Department of Transportation (New Haven, CT)	Sound Transit (Seattle, WA)	Central Florida Commuter Rail Commission (Orlando, FL)
Amtrak Services	Train Operations	Train Operations, Maintenance of Equipment	Train Operations, Maintenance of Equipment	Maintenance of Equipment	Maintenance of Equipment
System Route Miles	538	77	50	82	32
Number of Pre-COVID-19 Trains	171 Weekday	57 Weekday; 18 Saturday; 12 Sunday	36 Weekday; 22 Saturday/Sunday	38 Weekday	40 Weekday
Pre-COVID-19 Annual Riders	14.3M	6.2M	720,000	4.6M	831,000
Stations	62	13	9 (Not including Metro-North Railroad Segment)	12	16
Equipment Units Maintained by Amtrak	None	46 locomotives, 179 coaches	21 locomotives, 49 coaches	14 locomotives, 67 coaches	11 locomotives, 20 coaches

Thruway Connecting Services

Amtrak uses the marketing name "Thruway" to refer to through tickets between Amtrak's rail network and connecting services, most of which are buses. Thruway services also encompass vans, shuttles, ferries, and some commuter rail operations. The Thruway system highlights are at right.

The primary purpose of Thruway connections is to help customers access Amtrak's rail network. Market research estimates that 80 percent of Thruway bus connecting passengers would not travel on Amtrak trains if it were not for the existence of the Thruway bus connection, making the train accessible to them.

Amtrak combines two types of Thruway service with its rail network. "Dedicated" bus routes are contracted by Amtrak to private bus service providers to carry only Amtrak passengers. "Interline" tickets are sold for travel on independently operated services of partner carriers which may carry non-Amtrak passengers. Interline transportation carriers receive ticket revenue from the Thruway segment of the trip, and Amtrak usually retains a commission on sales. In a few select cases, Amtrak will provide a minimum revenue guarantee of ticket sales to an interline partner in order to arrange for a coordinated route connection. Dedicated buses are generally used where no interline option is available, the on-time performance of Amtrak train service is too unreliable for connecting service, or the volume of Thruway passengers is too large for an interline route to absorb. Amtrak contracts with dedicated bus operators through a competitive procurement process.

Thruway services play a key role in the existing and future Amtrak network as feeders, connectors, auxiliary frequencies, and in some cases providing Amtrak transportation service in advance of instituting passenger rail service.

Thruway System FY21 Highlights

Ridership has substantially recovered on several Thruway routes, with a few routes carrying greater passenger traffic than pre-COVID-19.

+100

Routes operated by over 60 carriers

$48M

Gross trip revenue
(train + bus connections)

+400

Bus stops,
in addition to the rail network

$34M

Connected train segment revenue;
Bus segment revenue is $15M

800K

Thruway rides

The intercity bus network has contracted significantly through most of Amtrak's history, but the COVID-19 pandemic has resulted in accelerated reductions in bus service by private carriers. Partnering with Amtrak may help keep some intercity bus routes financially viable and preserve mobility for communities.

Thruway connections do not need to be buses. Interline ticketing with commuter rail and mass transit is an opportunity for Thruway expansion. Upgrades to Amtrak's reservation system and related IT applications combined with potential new interline agreements with commuter rail and transit operators can open new markets for Amtrak travel, especially in the Northeast Corridor, which has the largest volume of commuter rail connections in the Amtrak network.

Charter Trains and Private Cars

Amtrak offers the services of operating charter trains and moving privately-owned passenger rail cars. Charter trains may use Amtrak cars and locomotives, or customer supplied cars and locomotives, or any combination, moving as a non-regularly scheduled Amtrak train. Private cars are privately owned railcars moved on regularly scheduled Amtrak trains.

There was a slight uptick in private car leisure travel during FY 2021, as Amtrak begins the COVID-19 recovery and Amtrak still expects the business to normalize by FY 2023. Charter train revenues and contribution for FY 2021 were significantly impacted by the COVID-19 pandemic with restrictions placed on some professional sports teams and prohibitions on large group gatherings. In FY 2021, Private Cars contributed $2 million in revenue, while Charters added an additional $1.5 million. Amtrak anticipates in the FY 2022 Annual Operating Plan Private Car revenue of $2.0 million and Charter Train revenue of $3.0 million.

Other Opportunities

Amtrak pursues other commercial services opportunities that align with its key tenets. For example, Amtrak is exploring the possibility of expanding multimodal journeys with potential technology and transportation partners to allow customers to search for and purchase address-to-address transportation (for example, combining Amtrak travel with local mass transit or ride-hailing). Amtrak is also collaborating with the proposed privately-funded high speed rail operation between Dallas and Houston, TX. Amtrak has executed a through ticketing agreement that, following construction of the high-speed rail line, would allow its passengers to connect to the nationwide Amtrak rail network in Dallas and Houston.

Market Overview

Amtrak operates in a range of markets with customers and competitors that include public agencies and private businesses. Amtrak adapts its approach and pricing to the market to achieve the best deals that can be made with partners and vendors in each circumstance.

Opportunities and Strengths

1. The conventional rail operating model of a single integrated system run by agency employees has not been expanding. With the sole exceptions of Utah Transit and the commuter rail system in Denver, every new commuter system which has begun service since the early 1990s has contracted out the traditional railroad work disciplines.

2. When new commuter operations were established, Amtrak was chosen in many cases as the initial provider to set up the service and ensure that it was operated safely and in a manner that met all Federal Railroad Administration (FRA)s regulatory requirements.

3. Amtrak's strategy embraces both geographic locations where its economies of scale can be most effectively applied, and business opportunities where a commuter rail provider is looking for a competent and experienced operator. Commuter operations bids can also solidify Amtrak's presence in strategically important areas such as California.

4. Commuter contracts may provide Amtrak with an opportunity to develop other business with its customers, who could potentially come to Amtrak in search of operational, mechanical, engineering, or dispatching expertise.

5. Most commuter rail systems must comply with FRA requirements, which creates an opportunity for Amtrak to offer its knowledge of compliance and expertise in this area to agencies.

6. Although COVID-19 has impacted commuter rail ridership to an even greater extent than Amtrak ridership, commuter agencies have not reduced service to levels commensurate with ridership, because of the essential nature of the service. While every agency implemented service reductions, the impact to their operations and Amtrak commuter revenue has not been as significant as the ridership drop. Amtrak does not expect that ridership, or service on all commuter railroads, will return to pre-COVID-19 levels immediately, but it is likely that agencies will continue to seek competitive bids in an effort to become more efficient and effective.

Opportunities and Strengths, continued

Amtrak has fifty years of experience operating intercity passenger trains nationwide, along with decades of experience providing contract commuter operations (currently Metrolink, Shore Line East, and MARC's Penn Line) and contract maintenance (currently Sounder, SunRail, MARC, and Shore Line East). Amtrak operates over and is trusted by nearly 30 host railroads nationwide, and has a strong reputation for standing by its payment and indemnification commitments. Amtrak maintains a unique set of key resources necessary for the efficient and effective operation of rail services, including planning, training, mechanical, safety, security, environmental, strategy, operational and infrastructure engineering resources.

Amtrak train and engine crews operating Amtrak's own trains, or operating trains where Amtrak provides crews on a contract basis, are trained in its world-class training facility, which includes providing the opportunity to refine their skills with up-to- date simulator technology before going out under qualified supervision to complete their training on the job.

Amtrak enjoys a reputation as a competent and reliable train operator, with a deeper bench of available staff than most of its contract commuter competitors, plus unique training capabilities.

However, pricing to win business while providing a reasonable financial return for the company can be a challenge in this competitive field.

Amtrak has nationwide in-house expertise in nearly all dimensions of operating a North American passenger railroad. Amtrak has resources such as train and engine crews, maintenance facilities, and supervision already in place in many major cities.

Strategy

Amtrak is seeking market-based and competitively bid business opportunities. Pricing is based on providing a positive financial contribution at a minimum and obtaining more if a particular market will support it.

Amtrak subject matter experts undertake evaluations such as "make" versus "buy". For example, the routing optimizer in a Multimodal Travel project discussed below would likely be more quickly and cost-effectively acquired through partnership or licensing with external firms who have years of experience, rather than built in-house.

Amtrak uses a selection process that evaluates potential projects based on the key tenets. Other considerations for potential projects or target markets include:

- **Are investments required** to make Amtrak competitive? If so, is public or private seed money available?
- Should Amtrak join with **joint venture partner(s)**? Are market opportunities large enough to justify this? An attractive return on investment is required, along with effort to establish legal and business agreements.
- If **modifications to work rules,** wages, etc., from the agreement workforce are required, can they be agreed upon?
- Will there be opportunities where **establishing a subsidiary** may be beneficial?
- Understanding of and adherence to any applicable **regulatory/governmental requirements.**
- Can Amtrak develop methods to handle **flow-down requirements** on work funded by the Federal Transit Administration (FTA), which differ from requirements for FRA-funded work with which Amtrak otherwise complies, or can those rules be addressed in some other way?

The level of Amtrak resources will determine how much time it can spend developing options and bidding more effectively based on deep understanding of markets and relationships established prior to Requests for Proposals.

Primary Objectives

Amtrak seeks to pursue opportunities with intention, rather than reacting to potential projects without a strategy. Achieving this requires the following to be accomplished.

Pursue Commuter Operations Opportunities

Pursue and win targeted opportunities through competitive and compelling proposals that meet customer needs. In addition, work with existing and potential customers on an ongoing basis to understand their needs and offer its services to their operations. In FY 2018, Amtrak was awarded the contract to continue to provide Train and Engine (T&E) services to the MARC Penn Line commuter service; the five-year contract, with an option for an additional five years, began in July 2018 and will generate more than $100 million in revenue for Amtrak over five years. In FY 2020, Amtrak won a competitive bid to continue to provide the train and engine (T&E) crews for Southern California Regional Rail Authority in Los Angeles. This five year contract, which contains options for an additional two years, will generate more than $221 million in revenue over the five year base performance period.

Several bid opportunities are likely to arise in the next 2-4 years. Amtrak will review these and other opportunities for fit with its key tenets. Amtrak will also consider the best approach for each bid, including self-performing the services, using subcontractors, or forming a joint venture or other form of business structure.

Support Existing Commuter Agency Customers

For existing customers, work with Amtrak functional areas to provide the services customers require to execute their vision, while developing opportunities for Amtrak to meet additional needs.

Continue to Improve Financial Performance of Charter Trains and Private Cars

The market is still adapting to the restructuring of the business described in this Plan and recovery from the COVID-19 pandemic, but indications are that Amtrak can anticipate acceptable margins from this niche business with solid contribution to Amtrak's bottom line. Amtrak will continue to monitor market acceptance of its restructuring and adjust as necessary to maximize contribution without distracting from Amtrak's core activities.

Continue to Expand Thruway Services

Expanding rail service can have high barriers due to funding requirements and host railroad resistance frequently accompanied by large capital investment demands. Thruway service provides a means to grow ridership and revenue in new and existing Amtrak markets by instituting bus service at low initial cost to establish an Amtrak presence in new markets, and to provide route extensions and additional frequencies for existing rail routes. Amtrak will explore closer schedule and operational coordination with bus operators and with state funding partners.

Current national network planning concepts envision buses performing some, or all, of the following roles:

- Enhancing rail service with **auxiliary frequencies.** Current example: The Amtrak Cascades service.
- **Adding new markets** to feed customers to/from the Amtrak rail system using bus connections. Example: Replicate Bakersfield, CA hub in Harrisburg, PA or other locations.
- Pursuing **interline ticketing partnerships** with commuter rail and transit operators to expand the Amtrak network to new markets.

Federal and some state laws preclude or limit Amtrak from selling "bus-only" trips on dedicated bus routes contracted by Amtrak. This impairs mobility for passengers and unnecessarily increases the federal funding required to maintain nationwide connectivity. A statutory change eliminating this restriction would address this situation and would be particularly beneficial to potential passengers on routes, most of which serve rural areas, over which direct intercity bus service is not otherwise offered.

New Opportunities

Amtrak pursues other opportunities which fit its key tenets. During the period of this Plan, this is expected to include pursuing, in coordination with Amtrak's Marketing and IT departments, the possibility of a Multimodal Travel initiative to provide information to customers regarding connections to help them travel beyond Amtrak stations to their ultimate destination address from their origin address. This is the so-called "First Mile/ Last Mile" challenge. The premise of this project is that by reducing uncertainty regarding travel to/from Amtrak stations, Amtrak can attract new riders to Amtrak. Potential partners could include commuter railroads, transit systems (e.g., light rail, subways and buses), taxis, Transportation Network Companies / ride-hailing services to/from specific addresses, livery (limousine) services to/ from specific addresses, shuttle carriers, rental cars, car sharing services, and bike and scooter sharing services.

Multimodal trip-planners that combine public transit and intercity service, including in some cases through-ticketing, already exist in many countries. For example, in Sweden, the "Samtrafiken" partnership enables travelers to search for routes and in many cases to purchase combined ("Res Plus") intercity rail and mass transit tickets. Similar ticketing systems exist in Switzerland, Italy, Germany, and other European countries. Amtrak, through the Amtrak Procurement Department, issued a Request for Information (RFI) to the marketplace in 2019. As indicated in the RFI, Amtrak sought to learn from established, world-class firms in order to expand Amtrak's "Thruway" program functionality to include commuter rail, local transit, ride- hailing services and other transportation connections in order to increase the range of origins and destinations available to travelers.

The objective of a Multimodal initiative would shift from intercity transportation to focusing on the "First Mile/Last Mile" issue of passengers getting to and from Amtrak's stations. During FY 2022, Amtrak intends to issue a Request for Proposals from technology partners to provide software to enable multimodal first/last mile connections. Amtrak knows from experience that adding connections to its network attracts new riders and grows revenue.

Risks and Environmental Factors

External Factors

Contract Commuter Operations

Entrenched competitors exist in each potential market with resources and market presence that generally exceed what Amtrak has available, at least initially. Some competitors, particularly in the commuter services area but potentially also in other areas, may be willing to price below their cost or take significant risks in areas such as liability to establish or defend their positions in the marketplace.

Commuter operations are funded by public agencies as a service and by their nature operate at a financial loss. When combined with state and local funding pressures, this drive commuter agencies to economize, pursuing lower costs and pushing risk onto contractors. Meeting Amtrak's goal of achieving sufficient contribution while operating in this market is a challenge. COVID-19 may worsen this challenge, as it is clear it is financially stressing many agencies. However, it may also make it more likely that agencies Amtrak does not currently serve, whose current contracts are now ending will be seeking to bid them out, which could create new opportunities for Amtrak.

Amtrak also faces accounting and compliance hurdles. Amtrak receives federal funding through the FRA, while commuter carriers generally receive federal funding through the FTA. Currently, the federal flow-down compliance rules are different for the two sources of federal funding. As Amtrak is requesting in its reauthorization proposals, it would be beneficial to Amtrak and commuter operators if this impediment was eliminated.

Thruway Connecting Services

Dedicated Amtrak bus routes (for which Amtrak charters the buses) currently have legal restrictions, as noted earlier, that impact Amtrak's ability to leverage bus services to connect communities across the country.

Charter Trains and Private Cars

Amtrak significantly restructured both of these businesses during FY 2018 to retain as much financial contribution as possible, while eliminating low-contribution moves and interference with Amtrak's core operations, to comply with its key tenets. Amtrak's consistent application of the clear guidelines for charter trains it has adopted has enabled implementation of its restructuring strategy. It appears market conditions have adapted while Amtrak recovers from the COVID-19 pandemic.

Internal Factors

Capacity

The bandwidth available to actively pursue new business, including the effort required from across Amtrak to respond to each potential business opportunity and Request for Proposal, can present a challenge to pursuing new opportunities. For example, the capacity of Amtrak functional areas such as Engineering and IT to take on additional work within the timeframes required is limited. Subcontracting, licensing, or partnering are options, although they still require Amtrak resources to hire and manage and can cut into Amtrak returns.

Risk Appetite

Willingness to take on reasonable business liability risks from performing additional work can be a challenge.

Ability to Price Competitively

Essential to running Amtrak as a business is market-driven pricing that contributes positive financial contribution but is also competitive in the marketplace.

Conclusion

One of the basic tenets for Amtrak's efforts seeking commercial opportunities is to provide a positive financial contribution to Amtrak.

Amtrak will continually evaluate business opportunities and pursue those that satisfy its three key tenets: (1) Provide positive financial contribution to Amtrak; (2) Provide clear strategic value for Amtrak; and (3) do not distract from or impede Amtrak's core activities.

Amtrak owns and/or manages a nationwide portfolio of real estate that spans the Amtrak system. This portfolio includes more than eight million square feet of station and maintenance facilities, five of Amtrak's top ten busiest stations, and over 800 miles of right-of-way and other property in 46 states, Canada, and the District of Columbia.

Real Estate and Commercial Service Line

While Amtrak's assets are primarily used for railroad operations, they do produce recurring revenue or have the potential to generate revenue. This revenue is used for reinvestment back into critical infrastructure and operational improvements that benefit Amtrak customers.

In addition to revenue-producing opportunities, the Real Estate & Commercial (RE&C) Service Line supports Amtrak's primary business function by acquiring property and/or real estate rights necessary for railroad operations. All activities are reported through the Ancillary Service Line under the FAST Act account structure.

RE&C Major Functions

The 10 major functions of the RE&C Service Line, which is organized through the Stations, Facilities, Properties, and Accessibility department, are listed at right.

To maximize the benefits associated with these activities, Amtrak is analyzing multiple asset classes including stations, maintenance facilities, rights-of-way, and air rights to identify a diverse program of opportunities for improvements and potential partnership with the private sector. They range from direct real estate transactions to comprehensive partnerships covering a variety of real estate asset types, station operations and maintenance, and master plan improvements. These types of initiatives can capture untapped value, strengthen Amtrak's self-reliance, and develop facilities, amenities and density that support Amtrak's mission.

1. **Overseeing the company's portfolio** of real estate assets (owned, leased, and managed) through acquisitions, dispositions, and day-to-day operations.
2. Working to **maximize the real estate portfolio's performance.**
3. Proactively making real estate decisions that are aligned with enterprise business strategy, **minimizing risk and maximizing returns.**
4. **Establishing and implementing the standards** for Amtrak-owned and leased facilities to deliver high-quality space to all customers, employees, and visitors.
5. **Analyzing financial feasibility** of third-party proposed projects.
6. **Providing oversight** for all the company's development strategies and evaluate development activities.
7. **Negotiating agreements** for utility occupations ("pipe and wire") as well as telecommunications and fiber optic occupations of the right-of-way and Amtrak-owned stations.
8. **Managing Amtrak-owned parking lots and garages** as well as station, onboard and right-of-way advertising.
9. **Managing and overseeing all retail locations** owned or managed by the company.
10. **Seeking opportunities** to leverage Amtrak-owned fixed assets and air rights through arrangements with public and private sector entities.

About the Department

Under the Planning & Asset Development group within Amtrak, the Real Estate and Commercial (RE&C) Service Line comprises several functions and development programs that serve both to proactively manage Amtrak's assets and generate revenue. The Stations, Facilities, Properties, and Accessibility (SFPA) department performs a variety of Real Estate Operations and Commercial Development functions, including the following.

Real Estate Operations and Asset Management

Manages all corporate owned, leased, or occupied real property assets to support the company's station, maintenance facility, and corporate office operations. These include:

Corporate Office Operations

Responsibilities include setting and ensuring compliance with Amtrak workplace policies, acquiring space required to support operations, administering agreements, managing space inventory, managing furniture inventory, preparing space plans, and providing project oversight for office fit-out/occupancy.

Real Estate Operations

Manages all real estate assets required to support railroad operations, including corporate office space. Responds to inquiries from station owners, prospective station owners/ developers, and Amtrak Operations to obtain or renew leases, enforce lease terms, negotiate facility acquisition, and dispose excess or underused assets.

Facilities Development

Responsible for specifying Amtrak's nationwide operating space requirements and reviewing operating facility development plans for consistency with the space and signage requirements for assets. This team also maintains and periodically updates the Amtrak Station Program and Planning Guidelines and the Amtrak Station Graphic Signage Standards Manual.

Financial Operations

Manages all revenue pertaining to retail, parking, advertisement, and telecommunications and pipe and wire uses of Amtrak property. Budgets for and manages all real estate payments. Communicates with all facets of operations to address issues with leases, contracts, and special projects.

Property Control Group

Maintains current property plans and maps. Custodian for over 14,000 archival documents from predecessor railroads, including deeds, leases, easements, sales record, purchase records and licenses. Maintains a digital map library, responds to requests for information from within Amtrak and from third parties, and provides testimony in legal proceedings involving property rights and ownership.

Commercial Planning and Development

Generates revenue from all corporately owned real property assets as a non-core business activity.

Advertising

Manages a portfolio of over 270 existing static billboards and over 650 static indoor station advertising locations throughout the Amtrak network. Responsible for the conversion from static to digital medium for strategic billboard and in-station locations. Manages the onboard advertising for trains throughout the Northeast Corridor, Keystone and Empire lines.

Parking

Oversight of nine parking garages and lots (a subset of the 38 parking facilities where Amtrak has ownership interest) utilized for commercial revenue purposes. Responsible for coordination of maintenance and capital improvements at these garages/lots.

Filming

Manages on-location station and right-of-way and onboard train filming requests on Amtrak property.

Commercial Real Estate

Responsible for structuring, negotiating, executing, operating, and administering all real estate agreements for acquisition of real property assets that are required for Amtrak's operations and disposition of underutilized real property assets. Real property includes land and improvements that may be used for stations, office space, warehouses, crew bases, maintenance facilities, track, access pathways, storage, etc. Provides other services related to real estate transactions, including but not limited to, surveys, appraisals, facility condition assessments, environmental reports, title reports and insurance, property management services, valuation analyses, architectural and engineering services.

Station Development

Establishes and provides oversight for all the company's development strategies; establishes and evaluates development activities; analyzes the financial feasibility of proposed projects; leads transactions.

Telecommunications

Negotiates, drafts, manages, and enforces revenue generating telecommunications agreements pursuant to which third parties, primarily telecom carriers, install, operate, and maintain network facilities on Amtrak's ROW and stations. Agreements are for longitudinal fiber optic cables and wireless facilities for approximately 65 base sites.

Utility & Right-of-Way Occupations "Pipe & Wire"

Manages a portfolio of over 2,400 existing agreements and negotiate all new agreements related to long-term third-party usage of the Amtrak right-of-way including transverse and longitudinal cable, fiber optic, electric transmission, sewer, water, oil, gas, and steam occupations.

Amtrak Portfolio Facts

517

U.S. Stops Served, of which Amtrak fully owns 24 and shares ownership of an additional 50 stations

9

Canadian Stations Served

38

Parking Facilities, of which Amtrak fully owns 29

74

Owned Station Structures, of which Amtrak fully owns 71

48

Stations where Amtrak owns Platforms, of which it fully owns 45

RE&C in 2021

$8.0M
Advertising Revenue

$10.6M
Commercial Real Estate

$2.5M
Parking Revenue

$13.5M
Retail Revenue

$10.3M
Utility and Right-of-Way Occupations Revenue

$21.1M
Telecommunications Revenue

Market Overview

Real Estate activities occur throughout the Northeast Corridor and the National Network, and span 46 states and three Canadian provinces. Amtrak has sole ownership of all existing components (station, platform, and parking) at 24 stations, and ownership of some components or shared ownership at an additional 50 stations, and no ownership interest at 452 stations within its operating portfolio of 526 stations. (Station operations where Amtrak provides services, but has no ownership interest, are governed by active Real Estate property agreements.) In addition, Amtrak owns 58 stations that are not served by Amtrak rail service, but are leased to other rail operators.

Amtrak also occupies over one million square feet of office space and owns approximately half of this space. Amtrak owns approximately 7.1 million square feet of maintenance facilities in over 150 unique locations in 24 states. Amtrak owns or holds long-term leases on approximately 750 miles of rights of way including: 245 miles from Washington, DC to New Rochelle, NY; 10 miles of the Empire line in New York, NY; 118 miles of the NEC from New Haven, CT to the Rhode Island–Massachusetts border; 104 miles of the Keystone line in Pennsylvania; 95 miles of the Empire line in upstate New York; 12 miles of the Post Road Branch in upstate New York; 60 miles of the Springfield line from New Haven, CT to Springfield, MA; 95 miles of the Michigan line from Porter, IN to Kalamazoo, MI; and the trackage in and around Chicago's Union Station.

Customer Analysis

Internal customers include the Corporation's functions and departments that use Amtrak-owned, leased, and occupied real estate assets, ranging from corporate services such as Information Technology and Government Affairs to Operations. External customers include Amtrak passengers, retail tenants and vendors, commuter railroads, and local governments. Commercial customers also include telecommunications and utility companies, companies wishing to advertise on Amtrak property, and other private sector entities.

FY 2021 Performance

Amtrak's Real Estate and Commercial Service Line produced revenue and proceeds from disposition from real estate and other holdings totaling approximately $66.5 million in FY 2020. Revenue was derived from a variety of asset classes, listed below.

Asset Classes

Advertising

Throughout the Amtrak network, revenue from advertising was $8.0 million, a decrease of $1.8 million over FY 2020.

Commercial Real Estate

Revenue pertaining to real property was $10.6 million, an increase of $4.9 million over FY 2020.

Parking

Amtrak's 9 parking garages and surface lots generated $2.5 million, resulting in a decrease of $2.4 million from FY 2020 results.

Retail

Amtrak retail portfolio generated $13.5 million in retail rental revenue, resulting in a decrease of $10.5 million from FY 2020 results.

Utility & Right-of-Way Occupations "Pipe & Wire

Agreements produced $10.3 million resulting in a decrease of $0.8 million from FY 2020 results.

Telecommunications

Fiber and wireless occupancy agreements produced $21.2 million in revenue remaining consistent with FY 2020 results.

Strategy

In early March 2020, unexpected and unprecedented impacts from the onset and spread of the COVID-19 pandemic rippled across the economy.

Not only did demand for travel collapse almost overnight, but a large volume of bookings and tickets for future travel were canceled as customers were confronted with the uncertainty of a new and scarcely understood disease. In a few successive weeks beginning in late February and lasting though the middle of March, the country was wracked by the effects of the COVID-19 virus, the economy shut down, people quarantined in their homes, businesses closed, and the country was plunged into crisis.

The slowdown had a major impact on Real Estate's retail business as customers remained home and Amtrak's real estate tenants struggled to keep their businesses viable in the initial months of the pandemic—a challenge that has continued. Several tenants have filed for bankruptcy; others have ceased operations and notified Real Estate of their closure. Advertising and Parking have also seen precipitous declines in revenue resulting from stay-at-home orders, reduced Amtrak ridership and limited foot and vehicle traffic.

Moving into FY 2022, Amtrak anticipates revenue to be aligned with the results of FY 2021 due to continued effects of COVID-19 pandemic. Some of Amtrak's revenue generators require foot and vehicle traffic that is currently expected to increase in the remainder of FY 2022.

Real Estate Operations

To provide greater efficiency in the processing of agreements, in FY 2020, the department implemented Phase II of Documentum (Real Estate's digital repository of its lease agreements and supporting documents) and began scanning all hard copy real estate agreements currently housed in Amtrak offices at 30th Street Station. Phase II was delayed for several months due to COVID-19 but is on-track for completion during the Q2 of 2022.

Property Control

In FY 2021, the department will continue to investigate methods for identifying property encroachment by adjacent property owners. Digitization of mapping property lines is being integrated as part of Amtrak's Enterprise Asset Management project. In the Q4, the department initiated a pilot program to assess a system that shall demonstrate a connected decision support system that links Amtrak Maximo system, real estate agreements, deeds, and other documentation and Amtrak Geographic Information System (GIS) to maintain, visualize, analyze, and summarize the spatial data representing Amtrak's real estate holdings.

Primary Initiatives

Master Developments

Amtrak is continuing to advance station redevelopment programs at the five Amtrak owned or controlled stations with the largest ridership: New York Penn Station, Philadelphia William H. Gray III 30th Street Station, Baltimore Penn Station, Chicago Union Station and Washington Union Station. These programs and their status are described in the Station Assets Line Plan.

More information on master developments at stations is included in the Stations Asset Line Plan.

Primary Initiatives, continued

Risks and Environmental Factors

COVID-19 Pandemic

The COVID-19 pandemic is continuing to have a major impact on Amtrak ridership, foot traffic at Amtrak stations and national and center city economic activity, the principal drivers of Amtrak's real estate and commercial development revenues. While all of these metrics are currently improving, the future progression and impact of COVID-19 are unknown.

Federal Appropriations

While Amtrak does not use federal funds for real estate development initiatives intended to generate ancillary revenues, inadequate annual appropriations could impact station redevelopment projects and would require increased revenues to fill the resulting gap. Such a gap could lead to prioritization of initiatives generating short term revenue streams over longer-term real estate and commercial objectives.

Major Service Disruption

A major disruption in Amtrak service due to extreme weather, terrorist attack, infrastructure failure, pandemic concerns or other similar event could cause significant interruption of service and station usage that would adversely impact RE&C revenues and initiatives.

Complex or Shared Ownership of Some Facilities

Some Amtrak facilities have shared ownership, which may provide benefits but requires extensive coordination that can slow down implementation of projects and initiatives.

Staff Resources and Expertise

Amtrak requires sufficient staff in both the SFPA group and among the Operations disciplines that support third party work along Amtrak's right-of-way and other assets. Revenue-generating opportunities are in constant competition for resources with capital and state of good repair projects, which will significantly increase during the period covered by this plan as a result of the significant additional funding provided by the Infrastructure Investment and Jobs Act.

Key Strategic Issues for SFPA

1. **Improving coordination with internal and external stakeholders** on programmatic improvements at both owned and leased stations and facilities.
2. **Improving oversight and monitoring of corporate office space occupancy and utilization,** and enforcement of corporate office space policy and standards.
3. **Coordinating and prioritizing customer needs** across national geographic footprint.
4. **Establishing appropriate benchmarks** for operating and maintenance responsibilities.
5. **Staffing and resources** to execute complex public-private-partnership (P3) and real estate transactions.
6. **Flexibility** to meet market opportunities in a timely manner.


AMTRAK
578
578
AMTRAK

The Infrastructure Access Service Line (IASL) plan summarizes Amtrak's plans to develop, manage, and provide access to Amtrak-owned or controlled infrastructure. The primary customers of IASL services are commuter and freight railroads in addition to Amtrak's own trains.

Infrastructure Access/ Reimbursable Service Line

Amtrak's fundamental responsibilities in delivering IASL services include meeting customer expectations related to their use of Amtrak assets; generating and growing revenue from asset use; and driving investments to renew, rebuild and enhance Amtrak infrastructure to meet present and future service needs.

Success depends on clear and consistent communication with stakeholders, robust asset and work management practices, integrated service and capital planning, and project delivery processes to reliably provide infrastructure access. The key goal is to generate sufficient funding from users and investors to perform ongoing maintenance, recapitalization and improvement activities needed to ensure Amtrak's infrastructure supports safe and reliable operations and accommodates future demand.

IASL provides infrastructure access primarily to commuter authorities and freight railroads on the Amtrak-owned portions of the Boston-to-Washington Northeast Corridor (NEC) main line, but also manages Amtrak- owned/ operated lines elsewhere on Amtrak's National Network. Principal financial sources include operating and capital payments by NEC users pursuant to agreements governed by the Northeast Corridor Commuter and Intercity Rail Cost Allocation Policy (hereafter referred to as "the Policy") developed by the Northeast Corridor Commission (NEC Commission), freight railroad payments under existing access agreements, payments by other entities outside the NEC that use Amtrak assets (such as Metra), federal appropriations to Amtrak's National Network Account. The recently enacted Infrastructure Investment and Jobs Act (IIJA) will provide transformative levels of federal funding, through grants to Amtrak and transit agencies and competitive grant programs, for investments in Amtrak owned/operated infrastructure shared with commuter railroads during the five-year period covered by this Plan.

IASL Activities

Partner Relationship Management and Coordination

IASL serves as the primary point of contact for major capital projects involving internal and external stakeholders through its management of contractual agreements related to access and design and construction support services. It supports the company's priorities through relationship management and coordination, which requires extensive communication with various stakeholders through regular outreach sessions and negotiations with, among many others, federal, state, and local governments.

Infrastructure Planning

Coordinating planning for Amtrak infrastructure for both existing and new services requires a strategic, proactive approach to building consensus with the other rail service providers which use Amtrak assets. Long- term infrastructure planning is a complex responsibility that requires regular communication with partners and other stakeholders, extensive attention to resource allocation, integration of intercity commuter and freight service plans, and strategic planning for improved or expanded services.

Capital Program Management

In conjunction with other departments (notably Engineering), IASL supports the development and management (i.e., monitoring, reporting, and adjusting) of both annual and five-year infrastructure capital plans to maintain Amtrak assets in a state of good repair and advance improvements to meet expanded service, reliability, frequency, and trip time improvements.

IASL's collaboration with external stakeholders in the pursuit of IIJA and other discretionary grant funding sources is critical to the effort to secure funding for shared benefit capital investments.

Coordination with the NEC Commission

The NEC Commission includes Amtrak, the U.S. Department of Transportation, and the eight Northeast states and the District of Columbia. It was established by Section 212 of the Passenger Rail Investment and Improvement Act of 2008 (PRIIA), which mandated development of a cost sharing policy for NEC users and coordinated regional leadership on near-term strategies to stabilize the NEC and establish a foundation for growth. Amtrak has been informed by its NEC Commission membership in developing this plan by participating in its committees and working groups. Amtrak also regularly meets with NEC partners on a bilateral basis to discuss issues and ensure appropriate coordination among the relevant parties. On an operational level, Amtrak communicates with partners daily.

An important next step is Amtrak's work with the NEC Commission to further integrate service and asset line plan development and approval processes into the Commission's planning timeline.

Many items addressed in this document are covered in greater detail in the Infrastructure Asset Line Plan.

Reimbursable

Amtrak also performs a variety of services for third parties. While these services are labeled "reimbursable", the actual financial terms are agreed to with the respective third party on a case-by-case basis.

Reimbursable work is considered an ancillary business and reported separately under the FAST Act financial accounting framework. It is discussed here because Infrastructure Access and Reimbursable activities have similar customers, and both often derive from access agreements. Financial forecasts are provided separately.

Many contractual arrangements are single sourced to Amtrak based upon unique expertise Amtrak may possess or Amtrak's ownership of right-of-way and property where work takes place. In addition, IASL also responds to requests for proposals issued by states and public agencies. This plan outlines the current functions provided by Amtrak in detail, discusses selected ongoing projects, and describes Amtrak's approach to this type of work.

Reimbursable Projects

Amtrak is often asked to perform engineering design and construction services on various state, commuter authority or third-party projects on a reimbursable basis. These services range from the support of local station construction to some of the largest transportation projects in the United States.

The largest projects may involve dozens of staff from the design phases through project close-out, including related activities like project management and budgeting.

Amtrak seeks payments from these services to cover the fully-allocated costs of Amtrak's work, including direct costs, overheads, and general and administrative and other costs. In certain instances where the investments have a direct benefit to Amtrak services or assets lower rates may be charged. Amtrak recently completed several third-party projects and has others ongoing.

Select examples of reimbursable projects recently completed or near completion are detailed on the following pages.

Reimbursable Functions

Design Review and Approval

Amtrak review, comment and approval of Engineering design activity performed by third parties for projects which will impact Amtrak rail-related assets.

Safety

Railroad protective services for projects in the vicinity of rail infrastructure, including flagging and overhead catenary system de-energization.

Rail Construction and Support

Track construction and tie replacement.

Station Maintenance

Support of maintenance and construction activities for commuter rail stations.

Ancillary Commuter Services

Contractual-based services providing Amtrak ticket sellers and other station management personnel.

Reimbursable Projects, continued

Middletown Station

The new $24.4 million Middletown, Pennsylvania station on Amtrak's Philadelphia-Harrisburg Keystone Corridor opened in January 2022. This PennDOT-funded initiative features a new ADA-compliant station with a new center island high level platform and a pedestrian overpass with elevators and stair towers, along with onsite parking and designated bus loading zones.

Amtrak reimbursable services included design review and roadway worker protection for PennDOT's contractor. Total cost of Amtrak services was approximately $4.5 million. In addition, Amtrak performed, and funded as an in kind contribution, track shifting and tie replacement to accommodate the new station infrastructure.

Providence Station

The Providence Station State of Good Repair and Capacity Project will complete a redesign and major renovation of the station. Over two million passengers, both Amtrak and MBTA, utilize this station each year. Funded under a $25 Million Federal State Partnership grant, with Amtrak contributing $7.25 Million towards the local match, key improvements include interior renovations and expansion of the restrooms, baggage areas, public waiting areas and other parts of the station, as well as platform emergency egress and pedestrian access enhancements. Completion of construction is expected in CY 2023.

MTA East Side Access

The New York Metropolitan Transportation Authority (MTA) is undertaking a project that will enable Long Island Rail Road trains to access Grand Central Terminal. The project includes constructing and upgrading trackage, signals, circuits, and other components of existing infrastructure at the Harold and Loop Interlockings near Amtrak's Sunnyside Yard in Queens. Amtrak has provided various support functions for the project where it intersects Amtrak's tracks and other infrastructure.

Penn Station Access for Metro-North Trains

This project, sponsored by the Metropolitan Transportation Authority and Metro-North Railroad, includes construction of four new stations in the Bronx, NY, and additional track structure to support Metro-North commuter rail service over Amtrak's Hell Gate Line between New Rochelle, NY, and New York Penn Station.

Coatesville Station

Amtrak is supporting the construction of a new Coatesville Station on the Keystone Corridor. This initiative, for which a groundbreaking occurred in October 2021, is being led and funded by PennDOT. Improvements include two new high-level platforms, track improvements, and two new elevators and stair towers providing ADA accessible access to and from the platforms via a pedestrian walkway and underpass. Other improvements include signage, lighting, storm water management and a security system.

Pawtucket Train Station

Amtrak is supporting a Rhode Island Department of Transportation (RIDOT) project to build a new commuter rail station in Pawtucket, RI. Work includes undercutting and realignment of Tracks 1, 2 and 7; reprofiling catenary, Communications and Signal (C&S) infrastructure relocation and construction of a new signal house by Amtrak's Lancaster, PA Signal Shop.

The project is on schedule for completion in 2022.

Market Overview

Amtrak's right-of-way infrastructure assets are primarily located in the Northeast but also include some important assets on Amtrak's National Network, principally the Michigan Line and several major terminal areas.

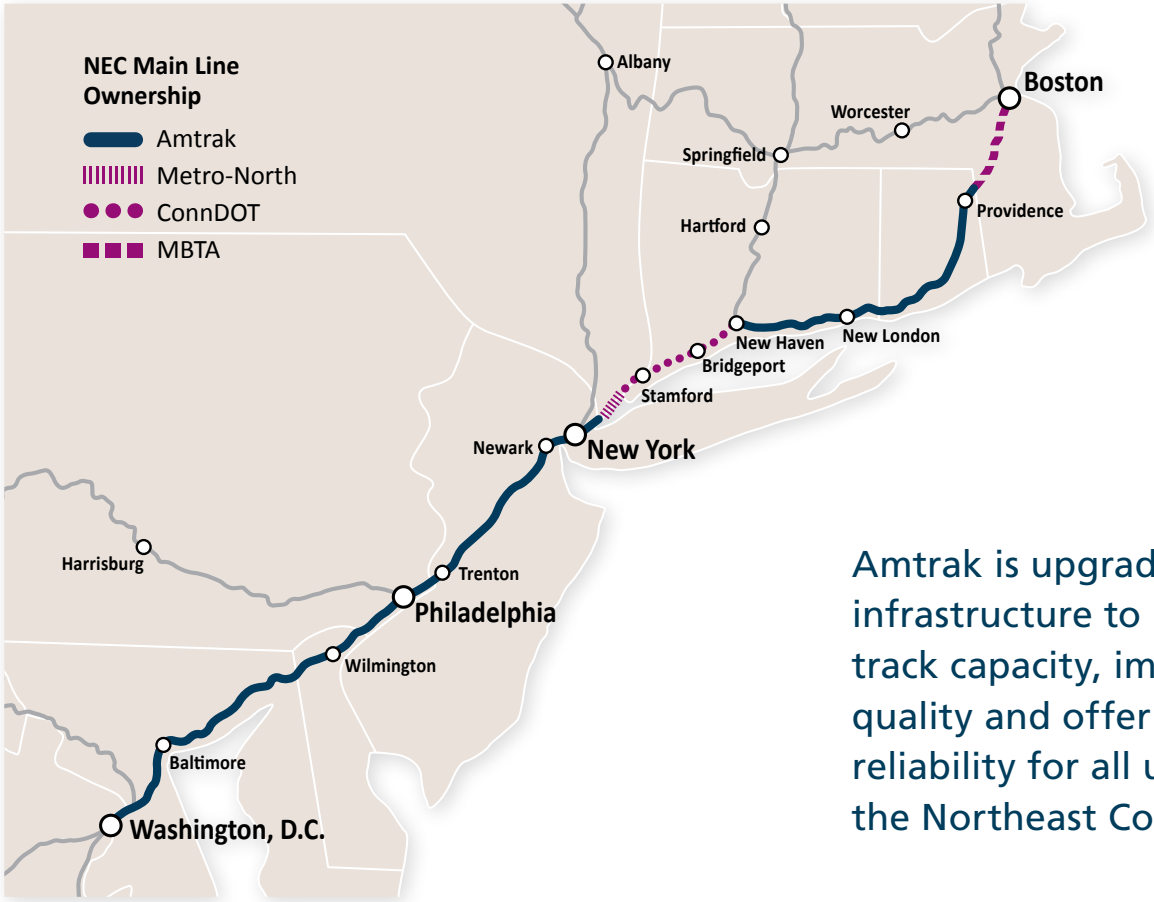
The Northeast Corridor

Amtrak owns 363 miles of the 457-mile right-of-way of the NEC main line between Washington, DC and New Rochelle, NY, and between New Haven, CT, and the Rhode Island- Massachusetts border.

Amtrak acquired its portions of the NEC, along with the branch lines to Springfield, MA (Springfield Line) and Harrisburg, PA (Keystone Corridor) pursuant to the Railroad Revitalization and Regulatory Reform Act of 1976, along with interests previously held by Penn Central Transportation Co. (Penn Central) in passenger rail yards and stations. While the Passenger Rail Investment and Improvement Act of 2008 PRIIA) defines the NEC as the Washington- Boston main line and the branch lines as part of Amtrak's National Network, the branch lines are part of the NEC in several contexts, including being subject to capital planning and PRIIA Section 212 Amtrak-commuter cost allocation statutory provisions.

Some statutory and other definitions of the NEC also include portions of the New York-Albany line (Hudson Line) and Washington, DC-Richmond, VA line.

On the NEC main line, Amtrak provides infrastructure access for commuter services provided by eight commuter authorities, two of which (RIDOT and DELDOT) use other commuter authorities to operate their services.



Amtrak is upgrading its infrastructure to increase track capacity, improve ride quality and offer greater reliability for all users along the Northeast Corridor.

Amtrak's NEC Infrastructure Access Customers (Agency and Description of Service)

	Massachusetts Bay Transportation Authority (MBTA) for operation between the Rhode Island/ Massachusetts State Line and Providence, RI, and between Providence and Wickford Junction, RI under contract with the Rhode Island Department of Transportation
CT rail	**Shore Line East** commuter rail service between New London and New Haven, CT by Connecticut Department of Transportation.
MTA Long Island Rail Road	**Long Island Rail Road** between Harold Interlocking (Queens), NY and New York Penn Station.
NJTRANSIT The Way To Go.	**New Jersey Transit (NJT)** between New York Penn Station and Trenton, NJ, and from Frankford Junction, PA to Philadelphia, PA.
SEPTA	**Southeastern Pennsylvania Transportation Authority (SEPTA)** between Trenton, NJ and Newark, DE; service within Delaware is provided under contract with the Delaware Department of Transportation.
MARC	**Maryland Area Regional Commuter (MARC)** between Perryville, MD and Washington, DC.
VRE	**Virginia Railway Express (VRE)** between Washington Union Station and Virginia Avenue in Washington, DC.

National Network

Amtrak owns the 104-mile Keystone Corridor from Philadelphia, PA to Harrisburg, PA and the 61-mile Springfield Line from New Haven, CT to Springfield, MA. Amtrak holds a long-term lease with CSX for the Hudson Line between Poughkeepsie, NY and Schenectady, NY (and owns outright two short segments of the Hudson Line in New York City and the Schenectady area). In the Midwest, Amtrak owns 95 miles of right-of-way and infrastructure between Porter, IN and Kalamazoo, MI (Michigan Line), and Chicago Union Station and adjacent trackage. Chicago Union Station is the hub of Amtrak's National Network. On the National Network, Amtrak provides infrastructure access to the commuter rail agencies detailed below.

Amtrak's National Infrastructure Access Customers (Agency and Description of Service)

CT rail	**Connecticut Department of Transportation** for CTrail service on the Springfield Line.
NEW YORK STATE	**New York State Department of Transportation** for Amtrak Empire Service.
pennsylvania	**Pennsylvania Department of Transportation** for Amtrak Keystone Service on the Harrisburg Line.
MDOT	**Michigan Department of Transportation** for Amtrak Michigan Services.
Metra	**Metra** for access to Chicago Union Station and adjacent terminal trackage.
SEPTA	**Southeastern Pennsylvania Transportation Authority (SEPTA)** for commuter rail service on the Paoli/Thorndale–Philadelphia portion of the Harrisburg Line.

Customer Analysis

Amtrak's primary external customers for infrastructure access activities are commuter and freight railroads. Amtrak also hosts its own trains for the NEC, State Supported and Long Distance Service Lines, which have different service and infrastructure requirements than Amtrak's external partners. Ultimately, the end users are Amtrak and commuter rail passengers and freight shippers, who depend on Amtrak to provide reliable and safe infrastructure and services to freight operators entrusted with their shipments. Other institutional customers include third parties such as states and localities that seek to use Amtrak's infrastructure or engage in capital projects or other activities that affect Amtrak's infrastructure temporarily or over an extended period.

Competitive Landscape

As an access provider to passenger and freight railroad operators, Amtrak must optimize and enhance competitiveness of all rail services that rely on Amtrak infrastructure. The NEC—Amtrak's primary infrastructure asset—has geographic advantages stemming from its location in a growing region that accounts for the largest share of U.S. commercial activity. Regional competitive advantages created by its high volume, high speed main line serving central business districts and ports enable NEC rail operators to capitalize on the advantages rail transportation offers compared to other modes.

Many rail assets need replacement to continue to provide safe, reliable, and convenient rail service to, and the capacity needed for a growing population and economy. The number of passenger trips on the NEC is projected to reach over a half billion—almost twice as many as prior to the COVID-19 pandemic—by 2040. As the popularity of rail increases, Amtrak and its NEC partners are challenged to ensure the NEC can meet the demand for new capacity on this critical infrastructure asset.

Accommodating heavy daily use of aging NEC infrastructure, some more than a century old, that has reached or exceeded the limits of its capacity and service life is one of the greatest challenges Amtrak faces.

FY 2021 Performance

Since the agreements between Amtrak and its NEC commuter partners became fully compliant with the requirements of the NEC Commission's Cost Allocation Policy in 2018, and the NEC Commission approved in 2019 contribution by each NEC passenger operator of 100% of the Baseline Capital Charge (BCC) that reflects the cost of normalized capital replacements, we have continued to work with our NEC partners on adhering to the requirements of the Policy and improving identification of capital funding needs, capital program delivery and reporting.

During fiscal year 2021, the NEC Commission completed the task of performing an updated and geo-specific Asset Assessment for NEC Infrastructure within the territory subject to the PRIIA 212 Policy. As the largest single infrastructure owner, Amtrak was heavily involved in working with Commission Staff on this effort. This new Amtrak Normalized Replacement amount is now derived from an Asset Assessment directly linked to specific corridor sections, providing a much stronger geographic link than the existing assessment from 2011. This collective effort has resulted in a new FY 2022 annual Normalized Replacement amount for PRIIA 212 territory of $1.05 billion, of which $829 million is for Amtrak-owned infrastructure.

The NEC Commission used the new Asset Assessment data to partially determine FY 2022 Capital Obligations, which were unanimously approved in the June 2021 meeting. This initial move towards phased implementation of the new data to drive cost allocation was a significant step. The Commission agreed to derive FY 2022 Capital Obligations in a 50/50 blend between the existing Asset Assessment data and the new data, with Normalized Replacement levels at 100% and 70% respectively. This resulted in a total FY 2022 Capital Obligations of $668 million, and $533 million for Amtrak infrastructure—a $30 million (6%) increase over FY 2021 Capital Obligations. Through FY 2022 and beyond, Amtrak expects to continue to work through the NEC Commission to advocate for greater incorporation of the new Asset Assessment data to determine future Capital Obligations as the most accurate presentation of Normalized Replacement need.

An additional and related NEC Commission effort that began in FY 2021 and continues through FY 2022 relates to the establishment of Station BCCs. There is currently no formulaic or comprehensive framework in place for Normalized Replacement costs of shared benefit station infrastructure like that used to determine BCC charges for the right-of-way. As a result, funding of ongoing station capital costs is ad hoc and inadequate, which negatively impacts Amtrak and commuter passengers and asset condition. And in close cooperation with Amtrak, NEC staff conducted a detailed stations Assessment Asset and resulting Normalized Replacement value for PRIIA 212 territory. This highly technical exercise started in FY 2021, and Commission members are being solicited for feedback and review. The objective is to have at least a partial (phased-in) introduction of Station BCCs beginning with FY 2023 Capital Obligations, and Amtrak continues working with the NEC Commission to achieve this outcome.

Finally, Amtrak is working internally to develop greater recognition and adherence to the Project-Based Cost Allocation provisions in the NEC Cost Allocation Policy. An ongoing multidepartment effort begun in FY 2021 is underway to increase Amtrak project managers' awareness of and exposure to these provisions. Ensuring adherence to them, including joint planning and development with state/commuter partners and submission of agreements to the NEC Commission where required, is of increased significance because the Project-Based Cost Allocations will be used to determine local matches for grants under the Federal-State Partnership for Intercity Passenger Rail Program that was enhanced and received significant additional funding in the IIJA.

Infrastructure Access: Ongoing Partner Shared Benefit Capital Investments

ST	SPONSOR	PROJECT DESCRIPTION	COMPLETION DATE	BENEFITS			AMTRAK FORCES	OTHER PARTNER COSTS/ CONTRACTOR	TOTAL PROJECT COST	AMTRAK CONTRIBUTION	FRA GRANT CONTRIBUTION
				ADA	CUSTOMER	TRACK / INFRASTR.					
NEC LINE											
MA	MBTA	**Tower One Rehabilitation**	2024			X	$18,000,000	$32,400,000	$82,000,000	$8,600,000	$41,000,000
RI	RIDOT	**Providence Station SOGR**	2023	X	X		$326,728	$5,250,000	$25,000,000	$7,250,000	$12,500,000
NY	MTA	**Penn Station Access**	2025	X	X	X	TBD	$1,170,000,000	$1,200,000,000	TBD	$30,000,000
NY	MTA	**East Side Access - Regional Improvement Projects**	2023			X	$83,600,000	$1,026,700,000	$1,404,300,000	TBD	$294,000,000
DE	DTC	**Delaware Third Track**	2020			X	$60,470,000	$10,730,000	$71,200,000	$26,200,000	$13,300,000
DE	DTC	**Newark Regional Transportation Center**	2024	X	X	X	TBD	$18,247,402	$64,098,000	$-	$-
MD	MARC	**Martin's Yard Switch Modernization**	2023			X	$5,580,000	$620,000	$6,200,000	$500,000	$3,100,000
NJ	NJT	**Newark Penn Station, Platform D**	2023	X	X		TBD	$5,905,000	$26,350,000	$2,000,000	$18,445,000
NJ	NJT	**Substation 41**	2024			X	TBD	$15,600,000	$73,000,000	$21,000,000	$36,400,000
NJ	NJT	**Trenton Transit Center**	2024	X	X		TBD	$7,108,305	$26,989,618	$1,600,000	$18,281,313
MD	MARC	**BWI Thurgood Marshall Station**	2019	X	X		$519,000	$4,181,000	$4,700,000	$-	$-
NHHS LINE											
CT	CTDOT	**Windsor Station**	2022	X	X		$525,897	$2,385,500	$2,911,397	$-	$-
CT	CTDOT	**Windsor Locks Station**	2023	X	X		$25,000,000	$26,000,000	$56,500,000	TBD	$-
HARRISBURG LINE											
PA	PENNDOT	**New Middletown Station**	2021	X	X		$4,595,163	$19,804,837	$24,400,000	$-	$-
PA	PENNDOT	**Coatesville Station**	2024	X	X	X	$23,700,000	$41,300,000	$65,000,000	TBD	$-
PA	SEPTA	**Track 2 Upgrade Glen to Thorn Interlockings**	2023			X	$16,675,000	$-	$16,675,000	$400,000	$8,337,500
PA	SEPTA	**Signal System Renewal: Paoli to Overbrook**	2026			X	$21,910,000	$-	$21,910,000	$2,000,000	$15,910,000
PA	SEPTA	**Ardmore Transportation Center**	2022	X	X		$6,820,707	$42,924,759	$49,745,466	$6,820,707	$-

PVD Amtrak forces is only for design. Estimate for construction will come in 2021.


611
611
2022

Strategy

Primary Initiatives

Advance Gateway Program

The Gateway Program is Amtrak's highest infrastructure investment priority and the most urgently needed infrastructure program in America. Gateway will modernize and expand the busiest stretch of the Northeast Corridor—the 10 miles between Newark, NJ and Penn Station New York—through a series of phased investments to double capacity, greatly increasing reliability and allowing service increases for Amtrak and its commuter partner NJ TRANSIT.

Thanks to billions of dollars in funding made possible by Congress through the IIJA, the Gateway Program is moving quickly from planning to delivery. With a supportive and fully engaged Federal partner, engaged regional stakeholders, and a public mandate that supports investment in the Gateway Program, momentum continues to build as the start of construction nears.

Significant milestones were reached in 2021, including:

- Issuance by the U.S. Department of Transportation of a Record of Decision (ROD) on the Hudson Tunnel Project. This brought the environmental review phase of the project to a close and allowed critical pre-construction activities to advance.

- Following the ROD, Amtrak moved quickly to acquire 260 Twelfth Avenue in Manhattan (known as Block 675 Lot 1) where a construction shaft and ventilation facility will be built for the new tunnel. The acquisition allowed Amtrak and its partners to move forward with needed geotechnical investigations to analyze the soil and rock conditions along the tunnel alignment.

- Execution of a full funding grant agreement (FFGA) allowing procurement of a construction contract for the Portal North Bridge Project. The FFGA signed by the Federal Transit Administration (FTA) and NJ TRANSIT is a first of its kind investment of more than $766 million.

2022 promises to be a pivotal year for the Gateway Program as major construction begins on Portal North Bridge and the Hudson Tunnel Project rapidly progresses. The Penn Station Expansion and Sawtooth Bridges projects will both begin preliminary engineering in 2022. Other Gateway projects such as Harrison Fourth Track, Dock Bridge Rehabilitation and relatively less complex project elements will continue to advance as well.

A key priority for Amtrak and its partners will be understanding the detailed requirements, operational challenges, strategic opportunities, and technical constraints to identify the most efficient, cost-effective implementation approach for this ambitious Program that is poised to enter a new phase.

IASL Strategies

1. **Increase investment** in shared-use infrastructure through discretionary grant opportunities established, enhanced and/or funded in the IIJA.
2. **Increase productive utilization of Amtrak infrastructure** where capacity exists.
3. **Improve data available** for decision making.
4. **Collaborate with partners** in developing long-range infrastructure planning and construction strategies.

Primary Initiatives, continued

Funding Commitments for B&P Tunnel Replacement Program

Built in 1873, the Baltimore & Potomac (B&P) Tunnel is Amtrak's oldest tunnel on its busiest corridor. One-third of Amtrak's ticket revenue and two-thirds of MARC's ridership rely on the tunnel, which has no redundancy or alternate route and is critical to Amtrak and MARC commuter operations.

The existing tunnel suffers from excessive water infiltration, structural deterioration, and inadequate size to permit the addition of modern fire/life safety systems. Furthermore, it is the largest chokepoint on the NEC between Washington and New Jersey, with the NEC's lowest non-terminal speed restriction (30 mph) and frequent delays for the approximately 150 trains per day that rely on it.

The B&P Tunnel Replacement Program will modernize and transform a nearly four-mile section of the NEC. Notably, it includes a new two-bore replacement tunnel to be named after Frederick Douglass, systems replacement, and track upgrades (including curve realignments and new interlockings) that will improve speeds to up to 100 mph and enhance capacity, and reliability. A new implementation plan, developed in collaboration and partnership with the Maryland DOT during FY 2021, will deliver these benefits with two tunnel tubes (instead of four) that will only serve electrified passenger trains. To enable this, Maryland has agreed to replace its diesel MARC trains with electrified operations through the new tunnel.

After suspensions of work that occurred in FY 2020 and early FY 2021, Amtrak has resumed design progression and initiated efforts needed to enable construction such as property acquisitions, work planning, and third-party coordination/ approvals. New federal funding opportunities enabled by the IIJA are anticipated as the primary funding source for the B&P Tunnel Replacement Program. Amtrak has also initiated discussions with Maryland DOT, which has publicly stated its support for the project, regarding an anticipated state funding contribution. The current level of support from state and local leaders is stronger than at any time since the B&P Tunnel Replacement was initiated.

Funding Commitments for Susquehanna River Rail Bridge

This 111-year old, two-track bridge connects Havre de Grace and Perryville, MD, and is used by Amtrak, MARC and Norfolk Southern. As the longest movable bridge on the NEC, it is a critical and fragile link that needs to be replaced with a new structure to maintain NEC rail services.

The bridge's functionally obsolete design and age require increasingly larger-scale rehabilitation and repairs which drive up maintenance costs and conflict with the need to maintain continuous rail operations. The replacement project will provide future improvements to capacity, trip time, and safety for commuter, freight, and intercity passenger rail services on the NEC, consistent with State and Amtrak plans, and could also improve the navigation channel for marine users.

Environmental reviews for the Susquehanna Bridge Replacement Project were completed in 2017 and final design was begun. A two-phase approach is planned for construction.

The first phase would include preliminary construction activities and construction of a new bridge on a new alignment upriver from the current bridge. The second phase, which preferably would start immediately after completion of Phase 1 but could be deferred until funding becomes available, would involve construction of a second bridge on the current bridge alignment. While achievement of a 60% design milestone was originally planned for September 2020, funding constraints, exacerbated by COVID-19, have required deferral to FY 2022.

Primary Initiatives, continued

Building Partnerships for Planning and Investment

Over the next five years, Amtrak will do the following to maintain and build partnerships to improve planning and increase investment:

- **Enhance internal and external partnerships** through the NEC Commission and bilateral efforts.
- **Ensure costs and obligations are being paid by all partners.**
- **Implement new capital methodology policy** to increase capital contributions by Commission members above BCC level that was approved by the NEC Commission and is now in effect.
- **Align infrastructure investments** with the NEC Commission's plans and member contributions.
- Coordinate with partners in **advancing long range investment planning strategies.**
- Continue to **seek additional funding** via joint or sole application for various federal grant programs.
- **Update Amtrak's long-term service plans** to reflect the NEC FUTURE Record of Decision, and work with the FRA, NEC Commission, commuter authorities and other stakeholders in developing an NEC Strategic Development Plan.
- **Continue coordinated planning** and project construction efforts with other users of the NEC to prioritize work, coordinate service impacts and schedule track outages in the near and long term.
- Execute a fair and financially viable **new Access Agreement** with Metra for Metra's use of Chicago Union Station that includes enhanced capital contributions.

Work Planning

Over the last several years, Amtrak instituted a Prioritization of Capital Projects process to seek collaborative input on the NEC capital project rankings for upcoming fiscal years.

Amtrak coordinates with state Departments of Transportation, Commuter Agencies, and various other third parties to obtain relevant information on projects and the Amtrak resources they will require.

Projects are then reviewed for consistency with Amtrak's Pillars and by a Work Force Manager who, after considering personnel requirements and resources, governmental mandates and priorities of Amtrak's partners determines what projects can be accomplished in the next fiscal year and allocates resources among them. The prioritization process provides accountability and transparency, increased engagement with partners, and better partner understanding of why some projects cannot be initiated.


B&P Tunnel

Risks and Challenges

General

Inadequate Funding

Inadequate funding from the federal government and for and from Amtrak's commuter partners has historically been a significant issue. The NEC Commission estimates the NEC's state of good repair backlog at $65.9 billion over the next 15 years. The passage of the IIJA may finally begin to address this funding shortfall.

Climate Change

Severe weather conditions, including hurricanes, floods, and other natural disasters, may cause service interruptions and result in revenue loss, increased costs, and liabilities, and require urgent repair work.

Infrastructure Condition

Unplanned outages from infrastructure failures.

Terrorism

Any terrorist attack, or other similar event, could cause significant interruption of service and adverse effects.

Accidents

Accidents may cause significant interruption of service and result in loss of revenue, increased costs and liabilities, and other adverse effects.

Resources

The IIJA will require an enormous increase in resources for staffing and training, and increased track outages to perform work.

Information Technology (IT) and Planning

IIJA funding also increases the need to link infrastructure investment priorities to goals and information about asset conditions and relationships to train delays, ridership, revenues, and partner satisfaction.

Human failure

Asset Condition and Capacity

- Deteriorating asset conditions and inadequate track, station and tunnel capacity threaten current performance and future growth.

- Due primarily to growth in commuter rail operations, many of the most critical Amtrak-owned NEC infrastructure assets—particularly New York Penn Station and the adjacent Hudson River Tunnels, and Washington Union Station—have grossly inadequate capacity to handle current levels of trains and passengers, let alone future growth.

- Amtrak's premier National Network asset, Chicago Union Station (CUS), has also experienced large increases in passengers and commuter trains that, prior to the COVID-19 pandemic, have produced severe overcrowding. CUS requires substantial investment to increase station and track capacity and fulfill its potential to become a world-class transportation facility.

Available Funding

- While the enactment of the IIJA provides a historic level of funding that creates a unique opportunity to work in coordination with Amtrak's commuter partners to finally remediate the excessive backlog of needed investments, the level of funding provided by the IIJA is insufficient to meet all needs. Intercity passenger rail continues to be without a trust fund or other assured, long term federal funding source for investments like that provided for other transportation modes.

- Additional state/commuter agency funding beyond the BCCs is required to fully fund the non-federal share of normalized replacement costs of basic infrastructure and necessary infrastructure rehabilitation and improvement projects.

Risks and Challenges, continued

Managing Shared Assets

- Different services have different needs:
  - → Commuter trains are slower and stop more frequently than intercity trains, making scheduling difficult.
  - → Deadhead positioning moves of empty commuter trains and their need for mid-day storage at capacity constrained terminals consume valuable capacity.
- Major stations (e.g., Chicago Union Station) are primarily used by commuters.
- Challenges in managing and reporting information in a useful format make it difficult to link capital planning with service goals.
- Many station assets are owned or controlled by others, and their owners may have broader interests than serving Amtrak (and in some cases commuter rail) passengers. A few examples:
  - → Washington Union Station is owned by the U.S. Department of Transportation and managed by the Union Station Redevelopment Corporation (USRC). Other users include Metro passengers, public and private bus passengers, retail, and office space.
  - → At Penn Station New York, LIRR, Amtrak, and NJ TRANSIT each control different areas, and some areas have shared control.
  - → Shared use stations in New Jersey are owned by NJT, though Amtrak remains responsible for track maintenance and in some cases station platforms.

Resource Availability, Including Track Time and Trained Workforce

- Hiring, training, and retaining a qualified workforce is an ongoing challenge that has become much greater due to the greatly increased work activity the IIJA will trigger and the difficulty all companies are having in finding workers, particularly those with specialized skills required for many Amtrak jobs.
- Specialized equipment or materials can take a long lead time to procure, particularly during a time of supply chain disruptions.
- Available time for infrastructure maintenance, renewal and improvement must be balanced against existing service needs.

Maintenance Windows and Service Curtailments

- While longer track outages requiring schedule changes and service curtailments allow railroad infrastructure work to be performed in a more timely and productive fashion that minimizes costs, the public, elected officials, and commuters have a limited appetite for delay or disruption.

Governance

- Intercity and commuter rail are governed by different statutory, regulatory, and funding schemes overseen by different federal agencies: the FRA and the FTA.
- There is not a single process or point of contact at the federal level when projects involving multiple participants are proposed. This fragmented approach makes it challenging to implement jointly funded projects.
- Conflicting regulations of different federal modal agencies relating to grant agreement ("flowdown") provisions, Buy America requirements, environmental review of projects, the application to various participants of the costs and responsibility for complying with certain labor regulations, and disaster relief hamper funding and management of projects and impose unnecessary costs.

Conclusion

The next five years will provide a long sought opportunity for Amtrak and its partners to advance essential infrastructure projects to maintain current rail services and to make vital investments that ensure the long-term utility of the network.

While Amtrak will continue to face many challenges including the remaining effects of the COVID-19 pandemic and its resultant supply chain and inflationary pressures felt throughout the broader economy, the recently enacted IIJA has launched a new era in investing in rail transportation. As a result, Amtrak and its partners are well positioned to carry out the vital initiatives included in Amtrak's five-year plan to replace and improve infrastructure on the NEC and elsewhere so that passenger rail in the United States can at last realize its full potential.

Strong partnerships among federal, state, and local stakeholders are crucial for meeting the significant challenges that accompany this opportunity and achieving success.

Acela passes over the Hell Gate Bridge.

Profit & Loss Analysis

Infrastructure Access/Reimbursable Service Line (FY 2022–FY 2027)

($s in Thousands)	FY 2022	FY 2023	FY2024	FY 2025	FY 2026	FY 2027	Total
Financial Sources:							
Passenger Related Revenue							
Ticket Revenue (Adjusted)	-	-	-	-	-	-	-
Charter/Special Trains	-	-	-	-	-	-	-
Food and Beverage	-	-	-	-	-	-	-
Contractual Contribution (Operating)							
PRIIA 209 Operating Payments	-	-	-	-	-	-	-
PRIIA 212 Operating Payments	200,835	248,498	254,711	261,078	267,605	274,296	1,507,024
Commuter Operations	202	-	-	-	-	-	202
Reimbursable Contracts	4,881	1,326	1,359	1,393	1,428	1,464	11,852
Access Revenue	37,169	-	-	-	-	-	37,169
Commercial Revenue (incl. Pipe/Wire, Real Estate, Parking)	399	-	-	-	-	-	399
All Other Revenue (incl. Insurance Revenue, Cobranded Commissions, etc.)	156	-	-	-	-	-	156
Operating Sources Subtotal	**243,644**	**249,824**	**256,070**	**262,472**	**269,034**	**275,759**	**1,556,803**
Contractual Contribution (Capital)							
PRIIA 209 Capital Payments	-	-	-	-	-	-	-
PRIIA 212 Capital Payments	-	200,000	200,000	200,000	200,000	200,000	1,000,000
Other State/Local Mutual Benefit	97,232	-	-	-	-	-	97,232
Amtrak Internal Cash	49,793	98,779	5,599	1,376	2,017	8,245	165,810
Financing Proceeds Applied	-	473,334	86,554	30,250	-	-	590,138
Other Capital and Special Grants (incl., state/local sources)	-	-	-	-	-	-	-
Capital Sources Subtotal	**147,025**	**772,113**	**292,153**	**231,626**	**202,017**	**208,245**	**1,853,180**
Federal Grants to Amtrak							
Prior Year Carryover Grant Funds	647,557	193,486	91,878	-	-	-	932,922
Current Year FAST Sec 11101 Grants							
Operating	227,191	252,085	84,589	86,962	87,923	94,492	833,242
Capital	404,842	1,024,337	1,272,525	1,410,878	1,522,901	1,578,771	7,214,256
IIJA Supplemental	-	2,200,000	2,200,000	2,200,000	2,200,000	2,200,000	11,000,000
IIJA Discretionary	-	-	-	-	-	-	-
Other Federal Grants (incl., FRA/OST, FTA, DHS)	19,370	33,302	40,308	35,950	21,484	47,950	198,365
Federal Grants to Amtrak Subtotal	**1,298,960**	**3,703,210**	**3,689,301**	**3,733,791**	**3,832,309**	**3,921,213**	**20,178,784**
Total Financial Sources	**1,689,629**	**4,725,148**	**4,237,524**	**4,227,889**	**4,303,360**	**4,405,217**	**23,588,767**
Financial Uses (Operating):							
Service Line Management	2,594	638	701	763	826	893	6,415
Transportation	68,077	104,592	114,532	124,380	134,488	145,189	691,258
Equipment	15,355	26,718	29,372	32,009	34,719	37,591	175,763
Infrastructure	166,351	195,047	213,966	232,735	252,015	272,432	1,332,545
Stations	57,848	51,065	55,795	60,473	65,271	70,346	360,797
National Assets and Corporate Services	160,611	142,257	155,940	169,507	183,440	198,192	1,009,947
Total Operating Uses	**470,834**	**520,318**	**570,305**	**619,866**	**670,759**	**724,642**	**3,576,724**
Operating Surplus/Deficit *(Operating Sources - Operating Uses)*	**(227,191)**	**(270,494)**	**(314,235)**	**(357,394)**	**(401,725)**	**(448,882)**	**(2,019,921)**
Available for Capital Uses *(Capital Sources + Federal Grants to Amtrak + Operating Surplus/Deficit - Debt Service Payments)*	**1,218,795**	**4,204,830**	**3,667,218**	**3,608,023**	**3,632,601**	**3,680,576**	**20,012,043**
Financial Uses (Capital):							
Service Line Management	3,538	-	-	-	-	-	3,538
Transportation	14,451	4,176	2,620	2,666	2,110	2,089	28,111
Equipment	79,665	117,716	24,400	24,760	25,105	25,695	297,341
Infrastructure	516,899	1,239,365	2,017,205	2,506,781	2,467,258	2,724,009	11,471,516
Stations	135,693	310,871	366,871	800,397	753,829	738,951	3,106,611
National Assets and Corporate Services	26,292	24,910	15,192	8,352	7,983	13,482	96,211
Capital Expenditures	**776,537**	**1,697,037**	**2,426,289**	**3,342,954**	**3,256,285**	**3,504,225**	**15,003,328**
Debt Repayments	-	-	-	-	-	-	-
Total Capital Uses	**776,537**	**1,697,037**	**2,426,289**	**3,342,954**	**3,256,285**	**3,504,225**	**15,003,328**
Remaining Carryover Balance	**$ 442,258**	**$ 2,507,792**	**$ 1,240,929**	**$ 265,069**	**$ 376,316**	**$ 176,351**	**$ 5,008,715**

The Transportation Asset Line refers to assets related to the operation and movement of the trains, onboard services and amenities that are managed and operated by the Operations department workforce. Operations is the execution arm of the service lines and drives safety, customer service and productivity for our stakeholders and customers each day.

Transportation Asset Line

Operations works in close collaboration with the Commercial & Marketing and Safety teams to ensure strategies and initiatives are implemented safely and efficiently to achieve the best results. Operations also has its own initiatives to drive safety, customer service and productivity. These improvement initiatives are led by the Transportation and Customer Service operating divisions, supported by the Operations Research and Continuous Improvement teams. We have made significant progress using data-driven approaches in recent years to drive improvements in key performance measures.

A new strategic initiative, Operations Transformation, is being launched to deliver transformative change across Operations, shedding legacy practices and processes while creating innovative systems and processes and an engaged workforce driving continuously towards Operational Excellence.

This initiative will put data science, enterprise asset management principles and employee engagement at the heart of daily operations, reengineering our national operations center's activities to focus on customer care through better planning, collaboration, and communication across all functions.

We practice a Just Culture management approach across Amtrak. Simply put, we encourage the self-reporting of human errors without fear of recrimination. We do this to learn, as an organization, from those errors and implement measures to prevent them in the future. We will not discipline for self-reporting and the company's response will be fair, appropriate and in accordance with our values and the law. Each day the traveling public places their trust in us. Accordingly, we will never tolerate intentional disregard and reckless behavior that violate Amtrak policy and procedures.

FY 2021 Performance and Results

FY 2021 was, again, a year of two stories. The first half of the fiscal year focused on cost containment in an uncertain environment before the advent of vaccines and COVID-19 relief funding. It saw the unprecedented action of furloughing hundreds of staff and reducing operations across services lines, most notably seeing most daily Long-Distance services reduced to tri-weekly operations. As vaccines became broadly available in the spring, emergency federal relief funding was provided, and customer demand rebounded, Transportation focused on returning capacity to the network. That effort continues amidst a very competitive labor market and the ongoing uncertainty of the pandemic.

Throughout this difficult period, the organization's focus remained fixated on executing operations safely, reliably, and efficiently. In addition to responding to unprecedented operational demands as a result of the pandemic, most notably the need to optimize crewing patterns to operate tri-weekly service on routes accustomed to daily service, the organization continued to implement tactical improvements in the near term while also planning strategic initiatives that will deliver step-function improvements in the longer term.

Accomplishments

- **Opened Moynihan Train Hall in New York City,** featuring state-of-the-art technologies and customer amenities as well as a spacious boarding concourse with standardized boarding procedures.
- Introduced **new Point-of-Sale systems** featuring contactless payment.
- **Introduced NEC Sleeper Service** on overnight trains 65/66/67 between Boston and Washington.
- **Delivered 'Safety Starts With Me' training** to most management employees and began the rollout of the program to agreement workers.
- Developed and implemented **new tri-weekly operating plans for long distance routes** and subsequently restored operations to daily service as part of emergency cost-saving measures involving a national furlough and recall process.
- Implemented several **Food and Beverage (F&B) initiatives,** including the restoration of traditional dining on the six western Long Distance routes (*California Zephyr, Coast Starlight, Empire Builder, Southwest Chief, Sunset Limited*, and the *Texas Eagle* for service between San Antonio and Los Angeles).
- **Implemented Mobile Document Compliance System (MDCS),** equipping train and engine (T&E) personnel with tablets loaded with an application to receive rulebooks and other required documentation electronically, improving the reliability of documentation and reducing the amount of printed materials railroad operating employees must carry.
- Started the rollout of mobile device technology to Onboard Service personnel to **improve the customer experience,** including coordinating with station personnel to arrange services for customers requesting assistance.
- **Enhanced T&E couplet optimizer** to quickly generate new couplets based on configurable changes to operating parameters, such as turnaround times and deadheading levels, providing the flexibility needed to achieve different optimization objectives demanded by market and public health conditions.
- Introduced the first of a **new-generation of Quik-Trak self-service ticketing kiosks** that will replace over 200 kiosks that have been in service for nearly two decades in more than 150 stations across the country and provide an improved customer experience. The kiosks are fully Americans with Disabilities Act (ADA) compliant with an available audio instruction for users with limited visibility and a 48-inch height to be accessible for customers in a wheelchair.


New York · Penn Station
← 7th Avenue
8th Avenue →
Back of NJT Train
Front of NJT Train
Moynihan Train Hall →
Moynihan
Train Hall

Five-Year Plan

Safety is Amtrak's highest priority. The continued implementation of the Safety Management System and of Positive Train Control (PTC) systems and practices on all route-miles used by Amtrak are the two most critical projects for FY 2022. For Amtrak to be a world class transportation company, we must achieve world class safety results. Our mission is to be the safest passenger railroad in North America. To achieve this goal, operations will:

- Continue to leverage training to drive safety and enhanced customer experiences as well as management training for new leaders.
- Embrace and disseminate Just Culture concepts to create a learning organization. This will assist in pushing decision making to the lowest potential levels, increase ownership and accountability in the organization, and facilitate continued improvements in safety, customer service and productivity.
- Complete rollout of 'Safety Starts With Me' training to all managers in Transportation and continue rollout to agreement workers.
- Roll out ADA training for completion by all customer-facing employees within the next two years and continue to deliver the customer service training begun in FY 2018.
- Work closely with the Service Lines, Product Development and Customer Experience teams to analyze and incorporate any new guidance from the Centers for Disease Control to ensure Amtrak continues to deliver a safe transportation product that aligns with public health initiatives.

Operations Transformation

We are focused on driving long-term efficiencies that improve the customer experience and position Transportation to scale to meet the exciting opportunities and demands of the future. The advent of the new Intercity Trainset (ICT) fleet, which will also begin the introduction of continuous maintenance protocols throughout Amtrak's network, brings with it an imperative for Transportation to develop a new concept of operations with a greater emphasis on enterprise asset management principles. This requires the development of new capabilities and organizational change to plan and schedule fleet rotation between revenue service and narrow maintenance windows to optimize asset utilization.

Transportation is responding to this challenge by developing an ambitious strategy, Operations Transformation, to deliver transformational change to our core operations. By shedding legacy practices and the reliance on workarounds to overcome outdated technology systems, Transportation will use this opportunity to reimagine and reengineer daily operations. Business process reengineering will standardize regular operations through more sophisticated planning and scheduling functions using enterprise asset management principles, optimize incident management practices, and reorient all activities to center on improving customer care, from communication to incident recovery times. This strategy will introduce new processes and technologies to deliver transformational change through an engaged workforce driving continuously towards Operational Excellence.

As always in Operations, business outcomes will be measured first in terms of improved safety performance. The strategy also centers customer satisfaction as a critical measure of Operations' performance. Creating a climate where Amtrak's diverse workforce can flourish and innovate is one of the foundational enablers on which the initiative will be built. Collectively, these components will create a learning organization that is equipped with the tools needed to excel, applying data-driven principles to drive improvements on a continuous basis.

Operations Transformation Strategy

Operations Transformation, continued

To achieve this goal, Transportation will:

- Reimagine the Centralized National Operations Center (CNOC) to deliver better outcomes for customers by realigning all activities involved in planning normal operations and responding to incidents, improving collaboration, and removing inefficiencies as part of a relocation of the center to a new facility.

- Reengineer business processes to adopt enterprise asset management principles, emphasizing disciplined planning and scheduling practices and data-driven approaches to optimize the reliability of train operations and maintenance in readiness for the transition to the ICTs.

- Establish new governance and organization change management frameworks to implement a portfolio of technology initiatives to overcome Operation's technology deficit, adopting state-of-the-art systems that leverage advances in mobile technology, Artificial Intelligence and Machine Learning.

- Foster a culture and practice of continuous improvement to enable our diverse workforce to drive Amtrak's evolution into a learning organization.

Transportation Asset Line Financial Uses

(FY 2022–FY 2027)

($s in Thousands)	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Total
FINANCIAL USES (OPERATING)							
Service Line Management	22,200	27,977	29,917	31,459	32,945	34,468	178,966
Train and Engine Crew Labor	472,094	530,437	568,130	595,944	622,383	648,914	3,437,901
Onboard Service Labor	173,478	213,093	226,952	237,744	248,202	258,614	1,358,084
T&E Overhead and Operations Management	87,750	111,162	119,770	126,457	132,927	139,564	717,630
Commissary Operations	99,821	125,555	134,734	141,587	148,164	154,737	804,598
Connecting Motor Coach	36,470	55,698	59,962	63,014	65,852	68,711	349,707
Host RR, MOW and Performance Incentives	143,349	165,290	178,564	188,062	197,015	206,011	1,078,291
Dispatching	57,407	63,715	69,883	75,143	80,384	85,842	432,372
Fuel and Power	218,174	270,941	292,345	309,243	325,703	342,449	1,758,855
Commissions	687	1,902	2,026	2,122	2,215	2,308	11,259
Passenger Inconvenience & Claims	6,915	20,274	21,505	22,460	23,380	24,301	118,835
Total Operating Uses	**1,318,343**	**1,586,044**	**1,703,788**	**1,793,234**	**1,879,171**	**1,965,919**	**10,246,499**
FINANCIAL USES (DEBT SERVICE PAYMENTS)							
Debt Repayments	-	-	-	-	-	-	-
Total Debt Service Payments	**-**	**-**	**-**	**-**	**-**	**-**	**-**
FINANCIAL USES (CAPITAL)							
Service Line Management	7,875	-	-	-	-	-	7,875
Technology & Systems	58,885	47,591	7,045	2,616	2,431	1,998	120,566
Facilities	201,242	11,600	9,749	10,153	5,700	5,700	244,144
Operations Equipment	7,236	-	-	-	-	-	7,236
Total Capital Uses	**275,238**	**59,191**	**16,794**	**12,769**	**8,131**	**7,698**	**379,821**
Total Transportation Spend	**$1,593,581**	**$1,645,235**	**$1,720,582**	**$1,806,003**	**$1,887,302**	**$1,973,618**	**$10,626,320**

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ALC-42 locomotive, which entered Amtrak service in February 2022, flanked by Siemens Venture coaches under construction for Amtrak state partners.

Equipment Asset Line

As of the start of the current fiscal year, Amtrak operated an active equipment fleet of 286 locomotives, 1,335 railcars and 20 high-speed trainsets (which include motive power and passenger cars), plus 244 locomotives and railcars owned by its state partners. Amtrak's fleet generally consists of custom-built equipment nearing the end of its useful service life, much of which was built by manufacturers who are no longer in business.

Most passenger railcars operating in North America are retired after 30 to 50 years of service. Globally, most high-speed trainsets are replaced after significantly shorter lifespans.

To address this issue, Amtrak has embarked on a comprehensive, multiyear strategy of initiatives to modernize its locomotive and passenger car roster. Amtrak has placed base orders for at least 101 new trainsets and 125 diesel locomotives, all to be manufactured in the United States. These orders include options for up to 140 additional intercity trainsets (ICT) and up to 50 additional diesel locomotives. Amtrak intends to complete its re-fleeting with a procurement for new long-distance railcars, to be placed within the five-year timeline of this plan.

Amtrak's Equipment Asset Line Plan (Equipment Plan) is an ambitious one, requiring the execution of several major equipment acquisition programs in relatively quick succession. However, the benefits of such a program will be enormous.

An Aging Fleet

35 years

The average age of an Amtrak-owned or leased railcar.

24 years

The average age of an Amtrak-owned diesel locomotive.

22 years

The average age of an Amtrak-owned trainset.

20 years

The average age of a state-owned locomotive or railcar operated by Amtrak.

9 years

The average age of an Amtrak-owned electric locomotive.

Overview

Amtrak's Equipment Asset Line Plan supports the current and planned product mix and service structures of each service line. For example:

The Northeast Corridor (NEC) Service Line

The NEC Service Line's plan to increase *Acela* capacity and service and provide an enhanced customer experience is supported by the forthcoming launch of next-generation *Acela* trainsets and the ICT procurement.

The State Supported Service Line (SSL)

The SSL plans to increase ridership and revenue by developing new and expanded corridors, acquire new fleet, and maximize operational efficiencies to reduce costs funded by state partners. The ICT procurement initiative is integral to all three goals.

The Long Distance Service Line (LDSL)

The LDSL identifies acquisition of new equipment that will improve operational and financial performance, enhance customer satisfaction, and reduce greenhouse gas emissions as one of its major strategic goals. The strategic initiative to refresh long-distance Superliner and Viewliner I equipment in this plan supports the LDSL's goal of near term product improvement.

Pacific Surfliner

New ALC-42 Charger #300 on Train 6, the *California Zephyr*, being delivered.

Asset Line Goals

The Equipment Plan initiatives support the following Amtrak FY 2022 goals:

Serve with Safety

This plan includes replacement of legacy equipment with new equipment that includes modern safety features allowing Amtrak to take advantage of nearly 50 years of design innovations in railcar safety.

Grow the Business

New, modern equipment with up-to-date features and increased capacity will attract new riders and provide space to accommodate them. Amtrak's comprehensive re-fleeting will bring a more modern product to nearly all routes within the next decade. Amtrak's fleet procurements include options to allow for substantial growth where demand warrants, and the introduction of dual-power (diesel and electric) propulsion and double-ended consists on *Northeast Regional* will allow Amtrak to operate more trips with a given number of trainsets than it can today.

Launch the Future

The initiatives in this Equipment Plan represent a key component of Amtrak's pivot from survival towards an aggressive program of building for the future. They will provide the additional capacity and modern customer amenities necessary for the significant expansion of Amtrak service contemplated by the recently enacted Infrastructure Investment and Jobs Act (IIJA) This plan also includes the construction and/or retrofit of maintenance facilities to support new maintenance practices that will improve the reliability and performance of Amtrak's equipment fleet of the future.

Project Milestones

Amtrak began its second half century last year with several exciting fleet milestones accomplished or coming soon. In addition to the ICT trainset order, during FY 2021 Amtrak received the last of the 130 Viewliner II long-distance railcars and the first new ALC-42 diesel locomotives, which entered service on Amtrak's long distance network in early FY 2022. Also debuting during early FY 2022 were the first of 137 state-owned, Amtrak-operated Siemens Venture cars on Midwest state corridor routes. Amtrak also looks forward to progressing through testing, commissioning, and crew training activities for its new high-speed next-generation *Acela* fleet as Amtrak prepares for a 2023 service launch.

Asset Inventory

Amtrak's Fleet Today

Amtrak's Equipment Asset Line includes its fleet of passenger locomotives, railcars, and trainsets, as well as the facilities to maintain this fleet. The equipment is used to carry customers on the railroad's three intercity rail passenger service lines: Northeast Corridor, State Supported and Long Distance.

At the start of FY 2022, Amtrak's fleet of active owned and leased passenger train equipment includes the units listed below. Due to the COVID-19 pandemic and related storage of some equipment, the number of active units listed here may differ from the combined active and inactive (including stored) fleet quantities listed elsewhere in this document.

General Electric P-40/P-42 diesel locomotives (174 units) and P32ACDM dual-mode locomotives (18), built from 1993-2001. P-40/42 locomotives are used nationwide on long-distance and State Supported routes, while P32ACDM units are used on services between New York City (where their ability to use electric power is required to access Penn Station) and Albany-Rensselaer, NY, Niagara Falls, NY and Rutland, VT. Amtrak's fleet of 17 P32-8 locomotives, generally used in terminals but also capable of road operations, is approaching 30 years of age.

Siemens ACS-64 electric locomotives (66), built between 2013 and 2016, are used to haul *Northeast Regional*, *Keystone Service* and other corridor and long-distance trains that operate in electrified territory on the NEC.

Amfleet I (435) and ex-*Metroliner* (16) railcars, built 1975-1977 (1967 for the ex-*Metroliner* coaches), which are the workhorses of *Northeast Regional,* Northeastern state corridor and some Midwestern corridor routes.

Amfleet II coaches and lounge cars (134), built 1981-1983, are used on all long-distance routes that serve New York City (where clearances preclude operation of bi-level Superliners), as well as the State Supported *Adirondack*, *Maple Leaf* and *Pennsylvanian*.

Superliner I railcars (227), built 1979-1981 and **Superliner II railcars (163)** built 1993-1995 are used on all long-distance routes except those which serve New York City, as well as several State Supported routes.

Horizon railcars (65), built 1989-1990 are used on Midwest, Amtrak Cascades, and California state corridors. These units will soon be displaced from their current routes by state-owned Siemens Venture equipment and will become available for re-deployment on corridor routes experiencing ridership growth.

Viewliner I (38), and Viewliner II (117) railcars, including sleeping and dining cars used primarily on long-distance routes serving New York, and baggage/baggage-dorm cars used nationwide. Viewliner I cars were built 1995-1996 by Morrison-Knudsen, while Viewliner II cars were built between 2014 and 2021 by CAF USA.

***Acela* trainsets (20),** built 1999-2001, which will be retired following the delivery of the new *Acela* trainsets.

Surfliner cars (39), built in 1999-2001 for *Pacific Surfliner* service. Amtrak also operates an additional ten Surfliners are owned by Caltrans, its California state partner.

***Auto Train* Auto Carriers (77),** built in 2006 by the Johnstown Corporation of America, are used to haul passenger automobiles on *Auto Train*.

Amtrak's Active Fleet of Operated Passenger Equipment, Start of FY 2022 (October 1, 2021)

Active counts based on October 2021 query of Amtrak's Operations Maintenance Systems (OMS) and subsequent review by System Operations and Finance.

Fleet Type	Ownership Status	Active Fleet	Avg. Yr. Built	Avg. Unit Age (Yrs)	Notes
AMTRAK-OWNED/LEASED LOCOMOTIVE FLEETS					
ALC-42	Amtrak-owned	0	2021	0	First trainsets undergoing testing, not yet active for revenue service.
GE P-42-8 Diesel	Amtrak-owned	174	1998	23	
GE P32-8 Diesel	Amtrak-owned	17	1991	30	
P32ACDM Dual Mode	Amtrak-owned	18	1996	25	
GE P40-8 Diesel	Amtrak-owned	11	1993	28	
Siemens ACS-64 Electric	Amtrak-owned	66	2014	7	
HHP-8 Electric	1 unit leased, 14 owned	15	2000	21	In reserve status.
AMTRAK-OWNED/LEASED RAILCAR FLEETS					
Heritage	Amtrak	5	1954	67	
Amfleet I	Amtrak	435	1976	45	
Amfleet II	Amtrak	134	1982	39	
Ex-Metroliner	Amtrak	16	1967	54	
Horizon	Amtrak	65	1989	32	
Superliner I	47 leased, 180 owned	227	1980	41	As of Dec. 2021, 47 units remain under lease; remaining Superliners are owned.
Superliner II	Amtrak	163	1995	26	
Viewliner I	Amtrak	38	1996	25	
Viewliner II	Amtrak	117	2015	6	
NPCU (former F40PH)	Amtrak	19	1977	44	F40PH locomotives built 1977 and rebuilt into NPCUs.
Auto Carrier	Amtrak	77	2005	16	
TRAINSET FLEET OWNED/LEASED BY AMTRAK					
First-Gen Acela	2 sets leased, 18 owned	160	1999	22	Does not include Acela Inspection Car (non-passenger equipment).
Next-Gen Acela	Amtrak	0	2021	0	First trainsets undergoing testing, not yet active for revenue service.
STATE-OWNED FLEETS OPERATED BY AMTRAK					
California Cars	California	91	1996	25	Most cars are California I built in 1996, also includes Comets (1968) and California II (2002).
Talgo	Oregon	33	2013	8	Amtrak, WSDOT trainsets no longer active; Active trainsets are ODOT-owned.
Oregon NPCU Units	Oregon	2	1977	44	Subfleet of Amtrak NPCU fleet with an average build date as F40PHs in 1977.
NCDOT Railcar	NCDOT	20	1961	60	
NCDOT F59/F59PHI	NCDOT	9	1991	30	
F59PHI / P32-8 (Caltrans)	California	14	1996	25	
Siemens SC-44 Charger	WSDOT, IDOT, California	65	2017	3	Of 63 total units, 8 are owned by WA, 20 owned by CA, 33 owned by IDOT.
TRAINSET AND RAILCAR FLEETS WITH OWNERSHIP SPLIT BETWEEN AMTRAK AND STATE PARTNERS AT THE UNIT LEVEL					
Surfliner	Amtrak, California	49	2000	21	Amtrak owns 39 units, California owns 10 units.

Unit Summary	# Units	Avg. Age
Total Amtrak-Operated Units:	**2,040**	**29.7 years**
Amtrak-owned railcar fleets:	1,296	35.0 years
Amtrak-owned trainset fleets:	160	22.0 years
Amtrak-owned/leased diesel locomotive fleets:	220	24.0 years
Amtrak owned/leased electric locomotive fleets:	81	9.6 years
State or split-ownership fleets:	283	20.3 years

A full inventory of passenger fleet assets, including unit-level in-service status and ownership as of the start of FY 2022, is included within the Equipment Appendices.

Amtrak's Fleet Today, continued

The age and condition of Amtrak's equipment is a continual challenge. Insufficient equipment has caused some state partners to look elsewhere for cars and locomotives to support ridership growth. Road diesel locomotives suffer from mechanical challenges due to their age and accumulated years of wear and tear, which can cause train delays resulting in passenger inconvenience and dissatisfaction. Other drawbacks include the lack of expected modern amenities such as manufacturer-installed Wi-Fi, and even baby changing tables on many routes. The small windows and limited toilet retention tank capacity of Amfleet I cars also negatively impact the customer experience. Furthermore, the dated layout of restroom modules on Amfleet and Superliner equipment hinders Amtrak's ability to keep cars clean, further degrading customer satisfaction.

Much of Amtrak's current equipment fleet does not reflect modern propulsion technologies and operating practices that enhance efficiency. Equipment operating over the electrified NEC is not dual-powered, so time-consuming engine changes between electric and diesel locomotives are required on trains that operate over both the NEC and connecting unelectrified lines. Most Amtrak trains are not dual-ended (equipped to operate in either direction), which significantly increases turnaround time at terminals.

Superliner I Sleeping Car

Now Arriving: Fleet Renewal and the IIJA

Amtrak has historically found railcars to have a useful commercial life of 30 years, and 20-25 years for locomotives. The key factors that limit useful commercial life include:

- **Maintainability.** Cost of routine maintenance on equipment (which rises over time, due to wear and component obsolescence).
- **Availability.** Quantities and types of cars required to meet evolving service needs.
- **Technical capability.** Capacity to meet service requirements.
- **Customer acceptance.** Appeal of the equipment to passengers.
- **Capital availability.** Ability to fund fleet replacements, which may not exist when the outermost limit of useful or commercial life is reached.

By any of these measures, much of Amtrak's fleet needs replacement. As new equipment typically takes four or more years from contract award to when the first unit enters service, Amfleet and Superliner I equipment will have operated for approximately 50 years, and P-40/P-42 diesel locomotives approximately 25-30 years, by the time replacements are manufactured, tested, and delivered.

In the next five years, Amtrak expects to receive 28 new high-speed *Acela* trainsets, 125 new ALC-42 diesel locomotives, and the first new ICTs. Options for additional diesel locomotives and trainsets provide Amtrak with the ability to increase orders to support future growth. Amtrak also plans to order new long-distance railcars during that period to replace the bulk of its aging long-distance railcar fleet. We also plan to complete the refresh of legacy equipment to improve short-term customer amenities.

The new procurements will include Technical Services and Spares Supply Agreements (TSSSAs) with the equipment manufacturers to ensure long-term support and parts availability for the new equipment. We also plan to assess and modify our mix of capabilities at shops and terminals to support new trainsets on order and dispose of aged equipment to fundamentally improve overall efficiency, quality, reliability, and availability of our rolling stock.

By the end of 2027, all first-generation *Acela* trainsets, many P-40 and P-42 diesel locomotives and all Talgo equipment we operate will be retired, and the complete replacement of Amfleet I equipment with the ICTs will be well underway. These acquisitions will materially reduce the average age of Amtrak's fleet. Further deliveries, including the remainder of the Intercity Trainset procurement and our planned order for new long-distance rolling stock will continue after the period covered by this plan. We anticipate the complete retirement of our P-40/P-42, Amfleet I and II and Superliner fleets by the early 2030s.

Amtrak's fleet initiatives present several excellent opportunities for effective uses of IIJA funding. We expect to the IIJA will fund large portions of our transformative fleet strategy for which other funding has not been secured, including Amtrak's $7.3 billion ICT procurement which includes both fleet acquisition and facilities upgrades. Another candidate project for IIJA funding can be found in Amtrak's order for ALC-42 locomotives; an option for 50 additional units to supplement the base order of 75 was approved by Amtrak's Board of Directors in January 2022.

Amtrak also intends to use IIJA funds to begin replacing most of its 744-unit fleet of long-distance railcars with new equipment. Renewal of long-distance locomotive and railcar fleets will allow Amtrak to provide a more modern, efficient rail service across its National Network, which serves the majority of rural and underserved communities on its system and will allow Amtrak to operate a uniformly modern and efficient fleet of equipment nationwide.

Equipment Asset Line Plan Leadership

Equipment initiatives are managed through close coordination among teams. Mechanical work, from refresh through heavy overhauls and wreck repair, and the development of specifications for equipment acquisitions, is managed by Chief Mechanical Officer George Hull. Fleet planning work, including route/service needs and fleet and repair facility sizing needs, are managed under Amtrak's planning organization, led by Executive Vice President Dennis Newman. New equipment acquisition initiatives, including Requests for Proposal (RFPs), Financial and Technical evaluation work, are conducted by a cross-functional team under Chief Procurement Officer Mark Vierling. Implementation initiatives following contract award are led by the Capital Delivery team under EVP Laura Mason.

Amtrak's Mechanical Facilities and Capabilities

Amtrak maintains the facilities to provide various levels of car, locomotive, and trainset maintenance on a national basis, and manages a maintenance program that includes facilities operated by contractors or owned by State Partners.

Work ranges from simple overnight or midday turnaround of equipment between trips to restoration of wreck-damaged equipment and heavy overhauls on equipment that is no longer supported by the original manufacturer.

Between now and the FY 2027 horizon of this plan, Amtrak plans to spend approximately $2.5 billion on capital work to maintain Amtrak's fleet in a state of good repair through overhauls, wreck rebuilds, refreshes and other key projects, in addition to costs related to upcoming fleet replacements and facility needs.

Facilities Overview

The fleet is maintained in over 60 locations nationwide, ranging from rail yards where basic cleaning and light servicing work is done to back shops where heavy overhauls and rebuilds of wrecked equipment are performed. All high-speed trainset maintenance for *Acela* trainsets takes place at three purpose-built facilities in Boston, New York, and Washington.

Three major "backshops" deal with conventional equipment in Wilmington, Delaware (specializing in locomotives), Bear, Delaware (specializing in Amfleet I equipment) and Beech Grove, Indiana (specializing in equipment which operates predominantly outside the Northeast). Other programmed mechanical work and repairs take place in over a dozen other facilities located throughout the country, while servicing work between trips takes place at approximately three dozen field locations where trains terminate (or, for long distance trains, where they reach a mileage requirement); this work is sometimes performed by contractors at small end-point locations. Please refer to Equipment appendices for tables which provide information on all Amtrak mechanical facility locations and the work performed at each.

Maintenance Capabilities

Turnaround and Layover Servicing

The most basic type of train maintenance is turnaround and layover servicing. Typical servicing tasks include daily federally mandated inspections of equipment; emptying toilets; refueling, restocking paper goods and other consumables; and rectifying minor mechanical issues that may develop over the course of a train's route (minor bad order repairs). More extensive repairs can typically be carried out at the larger turnaround end point facilities, of which most routes have one, although such extensive repairs often require equipment to be taken out of service for several days.

Periodic Inspections, Preventive and Corrective Maintenance

Every piece of equipment in revenue service is maintained on a periodic inspection schedule to address regulatory requirements and mechanical issues. This work may also be supplemented with preventive maintenance.

Equipment is taken out of service and deadheaded to a facility for work when it is due, which typically takes several days to a week. Tasks during a periodic inspection include a deeper cleaning of equipment than is typical for revenue service, repair of critical and non-critical issues that may require additional tools or staff time/expertise to rectify, application of small-scale modifications to equipment, and mandatory periodic regulatory inspections.

For *Acela*, a different continuous maintenance approach called Reliability Centered Maintenance (RCM) has allowed up to 17 trainsets (of a fleet of 20) to operate in revenue service on a given day, reducing the spare ratio (the percentage of equipment units that are expected to be out of service for maintenance at any given time) for the fleet and increasing revenue for the service. This approach has also been adapted for the ACS-64 fleet, which spreads the traditional periodic regulatory inspections and preventive maintenance tasks into weekly or bi-weekly blocks. All units receive the same work tasks over the course of each set of blocks as they would through the periodic regulatory inspections.

The enhanced fleet availability that comes from Amtrak's shift away from the historic maintenance practices and towards continuous maintenance with vendor support through a TSSSA has yielded measurable results. Enhanced *Acela* fleet availability, for instance, allowed the operation of additional frequencies to meet travel demand and increase revenue.

As a result, Amtrak plans to migrate towards a continuous maintenance approach for its new equipment, including the ICTs currently on order; facilities will be designed around continuous, fragmented maintenance cycles as opposed to the traditional periodic regulatory inspection cycles for the locomotives and railcars they replace.

Overhauls

The centerpiece of the heavy mechanical work program for Amtrak's existing fleet is the three-level overhaul cycle (see sidebar at right).

This will change as Amtrak transitions its fleet towards RCM. Rather than performing all heavy maintenance work on a locomotive, railcar, or trainset in an extended outage once every four years, components are evaluated and replaced individually on rotating schedules aligned with periodic inspections or other maintenance periods to better match the replacement cycles of individual parts based on failure rate experience or OEM recommendations.

For P-42 locomotives, Amtrak entered into a Life Cycle Preventive Maintenance (LCPM) agreement with the original equipment manufacturer, General Electric, to perform larger component replacement work as part of the routine preventive maintenance inspections which occur four times each year, reducing the need for heavy four-year overhauls. Amtrak is committed to this new approach with the ACS-64 locomotives and will implement similar programs with the new *Acela* high speed trainsets and the ICTs as they enter service.

Amtrak's Overhaul Cycle

Level I (Every 4 years)

The lightest overhaul includes complete rebuilding of trucks, HVAC units, brake valves, door operators and system critical components as well as heavy cleaning of carpeted surfaces and seat cushion replacement.

Level II (Every 8 years)

A Level I overhaul plus a complete replacement of all major components such as seats, diaphragms, windows and 480V trainline cabling.

Level III (As needed)

A Level II overhaul plus a complete interior upgrade or reconfiguration, including bathroom modules and any required modifications.

Modifications and Field Alterations (Including Refresh)

Since FY 2018, Amtrak has refreshed over 700 Amfleet I, Amfleet II, ex-Metroliner and Horizon railcars, along with 20 *Acela* trainsets. Refresh of Amtrak Superliner and Viewliner I fleets is currently underway. Refresh elements include new seat cushions, new carpets, restroom air fresheners and other soft goods changes.

Rebuild

The Beech Grove and Bear shops perform restorations of damaged equipment that is deemed economically repairable and convert equipment from one configuration to another as business needs evolve. Restoration of wreck-damaged equipment is critical to the continuation of current Amtrak service levels, since replacements for Amtrak's predominantly custom-built equipment, are usually unobtainable. Specific quantities of cars and locomotives to be repaired in a given year fluctuate depending upon funding, the number of restorable equipment units, and the widely varying scope of work necessary to rebuild each one.

Strategy

Amtrak's Fleet Recovers From the Pandemic

In FY 2020, the COVID-19 pandemic affected Amtrak significantly. Nationwide ridership and revenue declined by nearly half when compared to FY 2019, with some months experiencing declines in excess of 95 percent. As the outcome of emergency funding legislation was uncertain at key decision-making points during the pandemic, Amtrak was forced to temporarily reduce its levels of service across the Northeast Corridor and long-distance routes. On state-supported routes, many state partners requested reductions or suspensions to their services, and these were incorporated in tandem with the reductions in NEC and long-distance frequency and capacity.

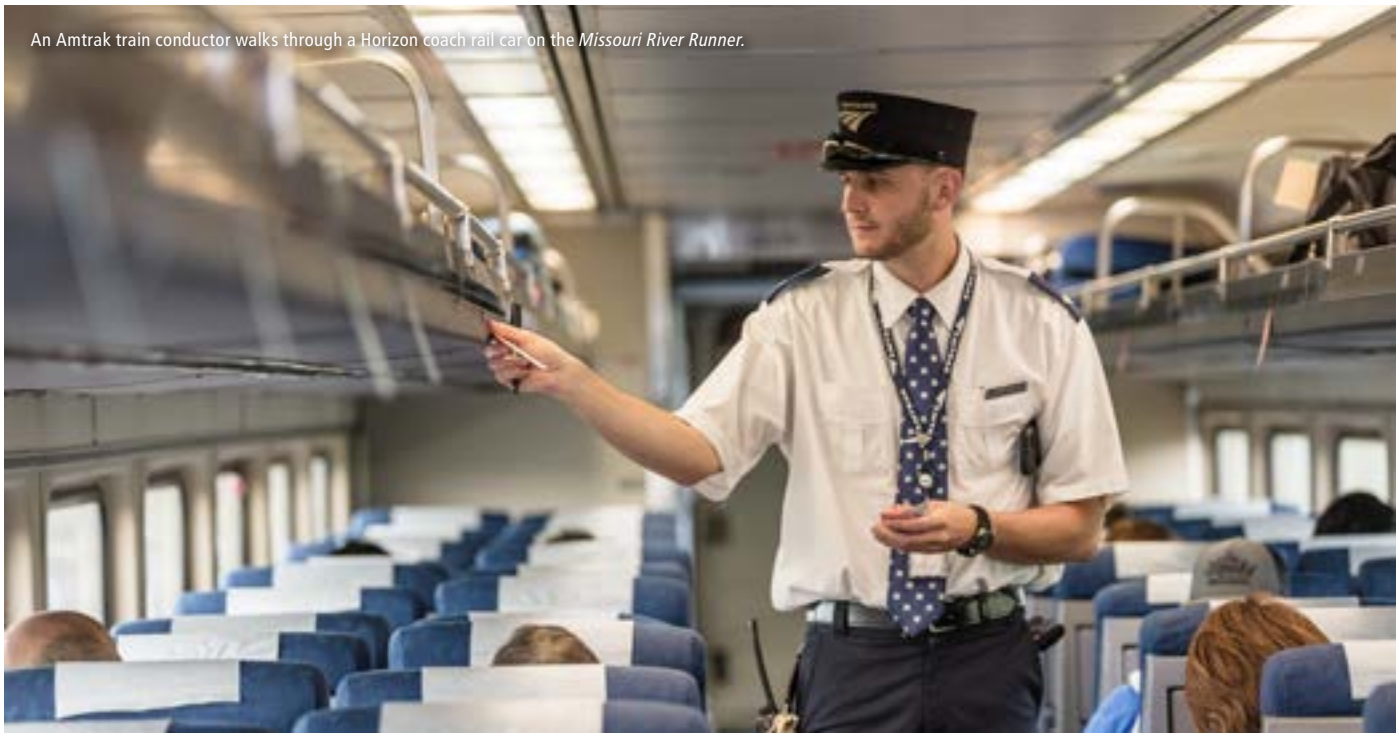
At the beginning of FY 2021, Amtrak placed some 144 passenger railcars into storage. Railcars chosen for this program were those due for Federally-mandated servicing and overhauls This maximized the immediate reduction in cash expenses necessary to weather COVID-19 driven reductions in revenue and uncertainty regarding future federal funding.

As of the end of FY 2021, some 129 railcars and eight locomotives in Amtrak's intercity fleet were in storage.

During FY 2022, Amtrak has been working to restore stored equipment to service, including performing the necessary overhauls and federally-mandated servicing. At this time, the plan is to restore all Viewliner, Superliner, Amfleet I and II cars to service by FY 2023. Specific timelines for restoration will depend upon:

- Future state-supported expansion;
- Passenger demand recovery;
- Availability of sufficient mechanical staff to perform work to restore equipment to service and to maintain it thereafter, and of sufficient employees to staff trains utilizing restored equipment.

Food service and baggage car restorations are also contingent upon forthcoming product decisions regarding checked baggage, Amtrak Express and food service formats by route. No target has been set for returning the 27 stored Horizon cars to service since Siemens Venture cars are replacing Horizon equipment on the Midwest routes on which most Horizon cars operate and there is not an immediate need for the stored Horizon cars.



An Amtrak train conductor walks through a Horizon coach rail car on the *Missouri River Runner.*

New ALC-42 locomotives at Ivy City Yard, Washington, DC.

Now Arriving: ALC-42 Long Distance Diesel Locomotives

In late 2018, Amtrak placed an order for 75 diesel electric locomotives from Siemens. Dubbed the ALC-42 (for Amtrak Long-distance Charger, 4,200 horsepower), this base order of 75 units will begin replacement of General Electric P-40/P-42 diesels used in long-distance service. In January 2022, Amtrak's Board approved the execution of options for 50 additional locomotives, bringing the future fleet total to 125. The P-40 and P-42 locomotives, in long-distance Amtrak service since the 1990s, are nearing the end of their useful service lives.

Revenue service has recently commenced, and All 75 units are scheduled to enter service by early 2025. The base order total cost is $850 million, which includes the purchase price, warranty, technical support, and spare parts through a multi-year TSSSA. Unit acquisition for this base order is funded through a combination of Amtrak's cash reserves and its National Network grant, while ongoing TSSSA work is split between operating expenses (funded by passenger fares and annual grants) and LCPM capital costs.

Amtrak's contract with Siemens includes the ability to acquire up to 100 additional ALC-42 units as options. The 50 additional ALC-42s for which options have recently been exercised will complete the replacement of P-40/P-42 motive power on Amtrak's long-distance network. Remaining Amtrak P-42s in shorter-distance service have either been replaced by state-owned SC-44 Charger locomotives in Amtrak Midwest service or will be displaced by the ICTs. Therefore, we anticipate the complete retirement of the P-40/P-42 fleet over the next decade.

ALC-42 Benefits

Better Performance

The ALC-42 represents a significant generational enhancement over current power. The ALC-42 can operate at speeds up to 125 MPH (15 MPH faster than the P-42) and accelerate 30 percent faster. While both unit types are rated at 4,200 horsepower, the ALC-42 generates head-end power (HEP) for onboard lights, climate control and appliances more efficiently via inverters. This allows an ALC-42 locomotive to provide HEP to more passenger cars than the current P-42, which could facilitate operation of additional Superliners on Auto Train to increase capacity and revenues. Fuel range will improve over both the P-42 and SC-44 Charger ordered by Amtrak's state partners, with the ALC-42's 2,200 gallon fuel tanks give it greater range than P-40/P-42s and SC-44 Chargers.

Environmental Benefits

The ALC-42s will meet EPA Tier IV standards for emissions, with reductions of up to 90 percent in various emission types versus the Tier 0 P-42 units they replace. The units will also be about 10 percent more fuel efficient, helping Amtrak reduce its carbon footprint.

Safety and Reliability Benefits

The ALC-42 features several reliability improvements over the P-42. Scheduled maintenance will require two events per year instead of four, reducing the time cars are out of service for maintenance. The ALC-42s will feature onboard diagnostics which will allow both Amtrak's mechanical team and Siemens technical staff to monitor and diagnose unit conditions in real time. The ALC-42's TSSSA provides stiff penalties for Siemens if the new units do not achieve significant reductions in both the frequency of enroute failures and the time necessary to receive spare parts.

The ALC-42s will also contain several enhancements over the SC-44 Charger locomotives, including enhanced winterization/weatherproofing and a bolt-on nose cone for easy replacement in the event of a grade crossing accident. All units will come equipped with necessary equipment for Positive Train Control.

Now Testing: New *Acela* Trainsets

In 2016, Amtrak ordered 28 next-generation high-speed trainsets to modernize *Acela* service on the Northeast Corridor (NEC). These new trainsets will replace 20 first-generation *Acela* trainsets built in the late 1990s. Alstom, their manufacturer, has built many of the latest-generation European high-speed trainsets. The new trainsets are being manufactured at Alstom's plant at Hornell, New York.

The new *Acela* fleet will serve as the cornerstone of the NEC's premium *Acela* service. It will expand Amtrak's *Acela* fleet size by 40% (28 trainsets compared to the current 20) and total seats by 77% (with each of the 28 sets having 386 seats, versus the current 304). The additional trainsets will allow Amtrak to expand its *Acela* service , making possible all-day hourly service between New York and Boston, and half-hourly service between New York and Washington during peak travel hours.

By leveraging a proven, in-demand design, combined with using a TSSSA to ensure reliable maintenance and parts availability, the new *Acela* trainsets will meet the highest customer expectations for Amtrak's premium service in both the near future and throughout their anticipated 30 year service life.

The new trainsets are primarily funded through a $2.45 billion Railroad Rehabilitation and Investment Financing (RRIF) loan from the Federal Railroad Administration (FRA)that will be repaid using the incremental net revenues generated through increased *Acela* ridership and ticket sales.

Additional new features on these trainsets include USB ports, outlets and lights in the seats, and an increased focus on sustainability via use of materials like e-leather and reduced packaging. The new trainsets will operate at speeds of up to 160 miles per hour on upgraded sections of the NEC as track projects are completed and are capable of operating at higher speeds if further NEC infrastructure upgrades are made.

Prototype trainset testing on the NEC will continue during 2022. The initial trainset design was modified to ensure optimization of the enhanced tilting technology which improves curve performance and passenger ride quality; these modifications necessitated extra testing which extended the timeline for introducing the new trains into revenue service. The first fully equipped trainset was delivered in November 2021; revenue service will begin after completion of testing and validation, commissioning activities, and training on equipment for employees.

Now Arriving: New Railcars for State-Supported Services in the Midwest and California

Utilizing a federal grant, Amtrak's state partners are acquiring 137 Siemens Venture railcars that will replace most of the equipment on Amtrak Midwest state-supported routes and the *San Joaquins*. This fleet will be owned by the states and maintained by Amtrak. California is acquiring seven 7-car semi-permanently coupled trainsets for the *San Joaquins*. Michigan, Illinois, and Missouri are acquiring:

- Twenty coaches;
- Seventeen married pairs of cars consisting of a coach and food service car; and
- Seventeen married pairs of cars consisting of a coach and business class car.

In addition, Wisconsin has received a separate Federal discretionary grant for nine additional railcars, including three cab control coaches, which are being acquired through a separate procurement.

The first Venture cars entered Amtrak Midwest service in February 2022. Remaining deliveries are anticipated to take place over the next two years.

The Venture railcars will displace most equipment currently operating in Midwest corridor and *San Joaquin* service, including most of Amtrak's Horizon fleet. The Horizon fleet, built around 1990, has approximately ten years' service life remaining. Amtrak intends to retain the Horizon fleet for the launch of new state corridor services, including routes in the *Amtrak Connects US* corridor vision, until they are replaced in the early 2030s by additional ICTs beyond the initial 83 trainset base order. In California, the new Venture cars will replace state-owned bi-level California cars, which the state could shift to its other state-supported routes, and state-owned Comet railcars built in the 1960s that the state could opt to retire.

On Order: Intercity Trainsets (ICTs)

In July 2021, as part of a $7.3 billion program, Amtrak signed a contract with Siemens Mobility for new multi-powered ICTs to replace aging equipment and provide a platform to equip future growth on corridor routes. The base order for 73 trainsets (each including a locomotive and six or eight passenger cars) is intended to replace Amtrak's aging fleet of 478 Amfleet I railcars built in the 1970s and 16 ex-Metroliner railcars built in the 1960s, as well as Talgo equipment used on Amtrak Cascades. Amtrak also has short-term options for up to ten additional trainsets, allowing Amtrak to tailor its base trainset order size to match its ridership recovery from the COVID-19 pandemic. The contract with Siemens provides pricing for up to 130 options for additional trainsets to allow Amtrak to equip future growth on corridor services, including the implementation of the *Amtrak Connects US* corridor vision strategy. Amtrak plans to use IIJA funding for the base order and possibly for exercise of future options.

The ICT program includes a 23-year TSSSA for Siemens to provide technical support and spare parts, and the construction of new or retrofit of existing maintenance facilities enable twenty-first century trainset maintenance best practices.

The base order trainsets will be built in four configurations, each tailored to the capacity and propulsion needs of the routes over which they will operate. All trainsets will include a Charger locomotive on one end of the consist and a cab control passenger car on the opposite end. The four configurations include:

Twenty-six (26) catenary-diesel dual-power trainsets, consisting of an ALC-42E locomotive and six passenger cars, for use on the *Downeaster, Vermonter, Pennsylvanian, Palmetto, Carolinian* and *Keystone Service*. The passenger car closest to the locomotive will be an Auxiliary Power Vehicle (APV) containing a pantograph, transformer cabinet and supplemental powered truck for use in electrified territory; power drawn from the APV will also be fed to the traction motors in the locomotive to ensure sufficient acceleration when operating on the Northeast Corridor (NEC).

Twenty-four (24) catenary-diesel dual-power trainsets (with a short term option to acquire eight more), consisting of an ALC-42E locomotive and eight passenger cars, for use on *Northeast Regional* including through trains to Virginia and Springfield, Massachusetts. These trainsets will also include an APV for use on the NEC.

Amtrak's *Ethan Allen Express* passes through Whitehall, NY.

Fifteen (15) battery-diesel hybrid trainsets with a short term option to acquire two more), consisting of an ALC-42E locomotive and six passenger cars, for use on the *Empire Service, Ethan Allen Express, Adirondack,* and *Maple Leaf*. The passenger car closest to the locomotive will contain a battery which will supply electricity to the locomotive for power when operating around New York Penn Station, eliminating the need for third rail propulsion. These trainsets represent the first time that battery propulsion will be used for intercity rail passenger service in the United States on a non-experimental revenue service basis.

Eight (8) diesel trainsets, consisting of either an ALC-42E or Washington DOT (WSDOT)-owned WSDOT SC-44 Charger locomotive and six passenger cars, for use on all Amtrak Cascades trains.

The table below provides a summary of Amtrak's base trainset order, routes, and trainset types; please note that the trainset quantities shown in the table include available short-term deferral options.

Amtrak Intercity Trainset Base Order Quantities and Configurations

Configuration	No. of Trainsets	Propulsion	Consist*	Routes
B-1	26	Dual-Power (Catenary + Electric EPA Tier IV Diesel)	ALC-42E locomotive and six cars (B-1)/eight cars (B-2) including one cab control coach, three trailer coaches (B-1)/five trailer coaches (B-2), food service car and business class. Trailer car closest to locomotive also includes APV with pantograph and transformer for catenary propulsion.	*Downeaster, Vermonter, Pennsylvanian, Palmetto, Carolinian, Keystone Service*
B-2	32			*Northeast Regional* including Virginia, Springfield Line through service
C	17	Hybrid (Electric Battery + EPA Tier IV Diesel)	ALC-42E locomotive and six cars including one cab control coach, three trailer coaches, food service car and business class. Trailer car closest to locomotive includes battery for hybrid propulsion.	*Empire Service, Adirondack, Maple Leaf, Ethan Allen Express*
D	8	EPA Tier IV Diesel	ALC-42E or WSDOT-owned SC-44 Charger locomotive and six cars including one cab control coach, three trailer coaches, food service car and business class.	Amtrak Cascades

*Order of cars in consist is TBD

On Order: Intercity Trainsets, continued

The new trainsets will introduce several generational advantages over legacy equipment; key features include:

- Cab controls on both ends of all train consists will allow for significant reductions in turnaround time for routes which currently require trainsets to be looped or wyed in between trips, such as *Northeast Regional* and *Empire Service*. As a result, each trainset can spend more time in revenue service and less time sitting in terminals throughout the service day.

- Dual-power catenary-diesel operation eliminates engine changes between diesel and electric locomotives in Washington, Philadelphia, and New Haven. This allows for shorter travel times, eases congestion around major terminals by eliminating light engine movements and eliminates the loss of on-board power during the engine change process.

- When operating in diesel mode, the new trainsets will meet EPA Tier IV emissions standards, including a reduction of up to 90 percent for some categories of emissions over the P-42 diesels they replace in state corridor services.

- Generational improvements in train interiors, including on-board electronic signage, vestibules, lighting, and restrooms.

- Significant reliability improvements are anticipated. The TSSSA will impose stiff penalties on Siemens if the frequency of "bad order" events exceeds specified thresholds. The dual-power and hybrid characteristics of most trainsets create backup propulsion possibilities should catenary or other power problems develop enroute. Finally, many trains which currently only have an engineer's cab at one end of the consist will gain a second cab on the opposite end; if a fault is discovered in one locomotive cab prior to departure (such as with cab signals or PTC equipment), the train can be turned rather than being taken out of service.

- The ICTs will also meet or exceed all requirements of the Americans with Disabilities Act (ADA) for new-build equipment, replacing legacy equipment which was built prior to the ADA's passage and not designed for accessibility on which various accessibility elements were added during overhauls.

Currently, Amtrak's trainset project team is working with Siemens on the final design elements, livery, and interior furnishings for the new trainsets. Additional trainset renderings, branding and other public announcements for these trainsets will be released as this work is complete and the project transitions to construction. The first ICTs are currently forecast to enter service on Amtrak Cascades in 2025, with all trainsets in service by the end of 2030.

The *Empire Builder* crosses Gaynor Trestle in Washington State.

In Design: Facility Upgrades to Support Intercity Trainsets

Approximately $2 billion of the $7.3 billion ICT program is allocated to upgrade Amtrak facilities in the major Northeast and Northwest terminals which will handle the new trainsets, as well as make improvements to rail yard and turnaround facilities at outlying points. Amtrak is currently performing alternatives analysis (for some locations) and design work (for others) on new or retrofitted maintenance facilities to enable the change from unit-based maintenance to trainset-based maintenance.

Under traditional, unit-based maintenance, equipment is maintained at the railcar or locomotive level. This requires an individual railcar to be removed from the train and replaced with a like unit whenever that car is coming up on a deadline for a periodic regulatory inspection, four-year overhaul, or other programmed work. Nearly every unit on a given train consist has its own unique set of dates for upcoming planned mechanical work. If a mechanical problem arises on any one car or locomotive, that unit is removed from the train or "set out," and a replacement unit is located and added to the train consist. The unit with the mechanical fault is then repaired when mechanical staff resources allow and placed onto another passenger train at the next convenient opportunity.

Under modern trainset maintenance, equipment is maintained at the trainset level and most components on a trainset are modular in nature. Instead of switching individual railcars in and out of train consists for programmed work, the entire trainset is moved into a shop at a set time for programmed work to occur simultaneously on all units in the consist. Should an unplanned issue arise on the trainset, the entire trainset is brought into a maintenance building in between passenger trips. The faulty component is removed from the train and sent out for repair; a replacement component is placed in or on the locomotive or railcar; and the trainset is then released for service.

Major maintenance facilities at Boston-Southampton Street, New York-Sunnyside, Washington-Ivy City, Albany-Rensselaer, and the Seattle coach yard are all planned for upgrades to handle the new ICTs and are currently either undergoing alternatives analysis or design work. These facilities will include Maintenance & Inspection (M&I) buildings which will provide all the capabilities of current Service & Inspection (S&I) buildings, plus additional repair and preventive maintenance capabilities. A heavy maintenance facility at Penn Coach Yard in Philadelphia, currently in design, will also be capable of performing M&I work. Together, these facilities will also perform five-day brake inspections in compliance with FRA regulations. Outlying terminals in Harrisburg, Pittsburgh, Savannah, Charlotte, Newport News, Norfolk, Roanoke and/or New River Valley, Richmond, Springfield (MA), Brunswick, Burlington (VT), Niagara Falls (NY), Portland (OR) and Eugene will also be improved as necessary to support overnight servicing of the new trainsets, including the addition of Diesel Exhaust Fluid (DEF) resupply to the current overnight servicing requirements of inspections, cleaning, re-watering, refueling, and waste retention tank servicing. Larger facilities will receive dedicated Servicing & Cleaning (S&C) tracks to expedite the overnight train turnaround process when equipment does not need to access M&I buildings.

Trainset facility work will continue throughout the 2020s, with new facilities coming online across the affected routes in tandem with the deliveries of trainsets.

Amtrak's Next Priority: New Long-Distance Rolling Stock

In the past six years, Amtrak has awarded contracts to modernize most of its passenger equipment nationwide, including new high-speed trainsets (order placed in 2016), long-distance locomotives (2018) and conventional trainsets for the NEC and state corridors (2021). With these orders placed, there is one remaining portion of Amtrak's fleet still in need of a fleet modernization solution: Long-distance railcars.

Amtrak's long-distance railcar fleet consists of 774 units:

- 266 Superliner I railcars, built by Pullman-Standard between 1979 and 1981.
- 142 Amfleet II railcars, built by Budd between 1981 and 1983.
- 186 Superliner II railcars, built by Bombardier between 1993 and 1996.
- 50 Viewliner I railcars, built by Morrison-Knudsen in 1995 and 1996.
- 130 Viewliner II railcars, built by CAF (Construcciones y Auxiliar de Ferrocarriles) USA and delivered to Amtrak between 2014 and 2021.

Superliner Sightseer Lounge on the *Sunset Limited.*

Except for the Viewliner IIs, all Amtrak's long-distance railcars are over 25 years old. Over half of the fleet has approximately four decades in Amtrak service, and nearly 60 percent was built by manufacturers who are no longer in the passenger rail industry. The fleet is well-worn from a usage perspective as well: The oldest Superliner I railcars have traveled approximately nine million miles in Amtrak service. This aged, well-worn fleet hinders Amtrak's ability to satisfy customers today, a problem which will only get worse with time.

Now that orders have been placed for high-speed trainsets, long-distance locomotives, and conventional trainsets, Amtrak plans to turn its attention to the replacement of the long-distance railcar fleet.

While the refleeting of Amtrak's long-distance network is a major priority and an excellent use of IIJA funding, a new railcar order of this magnitude for unique equipment cannot occur overnight. During FY 2022, Amtrak expects to commence preparations for acquiring a new long-distance fleet, including customer and market/supplier research, rolling stock engineering, and other steps necessary to develop the specifications for a long-distance railcar order. Market and supplier research may include a Request for Information (RFI). Once specifications have been developed, Amtrak can launch a Request for Proposals (RFP) for new equipment, receive vendor bids, negotiate with vendors, and ultimately award a contract. Amtrak will likely seek a TSSSA with any vendor to ensure that its Mechanical forces will have access to original equipment manufacturer (OEM) expertise and a ready supply of spare parts throughout the service life of the new equipment. Amtrak anticipates the award of a contract, and for new railcar construction to be well underway, by the end of the five-year horizon of these Service and Asset Line Plans.

Significant customer and marketplace research is necessary for this once-in-a-generation procurement. The bi-level Superliner fleet's original design roots trace back to the Atchison, Topeka, and Santa Fe Railway's Hi-Level railcar design from the 1950s, while single level Amfleet II is based upon the design of the original *Metroliner* railcars of the 1960s. The new fleet must reflect the major changes in customer preferences and rolling stock design over the past six to seven decades.

While specific delivery timelines for new equipment will be negotiated with the vendor, new railcars generally require about four years from the time of contract award until the first new unit enters service, and deliveries of hundreds of railcars from an order usually take place over the span of three to five years. Therefore, Amtrak anticipates that the first new long-distance railcars will arrive towards the end of the current decade, with deliveries continuing into the early 2030s.

Long-Distance Replacement Railcar Procurement Process and Timeline

Development of Railcar Order Specifications

Customer & Market Research/RFI,Rolling Stock Engineering, etc.

→

Procurement

Request for Proposals, Technical/Financial Evaluations, Contract Award

→

Railcar Deliveries

Testing, commissioning, crew training, entry into service.

FY 2022

Mid-2020s

Industry Average is 4 years from contract award to entry into service.

Late 2020s

Industry Average sees new railcars in large orders delivered over a span of 3-5 years.

Early 2030s

Refresh of Existing Equipment

Amtrak is continuing its multi-year initiative to refresh its railcars so that customers experience a modern seat and cabin interior even on older equipment. Refresh addresses the interior fittings of a passenger railcar which customers see and feel. These include seating cushions and upholstery, carpet, LED lighting, tables, and curtains. Cars also receive a deep-cleaning as part of the refresh process.

By early 2020 when the refresh initiative was temporarily paused due to the COVID-19 pandemic, all Amfleet I, Amfleet II, first-generation *Acela* and Horizon railcars had been refreshed, representing over half of Amtrak-owned railcar and trainset units. In Summer 2021, Amtrak was able to launch the $28 million Superliner and Viewliner I refresh program. The first refreshed Superliner coaches entered revenue service during the latter part of FY 2021, and Amtrak expects all Superliner and Viewliner I cars will have completed refresh by the end of FY 2023; the exact completion date is contingent upon Amtrak's ability to fill vacant Mechanical positions.

By improving the interior appearance of passenger railcars, fleet refresh allows Amtrak to provide customers with the best possible travel experience until new equipment can be funded, procured, and manufactured. However, it does not address underlying mechanical wear and tear of railcars that can be four or more decades in age.

Disposal of Retired Equipment

Amtrak's new equipment acquisitions will result in a continued need to dispose of locomotives and railcars as new units displace portions of the current fleet. Over half of the Amtrak's current revenue fleet will be retired in the next decade, greatly expanding the need to dispose of equipment beyond the hundreds of units disposed of in recent years.

Amtrak has established a consistent process by which units are identified as candidates for disposal and made available for sale after vetting to identify any ownership/title, legal or asbestos/environmental abatement considerations. As part of this process, Amtrak has established a point of contact (assetrecovery@amtrak.com) for potential buyers to express interest in receiving updates as future units become available for sale.

P-42 hauling *Northeast Regional* train arrives at Richmond, Virginia's Main Street Station.

FY 2022–2027 Fleet Retirement Outlook

First-Generation *Acela* trainsets

Amtrak anticipates replacing all first-generation *Acela* trainsets within the five-year outlook of this plan. Amtrak has concluded that continued operation of first-generation *Acela* trainsets on other Amtrak routes would be impractical. Amtrak will not have the capacity to maintain them at *Acela's* custom-built maintenance facilities once they are retrofitted to serve next-generation trainsets; operating them on other routes that are not electrified or have low-level platforms is not feasible; and their current seating arrangement would require costly retrofits to provide sufficient capacity in non-premium services.

P-40/P-42 Locomotive fleets

The arrival of ALC-42 locomotives will allow for the retirement of at least 75 P-40/P-42 units by the end of FY 2025. Over the next decade, Amtrak plans for the entire P-40/P-42 fleet to be replaced, along with P32ACDM dual-mode power locomotives, following the arrival of additional ALC-42 options units and dual-power intercity trainsets (ICTs).

Amfleet I and ex-Metroliner railcars

Amtrak plans to retire this combined fleet of nearly 500 cars once the ICTs prove themselves reliable in revenue service. Retirements will likely be underway by the end of FY 2027, and Amtrak anticipates all Amfleet-I and ex-Metroliner cars to be retired by the end of FY 2030.

ACS-64 Electric Locomotives

Amtrak's purchase of ICTs will reduce the number of ACS-64 electric locomotives required for daily revenue service. As a result, Amtrak will likely have surplus ACS-64 locomotives available for resale or lease to commuter agencies or the secondary market in the late 2020s. The exact quantities of units displaced and the timing have not yet been determined.

Other Fleets

Amtrak will be able to provide guidance on planned retirement of Superliner and Amfleet II equipment once Amtrak has a contract for replacement equipment that contains delivery dates. Amtrak does not anticipate any significant disposals of currently-active Superliner or Amfleet II equipment before the end of FY 2027, as new equipment will likely be on order but not yet in service. Amtrak may dispose of limited numbers of damaged units of any equipment type over the next five years, pending the conclusion of any legal holds, lien or lease resolutions, and a determination by Amtrak Mechanical that a given unit is beyond economic repair.

Amtrak Refleeting By Route: Five-Year and Ten-Year Outlook

Route	FY 2022 Equipment	FY 2027 Forecast	FY 2032 Forecast
NORTHEAST CORRIDOR SERVICE LINE			
Acela Express	Acela First-Generation Trainsets	Acela Second-Generation Trainsets	Acela Second-Generation Trainsets
Northeast Regional	Amfleet I + ACS-64	Phase-out Amfleet-I, Phase-in Intercity Trainsets	Intercity Trainsets (ICTs)
STATE CORRIDOR SERVICE LINE			
Northeast Regional VA, CT/MA Thru Trains	Amfleet I + P-42	Intercity Trainset (ICTs) deliveries underway; transition between FY 2021 Equipment and ICTs	Intercity Trainsets (ICTs)
Vermonter			
Downeaster			
Carolinian			
Empire Service			
Ethan Allen Express			
Keystone Service	Amfleet I + Ex-Metroliner + ACS-64		
Adirondack	Mix of Amfleet I and Amfleet II + P-42/P32ACDM		
Maple Leaf			
Pennsylvanian			
Amtrak Cascades	Talgo 8, Amfleet I / Horizon		
Pere Marquette	Superliner + State-owned SC-44	State-owned Siemens cars	
Illini/Saluki	Currently Superliner; Usually Amfleet I / Horizon; hauled by state-owned SC-44		
Wolverine Service	Amfleet I / Horizon + State-owned SC-44		
Blue Water			
Hiawatha Service			
Illinois Zephyr/Carl Sandburg			
Lincoln Service			
Missouri River Runner			
San Joaquins	Primarily California-owned Equipment		
Capitol Corridor			
Pacific Surfliner	Primarily Amtrak Surfliner + California-owned Equipment		
Piedmont	Primarily NCDOT-owned Equipment		
Heartland Flyer	Superliner + P-42		TBD; ICTs or New LD Fleet Strategy
NEW AMTRAK CONNECTS US CORRIDOR VISION ROUTES			
Fleet available for new start-up routes	P-42 + Horizon	P-42 + Horizon	Intercity Trainsets (ICTs) Order Options
LONG DISTANCE SERVICE LINE			
Palmetto	Mix of Amfleet I and Amfleet II + P-42 / P32ACDM	Intercity Trainset (ICTs) deliveries underway; transition between FY 2021 Equipment and ICTs.	Intercity Trainsets (ICTs)
Auto Train	Superliner + P-40/42	Superliner +ALC-42 (Some P-42s may still be in phaseout process)	ALC-42 + New long-distance fleet
Capitol Limited			
Coast Starlight			
Empire Builder			
Californa Zephyr			
Southwest Chief			
Sunset Limited			
Texas Eagle			
City of New Orleans			
Silver Star	Viewliner / Amfleet II + P-42	Viewliner / Amfleet II + ALC-42 (Some P-42s may still be in phaseout process)	ALC-42 + Viewliner II and new long-distance fleet
Silver Meteor			
Crescent			
Lake Shore Limited			
Cardinal			

Equipment Asset Line Financial Uses

(FY 2022–FY 2027)

($s in Thousands)	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Total
FINANCIAL USES (OPERATING)							
Terminal Yard Operations	39,679	48,430	52,772	56,182	59,512	62,921	319,496
Car & Locomotive Maintenance and Turnaround	538,416	610,891	658,131	692,422	725,031	757,770	3,982,662
MOE Supervision Training and Overhead (Less Backshops)	90,997	86,804	92,774	97,249	101,521	105,862	575,208
Yard Operations - Mechanical Support	36,346	47,290	51,145	54,176	57,125	60,135	306,217
Mechanical Backshops	7,997	17,479	19,040	20,119	21,141	22,192	107,968
On Board Passenger Technology	7,406	290	311	327	343	359	9,035
Fleet Strategy	1,367	1,567	1,682	1,769	1,853	1,937	10,176
Total Operating Uses	**722,209**	**812,751**	**875,856**	**922,243**	**966,526**	**1,011,175**	**5,310,761**
FINANCIAL USES (DEBT SERVICE PAYMENTS)							
Debt Repayments	212,685	196,626	185,328	184,822	183,799	175,931	1,139,191
Total Debt Service Payments	**212,685**	**196,626**	**185,328**	**184,822**	**183,799**	**175,931**	**1,139,191**
FINANCIAL USES (CAPITAL)							
Overhauls	226,580	241,189	232,627	239,769	248,042	253,650	1,441,857
New/Replacement Equipment	674,200	786,928	364,172	978,581	830,052	639,931	4,273,865
Facilities	172,809	162,420	66,488	56,907	56,287	57,777	572,688
LCPM	28,968	29,152	51,519	50,396	60,453	63,397	283,884
Other Train Capital	6,665	18,156	13,351	8,451	4,670	5,194	56,486
Capital Expenditures	**1,109,222**	**1,237,845**	**728,158**	**1,334,103**	**1,199,503**	**1,019,948**	**6,628,779**
Total Capital Uses	**1,109,222**	**1,237,845**	**728,158**	**1,334,103**	**1,199,503**	**1,019,948**	**6,628,779**
Total Equipment Spend	**$2,044,116**	**$2,247,223**	**$1,789,342**	**$2,441,168**	**$2,349,829**	**$2,207,054**	**$13,078,731**

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AMTRAK
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The Stations Asset Line includes all Amtrak-controlled passenger rail stations and elements of other stations across our network for which Amtrak has legal responsibility or intends to make capital investments. The Amtrak network is currently made up of 525 stations across 46 states, the District of Columbia and three Canadian provinces.

Stations Asset Line

Amtrak's stations mirror the development landscape of the country from small rural stations served by a shelter and a platform to large cities served by urban stations connecting multiple transportation modes. The mixture of stations and the variety of service routes combine to provide a national passenger rail network that supports national mobility and economic, urban, and community development.

Key components of Amtrak's Station Asset Line include a focus on identifying ways to improve customer experience at stations, implementing customer-focused near-term improvements, preserving and improving Amtrak assets, and continuing development of Amtrak's Major Stations Program.

Strategy

Amtrak's strategy is formulated around its six strategic pillars: Safety and Operations, Customer Impact, Strategy, Assets, People and Financial Stewardship. Amtrak is investing in critical station projects that will enhance the passenger experience, sustain the national passenger network, provide additional capacity, and improve reliability and safety.

Among the unique challenges in developing a plan to manage station assets are: working with other stakeholders, such as states, cities and host railroads that own many of the stations Amtrak utilizes; working with state DOTs and commuter agencies that either own or utilize stations served by Amtrak and have their own service goals; making improvements that align with Amtrak guidelines for station aspects such as branding and signage so as to provide consistent and recognizable products and services; operating and maintaining a safe, world class passenger railroad utilizing a mixture of modern and historic station assets; managing station roll-outs of technological updates such as ticketing and baggage handling upgrades; and coordinating station management plans with Amtrak's asset development and monetization initiatives.

Customer Station Experience

Amtrak customers have three touch points with their departing and arriving stations—entering the station, waiting/transiting, and leaving the station. Customers enter the station from the street, parking lot or from an arriving train and likewise leave the station for the street, parking lot or departing train. Their experiences in the station involve waiting for the train and transiting through. These experiences vary greatly from station to station. One station may have a small, sheltered waiting area while a larger station may have Amtrak staff, Red Cap Services, lounges, restrooms, restaurants, and shopping. Yet, the core components remain, and customers expect to find signage and information related to their journeys.

Among the attributes that determine the station experience are the number of passengers (crowding), amenities, connecting services, cleanliness, condition, and safety. As stations are owned and maintained by a variety of partners and governed by various agreements, some station attributes are not within Amtrak's direct control. Amtrak has adapted its organizational structure and responsibilities leading to improvements and a better understanding of both the customer experience and the assets. These changes include the expansion of the Stations and Facilities group to include a centralized facilities management function.

Shifting priorities and inconsistent funding over decades have resulted in a patchwork of station experiences and building conditions. However, as Amtrak continues to adapt and modernize its organization, improving the station experience has been identified as vital to retaining customers and increasing revenue.

Key Objectives

- Adaptability in the delivery of Amtrak's station services to meet the challenges of operating in a continued and evolving COVID-19 reality while providing the **highest level of safety and protection** for all Amtrak customers and employees in this new and ever-changing environment.

- **Deliver consistency in station image and behavior across the network.** A customer should recognize Amtrak's presence in a station through consistent branding, furnishings, and customer service no matter what location. Signage, restroom and interior cleanliness/condition, seating, access, lighting, and building conditions are the fundamental elements of what a customer can see and interact with at every station.

- **Standardize the designs and elevate the offerings of all station lounges,** now branded as Metropolitan Lounges, to enhance the customer experience with the current and next generation customer in mind.

- **Offer personalized and connected services.** Customer experience in the station can be enhanced to offer personalized touches through push notifications and custom coupons or upgrades. This also improves Amtrak's ability to understand patterns and preferences for future trips.

- **Reduce operational inefficiencies.** Manual and inefficient procedures result in lost productivity for employees and frustration for customers. Operational practices, including ticket sales, baggage handling and boarding, will be improved through process re-engineering and automation and station design upgrades where possible.

Metropolitan Lounge

Currently Amtrak's major stations offer access to passenger lounges, branded as the Metropolitan Lounge, for eligible first-class customers, Amtrak Guest Rewards Executive Select and Select Plus members, and those wanting to purchase a day pass. The lounges are intended for premium customers and include exclusive offerings, such as complimentary food and beverages and priority boarding. Depending on the city, each lounge has unique finishes, furnishings, décor, and food and beverage options. Because it is important to bring consistency, as part of a larger lounge station refresh initiative Amtrak will continue to standardize these designs and elevate the offerings of all lounges in alignment with the customer demographic for the station and physical space limits.

Through the design and execution of these unique customer spaces Amtrak aims to:

- Provide an **elevated and welcoming** customer experience.
- Create a **relaxing environment** as a component of the customer's pre/post journey experience.
- Provide a **comfortable space** to help customers do what they want/like while traveling.
- Ensure the **care and safety** of our customers and employees.
- Deliver **unexpected benefits** to customers, and enhancements to communities across the country.

The Metropolitan Lounge at Moynihan Train Hall in New York City

COVID-19 Station Ongoing Operations

Understanding and communicating Amtrak's awareness about the concerns of its customers because of the COVID-19 pandemic is crucial because customers recognize and value efforts to make their journeys safe and stress-free. Sharing with Amtrak's customers the measures it has implemented to address COVID-19 is how Amtrak makes them aware that it is doing its part to keep America's passenger rail system as a safe mode of transportation. Amtrak's ongoing COVID-19 response highlights and effort can be summarized as follows:

Amtrak's goal is to provide the highest level of safety and protection for all Amtrak customers and employees in this new and ever-changing environment.

To achieve this goal, Amtrak has established a multi-functional team dedicated to and focused on the station customer experience. Amtrak also supports federal, state, and local policies and public health protocols such as the NYC Test and Trace Program.

Station Improvements

Amtrak's emphasis on station improvements began with its Customer Now initiative which sought to deliver enhancements to the customer experience at Amtrak stations through the Station Refresh and Executive Adopt-A-Station programs.

Station Refresh is focused on the 25 stations with the highest ridership (Top 25 Stations), while the Executive Adopt-a-Station Program is focused on the 174 Stations with the highest ridership (Top 174 Stations). An overarching objective is to fund significant, near-term attainable projects that will deliver the greatest customer impact. Due to COVID-19, these programs were mostly paused but have now been advanced as part of regional station upgrade programs under the Stations and Facilities group.

During FY 2021, Amtrak continued to work with its state and local partners and other station owners to advance station improvements throughout our network. For example, in Brattleboro, Vermont, we joined with the State of Vermont, the Town of Brattleboro, and the New England Central Railroad in announcing a proposal for a new Americans with Disabilities Act (ADA)-compliant station.

Major Station Planning and Development

Amtrak is the owner and manager of a nationwide portfolio of assets including over eight million square feet of station facilities and five of its 10 busiest stations. The station asset portfolio is aging, suffers from decades of deterioration and needs modernization to meet growing demands.

Despite these challenges, Amtrak's stations are community hubs and the surrounding markets present opportunities to extract value from its assets from commercial real estate development or partnerships with area institutions and the private sector. A strategic asset management and development program can improve the performance and value of Amtrak's asset portfolio by:

- Addressing Amtrak's facility **state of good repair and modernization** needs;
- Making key investments that will have a positive impact on the **customer experience;**
- Taking a sustainable approach to life cycle **asset maintenance and preservation;**
- Ensuring sufficient near- and long-term capacity for **ridership growth;**
- **Optimizing utilization** of its assets for Amtrak rail and business operations;
- Producing revenue, such as retail or advertising revenue, for **reinvestment back into critical infrastructure** and operational improvements; and
- **Capturing commercial development opportunities** from underutilized or non-core assets.

At the five Amtrak-owned or controlled stations with the highest ridership (Major Stations)—New York Penn Station (#1), Washington Union Station (#2), Philadelphia William H. Gray III 30th Street Station (#3) (Philadelphia 30th Street Station), Chicago Union Station (#4), and Baltimore Penn Station (#8)—Amtrak has commenced Major Station Asset Development Programs. In these major urban markets, the challenges and opportunities facing Amtrak's asset portfolio are heightened.

Projected ridership growth and regional economic growth create a substantial and increasing demand on Major Stations that will only exacerbate state of good repair needs. However, there is high potential to attract investment for transit-oriented development that enhances intermodal connections and integrates stations with surrounding neighborhoods to create an exceptional station experience, one which will retain and grow a loyal customer base. The Major Station Asset Development Programs rely on three primary strategies: master plans, strategic partnerships, and master developments.

Master plans identify near- and long-term station needs. Master planning also identifies opportunities for improvements for intermodal connections and connectivity to the surrounding neighborhoods and opportunities for commercial development of Amtrak assets. Master plans serve as the aspirational vision for the future, but also provide roadmaps for planned capital investments by Amtrak and its partners for concourse improvement and expansion, track and platform improvements, and site improvements such as plazas, customer parking facilities, and intermodal connections. Amtrak's master plans are completed as partnerships with other significant stakeholders, such as commuter railroads, and express its future shared goals. Master plans have been completed either by Amtrak or in partnership with key area institutions for Washington Union Station, Philadelphia William H. Gray III 30th Street Station, and Chicago Union Station. Amtrak is currently working on a master plan for New York Penn Station.

Strategic partnerships with local and regional government entities, commuter rail and transit providers, area institutions, and the private sector are necessary to advance Major Stations Asset Development Programs. In some cases, funding partnerships raise the capital needed to complete design and construction of critical projects. In other cases, collaboration partnerships are necessary to coordinate financing, design, and construction activities at the stations.

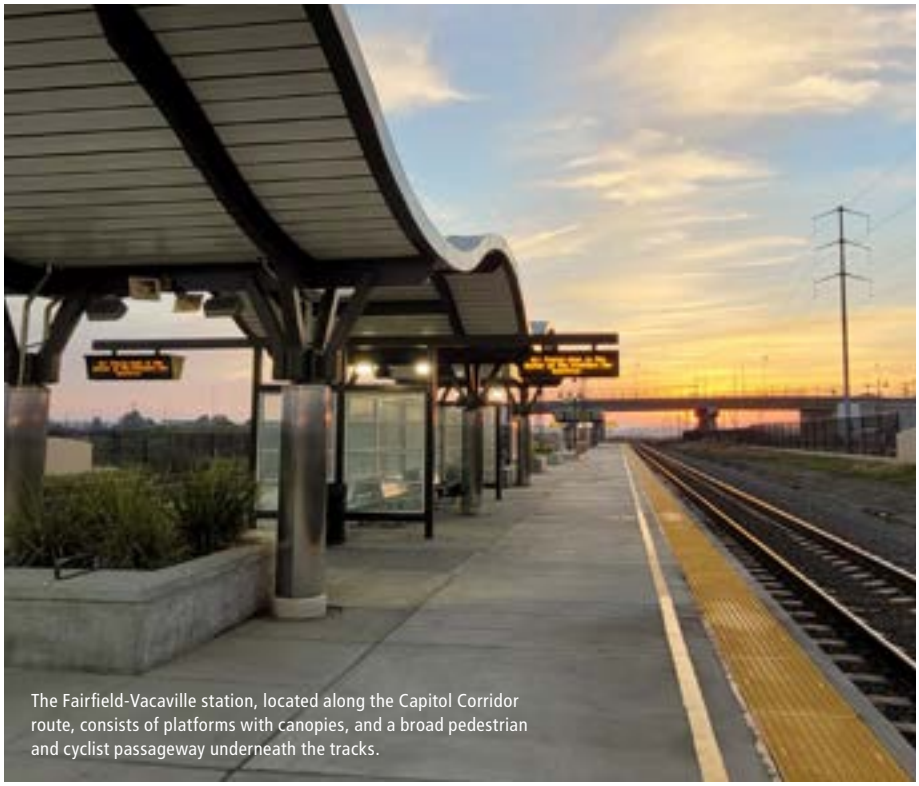
Master developments are a specific type of strategic partnership where Amtrak seeks to partner with the private sector to advance station improvements and generate economic developments in the areas surrounding each station to support passenger rail growth. Beyond funding and financing support, these master developers bring project delivery, asset management and commercial development expertise to the table to help Amtrak cultivate a first-class customer experience, while maximizing the performance and value of its Major Stations. Amtrak selected master developers for Chicago Union Station and Baltimore Penn Station in 2017, and Philadelphia William H. Gray III 30th Street Station in May 2020.

Customer Accessibility

The goal and objective of the Americans with Disabilities Act (ADA) Stations Program is to bring all Amtrak-served stations for which Amtrak has ADA responsibility into compliance with the ADA. In coordination with the FRA, Amtrak has developed the ADA priorities and work necessary to do that. The five-year strategic plan will be used to bring stations with known or potential accessibility deficiencies in certain key areas into compliance with the ADA within the plan period.

Stations that are listed as the highest priority include stations with known or potential: (1) Train access deficiencies, (2) Passenger Information Display Systems (PIDS) deficiencies, and 3) station access and/or key amenity deficiencies. Additional priorities include adding level boarding platforms where required by law and pursuing more integrated boarding solutions (based on Amtrak's Platform Design Policy) where level boarding is not required law due to the presence of existing freight traffic adjacent to the platform. Platform projects, which may include level boarding platform projects and low-level platform projects, will be funded after these three priorities have been funded, and advanced to the greatest extent possible with remaining funding.

Additional information on the ADA program is included in the Stations Appendices



The Fairfield-Vacaville station, located along the Capitol Corridor route, consists of platforms with canopies, and a broad pedestrian and cyclist passageway underneath the tracks.

Safety and Security

While customer safety and satisfaction are among Amtrak's highest priorities, both of those are founded on security. Amtrak stations adhere to standard design criteria and minimum specifications for a variety of security systems to protect Amtrak employees, customers, and facilities.

Amtrak's Emergency Management and Corporate Security (EMCS) department provides design guidance, practices, and recommendations to cover all physical protection system components, integrates Amtrak Engineering Department Standards, and corresponds to security counter measures. Protection includes implementing target hardening solutions to Amtrak facility vulnerabilities that are identified through a local assessment of risk to Amtrak employees, customers, and facilities. Several categories of security systems are applicable to Amtrak stations system-wide, including:

- Fencing and Gates
- Site Hardening Barriers
- Access Control Devices
- Intrusion Detection Systems
- Chemical, Biological, Radiological, and Nuclear Detection Equipment
- Video Surveillance Systems
- Emergency Communications
- Public Notification, Alert, and Signage
- Security Lighting
- Blast Containers

Capital funding for safety and security is included in the National Assets and Corporate Services (NACS) category under the FAST Act Account Structure.

Asset Inventory

Asset Management Approach

A five-year cycle of comprehensive condition assessments identifying deficiencies and prioritizing improvements at Amtrak stations began in 2017. Amtrak has completed comprehensive condition assessments for Amtrak owned or maintained stations in the Southeast, Southwest, and Northeast divisions, and it is currently assessing stations in the Central Northwest division. In addition, Amtrak completed a pilot inventory of station assets that have a direct relationship to its customers such as conveyances, HVAC, plumbing, electrical, and fire/life safety equipment. These assets and their specifications within stations are accessible in Amtrak's Mainline Rail Maximo enterprise asset management system. Once Amtrak has a comprehensive understanding of the conditions of its stations, it can develop an asset management plan aligned to its service line plans and overall corporate goals that defines a clear path for decision-making. This effort will be aligned and integrated with existing information systems and processes.

Amtrak Stations and ADA Responsibility

During FY 2021, Amtrak provided rail service to 525 stations across the U.S. and Canada. Of the 525 stations receiving Amtrak service, 516 are required to be ADA compliant. (The nine stations served in Canada do not fall under the jurisdiction of the Americans with Disabilities Act.) Of these, Amtrak has either sole or shared responsibility for ADA compliance of station components (station structure, platform, parking) at 386 stations; these are included in the ADA Stations Program. The Station Appendices contain a table showing the entity responsible for ADA compliance of components at stations where ADA compliance is mandated and ownership of station components at all Amtrak-served stations, and note stations on state-supported routes where Amtrak's state partners fund station costs. Another table shows the type of station and staffing level of each Amtrak-served station.

Five Year Plan

Amtrak's five-year plan supports continued improvements to stations and facilities programs and advancing major stations work. Some key highlights are detailed below.

Stations Design and Delivery

Stations Design & Delivery prepared a five-year station improvement strategy to bring stations throughout Amtrak's network into alignment with Amtrak's Core Values. This strategy, which builds upon the station assessments, is aligned with FRA requests and expectations. The projects involve multiple Amtrak stakeholders and external partners including private owners, state departments of transportation, local government agencies, and host railroads and transit agencies.

Amtrak's Top 25 Stations

1. New York Penn Station
2. Washington Union Station
3. Philadelphia William H. Gray III 30th Street Station
4. Chicago Union Station
5. Los Angeles Union Station
6. Boston South Station
7. Sacramento Valley Station
8. Baltimore Penn Station
9. Albany-Rensselaer Station
10. San Diego - Santa Fe Depot Station
11. Providence Station
12. Wilmington Station
13. BWI Rail Station
14. Newark Penn Station
15. Seattle - King Street Station
16. New Haven Union Station
17. Milwaukee Intermodal Station
18. Boston Back Bay Station
19. Portland Union Station
20. Emeryville Station
21. Lancaster Station
22. Harrisburg Transportation Center
23. Bakersfield Station
24. Irvine Station - Irvine Transportation Center
25. Westwood - Route 128 Station

Stations and Facilities

The Stations and Facilities group is comprised of teams for facilities management, asset management, and vertical transportation at network and major stations who each work to improve and maintain the stations and facilities. Facilities management refers to the ongoing functionality, safety, and efficiency of stations. Asset management is the maintenance of the individual building systems. Vertical transportation equipment encompasses escalators and elevators. Each of these areas relates to the overall station environment that customers experience.

At Amtrak, stations facility management is managed by two groups: Major Stations and Network Stations. At major stations, Amtrak has ownership and responsibility for maintenance of the station building and the passenger environment utilizing a combination of union, contract, and management personnel. Network stations are other stations within the Amtrak network, and are generally leased or host railroad-owned spaces. The network stations are managed by regional facility managers.

The focus is to develop and maintain Amtrak assets to produce high customer satisfaction, resulting in increased ridership and revenue. Amtrak performs a wide array of functions related to the planning, development, and maintenance of stations and facilities throughout the Amtrak network. Among the most visible of these are detailed on the following pages.

Station Refresh (Top 25 Stations)

The Station Refresh program for the Top 25 stations includes customer-facing improvements at Baltimore, Chicago, New York, Philadelphia, and Washington. The improvements are organized by six distinct categories:

1. Waiting Areas;
2. Restrooms;
3. Stairs;
4. Elevators/Escalators;
5. Platforms; and
6. Lighting and Signage.

The program for remaining stations includes customer-facing improvements organized by eight categories:

1. Waiting Areas;
2. Customer Service Areas;
3. Restrooms;
4. Stairs;
5. Elevators/Escalators;
6. Platforms;
7. Lighting and Signage; and
8. Site.

These categories mirror the broader Amtrak operational audits and performance areas for stations, including new stations and master planning work for major stations.

Projects and areas of improvement are identified through Executive Audits, Customer Satisfaction Index (CSI) scores and other methods, such as operational audits and surveys at stations. During FY22, projects identified for station refresh will continue to be implemented through the regional Station Upgrade programs or advanced as a stand-alone project depending upon scope.

Adopt-A-Station (Top 174 Stations)

The Adopt-A-Station program involves executives and senior managers each adopting a group of stations to audit. Audits are completed on a rolling basis throughout the year and entered into a newly designed data and work management system. This new system allows District Station Managers, and others involved in the program, to enter new, review existing, and close-out completed maintenance deficiencies on display dashboards within their respective territories.

The program is intended to transform audit notes and findings into customer-facing improvement programs and projects at 174 staffed stations. Programs and projects are organized by the following categories: Approach to the Station; Parking Area; Site/Station Structure Exterior; Station Structure Interior (Waiting Room, Restrooms, Ticketing/Baggage Areas, and Retail); and Platform and Track Area.

Station Seating

The Station Seating program that will replace damaged, outdated or functionally deficient seating, which will begin with the Top 25 Stations and then progress to the other stations, has been paused, but is expected to relaunch in FY 2023.

Station Signage and Branding

The presence of station signs and brand identification directly influences customer behaviors and interactions at stations. Good signage can effortlessly direct passengers through large stations and provide positive feedback and reassurance to customers. Bad or non-existent signage can cause customer stress and uncertainty about being in the right place or knowing where to go, which is detrimental to brand identity and customer perceptions.

Amtrak is continuing its Top 100 Branding Modernization and General Signage Programs during FY 2022 and expects spending for Station Signage and Branding to remain consistent for the five-year plan period. The Top 100 Branding Modernization program seeks to replace old, outdated station branding signage in four key areas: building, monumental, ticket counter and hours of operation signage. While the scope of work will vary from station to station the key objective will be to provide focused and quick signage improvements using pre-determined signage standards. The fabrication and installation of new branding signs will launch during FY 2022, and after the Top 100 stations have been addressed will transition to the remainder of the stations.

The General Signage Program consists of the replacement of damaged or missing wayfinding or station signs. In limited cases, it includes a full signage package to update all station signs.

Station Upgrades Program

The Station Upgrade Program provides smaller scale capital improvements for stations across the network aimed at directly improving safety and the passenger experience. Examples include new ticket counters, platform lighting, restroom fixtures and HVAC systems.

Vertical Transportation Equipment

Vertical Transportation Equipment includes the inspections and maintenance required to keep escalators and elevators safe and operational. The goal is improving the safety and readiness of equipment for customers while reducing customer injuries. Escalator improvements programs will continue during FY 2022and a pilot monitoring program that will provide real-time notifications of out of service escalators to facility managers and generate work orders for repairs will be added.

Network Stations Facilities Management

The Network Stations Facilities Management program consists of procuring a professional facilities management firm to provide preventative and reactive maintenance at stations. Areas covered include landscaping, lighting, HVAC, electrical, plumbing, fire/life safety, doors and locks, and window cleaning One key benefit of this approach is the establishment of a toll-free number to report deficiencies and issues reporting by the District Managers. In addition, the program includes collection of data on work items and warranties to provide a maintenance history for each station, and the development of better data on the costs associated with operating stations.

Major Stations Facilities Management

Under the Major Stations Facilities Management program, dedicated facilities managers for each major station oversee professional facilities maintenance and cleanliness contracts. The work covered ranges from general maintenance to capital improvements, support of major station development, and coordination of work and maintenance issues with a variety of state and transportation partners, other station users, and labor representatives.

Major Stations and Facilities Programs

Primary Initiatives

Subject to funding availability over the next five years and beyond, Stations and Facilities plans to launch the following programs requiring approximately **$290 million** in capital investment. Elements that could be completed within a five-year timeframe include these initiatives.

Roofing Program

Re-roof and/or repair Amtrak responsible roofs at stations facilities—including crew bases.

HVAC Program

Replace HVAC units at stations and crew bases.

Signage and Branding Program

Fully roll out complete branding and signage overhauls to all stations.

Landscaping Program

Re-landscape, replace, or repave the station grounds, parking and exteriors.

Painting Program

Repaint and clean station interiors and exteriors.

Lighting Program

Upgrade platform lighting to current Amtrak standards at all platforms.

Doors and Locks

Upgrade stations to swipe locks.

Furniture Upgrade

Upgrade and replace Amtrak station furniture.

Flooring Upgrade

Replace floor tiles and carpeting.

Restroom Upgrades

Replace all fixtures.

Station Ownership and Maintenance

Assume maintenance responsibility, through ownership change or agreement, of select third-party owned stations.

Larger Scale Initiatives

Additionally, Station and Facilities would begin larger scale initiatives that would extend beyond five-years of approximately **$150 million** in capital investment.

Station Right-sizing

Planning and development of new, replacement stations that align with future needs.

Facility Overhauls

Complete rehab of select crew or stations.


Chicago's Union Station

Major Stations Programs

Amtrak's plan also includes continued improvements at major stations in Chicago, New York, Philadelphia, Baltimore, and Washington.

Chicago

In Chicago, Amtrak continues to make progress in modernizing and expanding Chicago Union Station (CUS) by advancing the Headhouse Improvements and Master Plan program.

Utilizing proceeds from Amtrak's sale of the parking garage to Riverside Investment & Development, Amtrak has completed construction of a new ADA-accessible Clinton Street entrance and reactivation of the former Fred Harvey Restaurant space that has remained dormant since being destroyed by fire over forty years ago. Amtrak completed its landlord work in early FY 2021 and continues to search for a food hall operator who will fit out this space and operate it as a customer amenity and revenue source for Amtrak. Remaining sale proceeds have been used to initiate a similar project to reactivate the former Metro Deli space that is on target to be completed in FY 2022.

As part of the CUS Master Plan, Amtrak is currently leading design efforts to reactivate the High-Level Mail Platform for passenger use. This critical project will not only create the first level-boarding platform at CUS, but it will also provide the much-needed additional rail capacity and operational flexibility required to implement future platform improvement projects.

As funding becomes available in future years, Amtrak and its Partners (Metra, City of Chicago, Regional Transportation Authority, and others) will work together to advance additional Master Plan projects, including concourse improvements, expansions of platforms 2/4, 6/8 and 10/12, and trainshed ventilation improvements.

New York

Following the opening of the Moynihan Train Hall on January 1, 2021, Amtrak is continuing work with the Metropolitan Transportation Authority and NJ TRANSIT (NJT)on a new Master Plan for New York Penn Station. With the assistance of a multi-disciplinary consultant team, the Master Plan aims to transform Penn Station to improve customer experience, increase passenger handling capacity, and restore the status of Penn Station as a world-class transportation facility. The Master Plan also seeks to create a unified vision of the larger transportation complex created by the renovation of Penn Station, the opening of the Moynihan Train Hall, and an anticipated future Penn Expansion. This plan is coordinated with New York State Empire State Development Corporation-sponsored General Project Plan for the larger Penn District, which will imagine Transit and Public Realm improvements to be funded via an increase in commercial density in the area surrounding the station. Amtrak is continuing to work with MTA and NJT to select a preferred design alternative for the Master.

The Major Stations group undertook an Interim Improvements Plan for New York Penn Station that identified short-term improvements to spaces Amtrak vacated when it shifted its daytime passenger-facing services to Moynihan Train Hall. This plan seeks to strengthen connections between Penn Station and Moynihan Train Hall, as well as repurpose the vacated spaces for station operations and appropriate retail opportunities to serve the traveling public. Amtrak has transformed this plan into a series of distinct projects both internal and external to the station. Amtrak initiated initial design of its first of these projects, the West End Reconfiguration, at the beginning of FY 2022. This first project will repurpose the former Amtrak ticket counters and back of house space at Penn Station for a centralized NJT ticketing/customer service location, new retail, and optimized back of house space for the Amtrak Police Department. Amtrak is also threading improvements identified by its FY 2021 State of Good Repair Assessment into each of these projects.

Several capital projects have recently been completed or are currently underway. They include completion of the second phase of near-term improvements to the Ticketed Waiting Area in conjunction with NJT, a Platform Improvements Project to deliver unified wayfinding on the platforms for the Moynihan Train Hall opening, installation of an Ultraviolet Germicidal Radiation System in an HVAC unit in the Amtrak concourse, and refreshed finishes and lighting on Platforms 3-8. The modernization of elevators C2 and P4 was also completed, providing access within the station for all passengers. Amtrak has implemented a unified facility wayfinding system under which updated signage was installed throughout the station to help guide all passengers.

FY 2022 plans include launching the first year of the Amtrak Public Art Program at Penn Station and initiation of an analysis of all Amtrak property assets in New York to assist Amtrak in planning for growth and staging of improvements. Amtrak continues to work with NJT on advancing design of the Central Concourse Expansion, which will provide new access and egress points to Platforms 1-6.

Philadelphia

At Philadelphia William H. Gray III 30th Street Station, Amtrak continues to advance activities to implement the 30th Street Station District Plan following the execution of Amtrak's Lease and Development Agreement with Plenary Infrastructure Philadelphia, which will refurbish and improve the station building, provide necessary financing, and maintain the station for a 50-year term.

The Master Development Implementation is a strategic partnership under which Amtrak is partnering with the master developer to advance station improvements to address a backlog of deferred maintenance; improve station operations; enhance the customer experience for current customers and in anticipation of future growth in ridership; modernize corporate offices; and revive the historic station as a customer-oriented gateway and civic destination. Amtrak seeks to achieve these goals through consolidation of employee functions; improvement of operations and retail opportunities; renovation of corporate offices; and the restoration of historic fabric.

In addition to providing financing support, the master developer brings project delivery, asset management, and commercial development expertise to the table to help Amtrak cultivate a first-class customer experience, while maximizing station performance and value.

Major Stations Programs, continued

Washington

In Washington, Amtrak is working with the FRA to advance the Washington Union Station Expansion Project (SEP) to transform this vital transportation hub while preserving the iconic historic station building. SEP is intended to provide a reliably high-quality customer experience, with improved access to increased rail service.

Benefits include:

- **New concourse space** to improve connections for station users.
- **New tracks and platforms** to allow for additional capacity.
- **New train hall** to provide light and air over the tracks.
- **New bus and parking facilities.**
- **Improved pedestrian spaces** and additional entrances.
- **Additional bicycle facilities.**
- **Improved vehicular circulation** and pick-up/drop-off areas.

In parallel to the partnership with FRA on SEP, Amtrak is continuing to advance many near-term capital improvement projects. Construction of several station and track side improvements was completed in prior years. Final design and construction work is ongoing for several other efforts including construction of Track 22, design of Subbasement Structural Replacement, design of Concourse Modernization and preconstruction activities on several projects in the Near Term Rail Program. Design and construction activities associated with the near-term program will continue to progress over the next five years.

Baltimore

In Baltimore, Amtrak is developing a comprehensive multi-modal approach to station planning and design with Penn Station Partners, commuter rail and transit partners, and local stakeholders that incorporates all modes and retains the flexibility needed for future changes in mobility.

A complete station redevelopment is planned, including state of good repair improvements to the historic station, concourse modernization, and station expansion. Design is underway for the first phases of Amtrak's improvements to the station with a focus on securing the building envelope; providing increased, safe and accessible access ; and expanding customer-facing concourse facilities including front and back-of-house operations, amenities and retail.

Future transit-oriented commercial development will provide additional density as part of the overall station district development and integrate with Amtrak and MARC customer interfaces at Baltimore Penn Station. Design and construction will proceed over the next three to five years with phases implemented through the Master Developer Partnership and managed through long term ground lease.

Plans For Additional Infrastructure Funding

The need for station improvements throughout Amtrak's network is high. Prior to COVID-19, many stations were experiencing strained capacity and services as burgeoning ridership butted against antiquated or historic facilities not designed for modern requirements and technology, accessibility, or the number of people using them. Several programs have been developed for future work to bring Amtrak stations into a state of good repair and modernize and right-size stations to meet future needs. The programs listed below will complement the capital work related to deficiencies found as part of the asset assessments. The combined approach will seek to eliminate the backlog of station improvements and repairs at stations across the network.

Programs and Initiatives

Subject to funding availability over the next five years and beyond, Stations and Facilities plans to launch the following programs requiring approximately $290 million in capital investment. Elements that could be completed within a five-year timeframe include:

Roofing Program

Re-roof and/or repair Amtrak responsible roofs at stations facilities, including crew bases.

HVAC Program

Replace HVAC units at stations and crew bases.

Signage and Branding Program

Fully roll out complete branding and signage overhauls to all stations.

Landscaping Program

Re-landscape, replace, or repave the station grounds, parking and exteriors.

Painting Program

Repaint and clean station interiors and exteriors.

Lighting Program

Upgrade platform lighting to current Amtrak standards at all platforms.

Doors and Locks

Upgrade stations to swipe locks.

Furniture Upgrade

Upgrade and replace Amtrak station furniture.

Flooring Upgrade

Replace floor tiles and carpeting.

Restroom Upgrades.

Replace all fixtures.

Station Ownership and Maintenance

Assume maintenance responsibility, through ownership change or agreement, of select third-party owned stations.

Additionally, Stations and Facilities plans to begin larger scale initiatives that would extend beyond five-years and would require approximately $150 million in capital investment. They include:

Station Right-sizing

Planning and development of new, replacement stations that align with future needs.

Facility Overhauls

Complete rehabilitation of select crew bases and stations.

The IIJA's advance appropriations to Amtrak, Federal-State Partnership grants that Amtrak will seek, and IIJA transit funding provided to our commuter partners will allow advancement of programs we have already commenced, at Amtrak-owned station facilities.

Stations Asset Line Financial Uses

(FY 2022–FY 2027)

($s in Thousands)	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Total
FINANCIAL USES (OPERATING)							
Station Staffing	181,703	203,615	219,932	232,165	243,877	255,723	1,337,015
Station Facility Operations	122,217	97,953	106,282	113,081	119,746	126,616	685,895
Total Operating Uses	**303,920**	**301,568**	**326,214**	**345,246**	**363,623**	**382,339**	**2,022,910**
FINANCIAL USES (DEBT SERVICE PAYMENTS)							
Debt Repayments	-	-	-	-	-	-	-
Total Debt Service Payments	**-**	**-**	**-**	**-**	**-**	**-**	**-**
FINANCIAL USES (CAPITAL)							
Normalized Replacement	84,840	216,747	234,510	255,902	269,729	235,485	1,297,214
Safety & Mandates	157,340	219,925	241,375	207,911	230,497	73,415	1,130,463
Major Backlog	3,890	3,890	4,279	4,707	5,178	5,696	27,641
Improvements	182,566	439,214	552,983	1,157,677	1,038,469	1,048,019	4,418,927
Total Capital Uses	**428,636**	**879,777**	**1,033,147**	**1,626,197**	**1,543,873**	**1,362,615**	**6,874,245**
Total Station Spend	**$732,556**	**$1,181,344**	**$1,359,361**	**$1,971,443**	**$1,907,496**	**$1,744,955**	**$8,897,155**


K MOYNIHAN TRAIN HALL
9/10
9/10
11/12
8th Avenue & 33rd Street
13/14
15/16

The Infrastructure Asset Line Plan includes all Amtrak-owned or maintained assets: track, communications and signals, electric traction, bridges and buildings, and maintenance of way equipment. The Infrastructure Asset Line Plan effort is led by the Engineering Department with contributions from Safety, Operations and Planning.

Infrastructure Asset Line

Amtrak—America's Railroad—is dedicated to safe and reliable mobility as the nation's intercity passenger rail service provider and its high-speed rail operator. The infrastructure we own and maintain is largely located in the northeast – including 1,154 of main-line track miles on the Northeast Corridor (NEC) between Washington, DC, and New Rochelle, NY and between New Haven, CT and the Rhode Island-Massachusetts border. Our infrastructure on the NEC is used by over 2,100 passenger trains and 60 freight trains each day, at speeds up to 150 mph (241 kph). We own infrastructure nationwide, as well as manage infrastructure on behalf of the States of Michigan and New York. We provide efficient and effective intercity passenger rail mobility, connecting more than 500 destinations in 46 states.

The Engineering Department acts as the custodian of the infrastructure on which Amtrak customers travel. Engineering endeavors to provide a proactive, preemptive, and customer-service approach to infrastructure maintenance, project planning, design, construction, and maintenance that will deliver a safe and reliable railroad for Amtrak customers and employees. To achieve this mission, the Engineering Department is comprised of three key functions—Engineering & Design, Maintenance, and Project Delivery.

The **Engineering & Design** group creates and monitors standards for design, installation, and maintenance of assets to improve quality and performance of the infrastructure including but not limited to the following assets:

- **Communications & Signals –** Track circuits, signals, interlockings, communication systems.
- **Electric Traction (ET) –** Catenary, substations, third rail, frequency converter stations.
- **Structures –** Bridges, buildings, tunnels, culverts, retaining walls.
- **Track –** Rails, ties, turnouts, ballast, substructure.

These four technical disciplines prepare design solutions utilizing engineering drawings, basis of design documents, and specifications that allow for the efficient procurement, installation, and maintenance of assets. They work collaboratively and provide technical guidance, review, and approval of third-party work affecting Amtrak assets. The technical disciplines establish and maintain professional and mutually beneficial relationships with regulatory agencies, external partners, and other rail carriers, both passenger and freight.

In addition to the technical disciplines, the Engineering & Design group is also responsible for business improvement initiatives within the Engineering Department. This group drives collaboration among Engineering sub-groups and other business lines for the purpose of improving the effectiveness and efficiency of the Engineering Department. It sets the strategy, establishes processes, and delivers tools and technology for asset management. The Industrial and Systems Engineering group promotes sound business principles through process development and improvement, reporting, analysis, business cases, etc. It develops the strategic direction for the department, disciplines, and divisions based on Amtrak's Strategic Objectives and the Chief Engineer's goals and is also responsible for the acquisition of Engineering Maintenance of Way equipment.

The **Maintenance** group maintains the infrastructure to a State of Good Repair (cost effectiveness vs. asset efficiency). It promotes production and quality processes to improve the products delivered and continuously assesses the state of all assets, taking necessary actions to maintain and improve them. Maintenance has overall responsibility and oversight for directing Engineering Department resources in all construction, inspection, and maintenance activities with Amtrak-owned and or maintained right-of-way assets including track, bridges, buildings, communications and signals, and electric traction to provide continued safe and reliable operation of inter-city passenger, commuter rail and freight trains over the entire Amtrak system. Within the Maintenance organization, it is the Production group who is responsible for major construction work on the infrastructure. There are dedicated gangs aimed at achieving large volume asset renewals including, but not limited to, Undercutter, Track Laying System, and Switch Exchange System. The production season from March through November is the greatest opportunity for advancing the Engineering State of Good Repair program work.

The **Project Delivery** group executes the engineering designs in the most efficient and cost-effective manner possible. They provide high-quality and cost-effective construction and project management services to internal and external stakeholders, as well as facilitate information exchange between technical disciplines, front line personnel, third party contractors, and the maintenance organization. Project Delivery promotes production and quality processes to improve the end-product delivered, manages third party contracts for adherence to scope, schedule, and budget, and provides estimates to internal customers and external partners to assist in the planning, budgeting, and staffing of projects. They improve operational performance and cost efficiency by creating, maintaining, and distributing to internal customers and external partners accurate Engineering schedules that reflect all aspects of the Engineering program.

The Infrastructure Asset Line Plan details the strategies by which Amtrak manages the infrastructure. The methodology used to calculate the State of Good Repair backlog, and improvements to the data behind condition parameters, are addressed in the IALP. Of equal importance in judging the near-term view of the infrastructure is how Engineering is using its resources of manpower, track possession, and equipment in combination with data to maximize the return on invested capital for the benefit of Amtrak and other users of the infrastructure.

Year in Review

FY 2021 Key Accomplishments

In FY 2021, Amtrak Engineering achieved many noteworthy accomplishments despite the challenges of the COVID-19 pandemic.

Penn Station NY – Infrastructure Renewal Program

Completed majority of planned work within Penn Station including rehabilitating Tracks 9 and 12 and replacing eight switches.

Mid-Atlantic South - Structures Program

Completed three culvert replacements, the upgrade of Patapsco River bridge pedestals under Tracks 1 and A, and Jay's Run Bridge upgrades. Began emergency improvements to Susquehanna River Bridge pier 6 and Furnace Ave Bridge improvements. Continued 1st St. Tunnel drainage improvement, Gunpowder River Bridge concrete improvements, Cheverly culvert final design, and Cheverly flood assessment.

Production Wood Tie/Timber Replacement Program

On the Keystone Corridor, production gangs destressed rail on Track 1 between Thorn and Park and installed 9,327 ties and 260 timbers between Thorn and Park and at Phil and Mantua. Another production gang installed rail, track panels, 2,645 ties and 490 timbers at Landover, MD, Washington DC, and Lorton, VA, and coordinated with Buildings and Bridges (B&B) for demolition and renewal of cart path crossing surface. The New England Construction gang installed 37,584 ties and destressed rail between Mill River and Windsor on the Springfield Line.

Turnout Renewal Program

Replaced 39 total turnouts on the New England, Empire, New York, and Mid-Atlantic divisions. Cable and panel replacements were also performed as needed at the turnout installation locations.

Ride Quality Improvements

Ride quality improvement work was completed on Tracks 1 and 4 and started on Track 2 between the Hook and Baldwin Interlockings.

Rail Grinding

The Loram rail grinder completed 918 track miles along the NEC.

New York - Catenary Program

Replaced the 72 low rupture breaker at PSNY. Continued the replacement of post insulators for catenary renewal on the Hell Gate Line between MP12.8 and 13.8, the replacement of trolley switches at Lane Interlocking, and the installation of the track heater at Q Interlocking.

Total Track Renewal Program

Installed 1,645 block ties in both Track 8 and Track 10, each is 1337 feet of cast-in-place concrete-embedded track. Independent Track South installed new continuous welded rail (CWR) throughout and installed new track and surfaced the transitions. Electric Traction installed new overhead catenary system for each track.

New York - Track Program

Completed 52.4 miles of surfacing; installation of 3,353 wood ties/ timbers; 760 concrete ties, 3.4 miles of rail, and 502 insulated joints; and 432 joint elimination welds.

Also replaced the North Tube Track panel on Track 3.

The Engineering Department's Capital Plan supports Amtrak's continuing efforts to achieve a State of Good Repair (SOGR) across its infrastructure assets and to advance the Company's strategic priorities. Table 1 (page 159) summarizes the major production work delivered in FY21.

Table 1: FY 2021 Engineering Major Production

	PROGRAM SCOPE				PROGRAM BUDGET				COMMENTS
	Actual Units (FYTD)	Planned Units (FYTD)	Total Planned Units (FY 20)	% Complete (FYTD)	Total Spend (FYTD)	Planned Budget (FYTD)	Total Budget (FY 20)	% Spend (FYTD)	
Surfacing (track miles)	186.0	270.0	309.0	69%	$ 16,525,138	$ 21,128,478	$ 23,060,158	78%	High Speed Surfacing gangs surfaced 79,200 feet or 15 track miles in August.
Wood Ties (each)	55,274	55,274	102,006	100%	39,503,080	39,503,080	89,389,901	100%	In August, New England Construction installed 3,657 wood ties on the Springfield Line between Willow and Midland. Z181 installed 227 ties and 128 timbers at Mantua and Phil. Z192 installed 76 ties in Washington Union Station Track 7 crossings.
Concrete Ties (each) [2]	750	783	914	96%	1,513,184	3,502,173	3,820,552	43%	
Joint Elimination Welding (each)	1,226	1,217	1,130	101%	8,031,061	9,811,298	10,703,234	82%	
TLS - Continuous Welded Rail (rail miles) [1]	28.0	37.0	63.1	76%	26,760,782	91,242,987	99,537,804	29%	The TLS gang began a track improvement project on Track 2 from Glenn to Thorn on the Harrisburg line. The TLS gang will be unloading and installing CWR.
TLS - Concrete Ties (each) [1]	37,779	48,476	82,120	78%					
Undercutting (track miles)	3.1	3.1	3.2	100%	7,252,143	7,252,143	23,788,355	100%	
Turnouts (each)	56	56	81	100%	55,205,573	55,205,573	83,273,814	100%	SES installed the #12 XO at Lehigh and continued building for future Lehigh installs. ITS continued building for installs at Thorn and replaced the #47 XO.
Continuous Welded Rail (rail miles) [2]	24.2	24.2	30.0	100%	11,725,232	11,725,232	15,241,904	100%	The Albany Rail gang installed 4,660 ft of CWR. The gang was shut down for three weeks to work on higher priority work.
Bridge Ties (each)	796	656	1,994	121%	2,984,048	10,784,044	11,764,412	28%	Bridge timber replacement change request has been submitted to delay the Conn River Bridge (Springfield Line) Project to FY22.
ET Transformers (each)	0	0	0	N/A	0	0	0	0%	
ET Breakers (each)	1	1	6	100%	112,091	112,091	310,258	100%	
ET Switch Heaters Power Substation (each)	3	3	6	100%	1,161,119	1,161,119	2,265,530	100%	
ET Air Break Switches (each)	2	15	20	13%	763,306	5,584,871	6,092,587	14%	Fair Sectionalizing switch replacements have been delayed to FY22.
12 KV Switches (each)	17	17	26	100%	393,681	393,681	2,447,957	100%	

Notes: 1. Grouped together for accounting purposes. 2. Excludes work completed by TLS operation.
Data through August 31, 2021.

Capital Renewal Accomplishments

Though plan adjustments were necessary due to COVID-19, Engineering completed significant capital renewal/ SOGR work in FY21 that improved Amtrak's operational flexibility, reliability, on-time performance (OTP), and customer satisfaction.

In addition, Engineering advanced several critical major capital projects, including Amtrak's own priority projects and third-party projects on behalf of partner agencies. Notable accomplishments are detailed at right.

B&P Tunnel Block/ Tie Replacement

Completed third construction phase consisting of just over 2000 Linear Feet (LF) of track slab, block tie, and associated rail replacement. Improvements have reduced geometry incidents and delay minutes while improving ride quality and customer satisfaction.

Fitter Interlocking

Planning and field preparation continued in preparation for construction in FY 2022, with FRA approving the network configuration change and Amtrak's Lancaster, PA shop manufacturing the central instrument houses. The project will break a 15-mile block, thereby increasing operational track availability, reliability, OTP, and customer satisfaction.

Hook to Baldwin Ride Quality Improvements

Completed ride quality improvements on Tracks 1 and 4 by replacing 6,400 LF of rail; remediating 1,100 LF of fouled ballast with geo cell subgrade upgrades; addressing geometry defects at 24 bridge approaches; and mitigating poor drainage conditions by ditching 1,500 LF. In addition to improving ride quality, this work reduces geometry impacts that cause slow orders and increases customer satisfaction.

Empire Line Slope Stabilization (MP108.3)

Completed construction of drainage improvements, slope stabilization, and retaining wall. Improvements in this two-track territory will reduce slow orders from drainage and retaining wall failures due to temperature variations, thereby supporting OTP and improving ride quality.

New Jersey–New York Region

Improvements to support SOGR included completing nearly 40 miles of surfacing and 320 joint elimination welds and installing 2,500 wood ties/ timbers, 550 concrete ties, 2.8 miles of rail, and 500 insulated joints. These infrastructure renewals improve ride quality, OTP, and customer satisfaction and reduce Engineering-caused delays.

Mid-Atlantic Region

Installed nearly 700 SAP ("Steady and Pull-Off") assemblies in Amtrak's overhead catenary system from Bell to Baldwin, Carrol to Bridge (Tracks 2-3), and Winans to Bridge (Track A), and installed new switch heater stations at Oak, Wood, Charles, and Paul Interlockings. These activities support emergency return to service response, reduce delays, and improve OTP.

West Region

Improvements to support SOGR and operations in Los Angeles, CA included infrastructure upgrades for tie and surfacing as well as the replacement of 480v 400- and 800-amp power stands, which reduce Amtrak's environmental footprint.

Connecticut River Bridge

FY 2021 Major Capital Accomplishments

East River Tunnel Rehabilitation Project

Consultant completed 90% design for the tunnel rehabilitation and began survey work in Sunnyside Yard. Project team is currently advancing 100% design and initiated a scope modification for additional design work outside tunnel portals. National Environmental Policy Act (NEPA), historical preservation and categorical exclusion determinations are ongoing.

Connecticut River Bridge Replacement Project

Completed design permitting activities, NEPA, and historic preservation reviews are progressing.

Clark to Ham Constant Tension Catenary Project

Completed foundation construction along Track 1. Initiated foundation work for Track 4 and started catenary pole installation.

Brill to Landlith Overhead Catenary Replacement Project

Completed soil borings and site survey work for interlocking lighting, retaining wall, and overhead bridge conditions; consultant progressed 30% design.

PSNY Infrastructure Renewal Program

Amtrak's forces installed 1,700 LF of block ties, concrete, track, and third rail, and then ballasted track sections to complete the full replacement of Tracks 9 and 12. Also installed 6 slip switches and 2 turnouts.

Strategy

Amtrak Engineering's asset strategies center on using information that will ensure normalized steady state activities deliver the best investment opportunities in the near term and work towards a SOGR in the longer term that is able to support a safe, efficient, and sustainable railroad.

Amtrak Engineering is driving a plan to ensure the continued viability of the infrastructure with a longer view on achieving a State of Good Repair (SOGR) across infrastructure assets. With the introduction of the Steady State Program in 2017 and Construction Program Procedure in 2018, there has been a renewed focus on capital maintenance. Moreover, capital improvement projects which contribute to the replacement or renewal of aging infrastructure are prioritized higher than those projects which provide little to no SOGR benefits. The Steady State (normalized replacement) Program identifies the count of units to replace annually, preventing an increase to the existing SOGR backlog. When Amtrak achieves a SOGR, the normalized replacement annual requirement will ensure infrastructure assets remain in a state of good repair.

Strategies for Ensuring Safe Operation

In 2017, Amtrak Engineering commenced a review of the Asset Strategies for all infrastructure assets to develop the long-term infrastructure maintenance and improvement programs to reach SOGR. These strategies are included in Appendix B – Asset Strategies.

Our existing strategies for ensuring continued safe operation can be summarized as follows:

Core Funding

- **Inspection/monitoring** activities to confirm the asset can function in its required state and provide a safe operational environment.
- **Preventive maintenance** activities to achieve a required level of asset performance and maintain a safe operational environment.
- **Corrective maintenance** activities to return the asset to its required function.

Capital Funding

- **Capital maintenance** to restore the asset to an operational design standard and maintain performance.
- **Capital replacement** to renew the asset and maintain performance.
- **Capital improvement** to replace the asset and improve performance or network capability.

Inspection/Monitoring Activities

Amtrak's Engineering standards set out the requirements for inspection and monitoring of assets to ensure safe infrastructure performance. Except for ET assets, these are aligned to FRA mandated inspections, and in some areas (track and movable bridges for example) go beyond FRA requirements. Inspection and monitoring programs drive corrective and capital maintenance programs.

Maintenance (Preventive, Corrective and Capital) Activities

Historically, asset maintenance strategies could be summarized as run-to-fail (where fail exceeds a maintenance defined limit, not a failed asset that is unsafe). Currently, data is being developed utilizing root cause analysis to identify high impact assets and introduce preventive maintenance replacement cycles. Corrective actions are typically assigned following an inspection. These are a mix of addressing identified faults and poor conditions which will lead to an asset failure, either through a corrective maintenance action or through a capital maintenance action.

Capital Replacement and Improvement Activities

Tools are in use that allow for a more consistent approach in the use of manpower, track possession, and equipment resources. Historically, the capital replacement of assets was determined by engineering judgment—including conditions, safety and reliability, funding availability, and track access.

In 2018, to address performance issues, Amtrak Engineering introduced reliability analysis to better inform replacement decisions. This included identifying assets with repeat failures or asset types which may be prone to failures.

In 2019, significant steps were taken to advance root cause analysis. Each failure work order was linked to the asset that failed, the minutes of Amtrak and commuter train delay and an enhanced problem, cause, remedy structure designed by the technical departments. Furthermore, in development are processes and tools that link asset design with asset maintenance—the technical organization with the maintenance organization. The desired outcome will be standard asset classes for quicker construction, a material view specific to the asset maintained and failure data returned to asset design to improve performance. These tools and others reflect a desire on the part of Engineering to use the latest asset management techniques to improve asset performance and expected economic life within the resources available to the Department.

Establishing Capital Investment Priorities

FY 2022 Capital Prioritization

For the FY 2022 construction plan the prioritization process has been further developed to align fully to Amtrak's Strategic Pillars to demonstrate how each project supports our corporate strategic objectives. The approach is presented in Table 2 on page 164.

FY 2022-2026 Capital Prioritization

For the FY 2022 construction plan Amtrak Engineering will be applying a tiered prioritization process to its annual program. Major production work performed by Engineering force account will take top priority, this includes but is not limited to Undercutter, Track Laying System and Switch Exchange System. The second tier will be for the SOGR capital maintenance performed by local divisions. The third tier will be capital and 3rd party projects which will be prioritized in accordance with Table 2 on page 164.

Table 2: FY 2022-2023 Infrastructure Capital Investment Prioritization Approach

Engineering Category and Definition	Infrastructure Capital Investment Prioritization - Rating					
	0	1	2	3	4	5
EXCELLENCE IN SAFETY AND OPERATIONS PILLAR						
SAFETY Unsafe condition for employees or customers	No improvements to overall safety	Minimal improvements to overall safety	↔	Safety measures can be put in place to mitigate risk	↔	No measures can be put in place to mitigate addressed safety risk
POSITIVE CUSTOMER IMPACT PILLAR						
CUSTOMER IMPACT Significantly improve OTP, ride quality or reliability of the asset	No positive impact to OTP, ride quality or reliability	Minimal positive impact to OTP, ride quality or reliability	↔	Positive impact to OTP, ride quality, and/or reliability	↔	If project not completed, asset will be taken out of service with negative customer impact
INTEGRATED STRATEGY PILLAR						
NON-STRATEGIC REQUIREMENTS Strong external requirements which may not align with Amtrak Strategic Pillars	Project aligns with an Amtrak Strategic Pillar (Already factored into priority ranking)	Project has external pressure for completion but is only in planning and/or initiation phase	↔	Project has external pressure for completion but does not have to be completed in upcoming fiscal year	↔	Project has significant external pressure for completion and must be completed in upcoming fiscal year
INVEST IN OUR ASSETS PILLAR						
STEADY STATE CONTRIBUTION Work completed will achieve steady state unit contribution	No Steady State improvements achieved	Minimal Steady State improvements achieved	↔	Steady State unit replacement contributes to annual required levels	↔	Steady State unit replacement significantly contributes to annual required levels
EXCELLENCE IN FINANCIAL STEWARDSHIP PILLAR						
FINANCIAL STEWARDSHIP Project will have a positive return on investment	Project has no financial impact or a negative return on investment	Project has minimal financial impact or a low return on investment	↔	Projects return on investment will break even	↔	Project is funded by external resources or will result in positive return on investment

Moving Towards Normalized or Steady State Maintenance

Lifecycle Management Strategies

Amtrak Engineering has four key elements to its lifecycle management strategies presented in Appendix A.

Achieve SOGR

The primary objective of this strategy is to bring the infrastructure assets to a state of good repair and then maintain them in a steady state to ensure sufficient capability to meet operational needs.

Prevent Insidious Decline

While Amtrak progresses towards SOGR, introduction of an enhanced assessment regime will guard against the insidious decline in the condition of any individual assets and ensure that they remain in a safe operational state.

Maintain Performance

The implementation of the steady state strategy is through a program that is prioritized to ensure that the infrastructure assets can function in their required state, thus minimizing performance loss due to asset faults and failures.

Support Network Capability Improvement

The program is also designed to ensure that the infrastructure assets contribute to capability targets established through the Amtrak Service Plans, including enabling higher speed operations.

Useful Life Benchmarks

The approach taken has been to establish useful life benchmarks (ULBs) to define a program of steady state or normalized levels of capital replacement necessary to move to a sustained state of good repair.

Useful life benchmarks have been established through several sources, including:

- **Previous SOGR reports** and studies conducted in the last five years.
- **Engineering review** and judgment of typical asset lifecycles on Amtrak property.
- **Independent review** by outside parties.
- **International benchmarking** against comparable rail networks including those in Europe.

Moving Towards Normalized or Steady State Maintenance

Transition Strategy

The concept of a useful life benchmark supports the development of a work-bank, but it is not an asset management strategy. This is because the transition to steady state maintenance requires SOGR backlog needs to be addressed first. To address this, Engineering has identified a series of delivery strategies which must be fully implemented to effectively move to a steady state maintenance strategy. These are described in the following six sections.

Reducing Expenditure

More efficient delivery of work in the long-term reduces the funding needed and ensures that steady state maintenance is affordable. To achieve this, we need to invest in our equipment—high-output plant delivering maintenance efficiently; invest in our people—so we have qualified and experienced staff delivering the work; and invest in our asset management approaches—so we have the right information to inform our decisions, so our assets are performing to the optimum service levels.

Equipment Availability

The performance of Amtrak's maintenance of way equipment has a direct impact on our ability to achieve steady state (normalized) maintenance of the infrastructure. The work of replacing assets is done by large machines in consist with an assembly line of smaller support machines. The tempo of work is determined by factors including track possession efficiency where successive blocks of work are driven not only by the speed of the large machine but by the finish of the smaller machines. Pace is also set by the logistics of material fed and removed from the process by work trains, the reliability of the equipment to work without failure, and the skill of the people operating the equipment.

To address the challenges of outmoded, unproductive, and insufficient equipment, the Engineering Department prepared an Equipment Asset Strategy and received approval to procure $362 million in equipment over five years. The new equipment includes one new Track Laying System (TLS) for ties and rail replacement, two new undercutters for ballast cleaning, and five new high-speed tampers for track geometry maintenance. The strategy was designed based on our current and forecasted production capacity, with the goal of addressing state-of-good repair and transitioning to steady state. Equipment began arriving during FY 2019; undercutters are scheduled to arrive during 2022. The TLS is still three years from completion.

Availability of Qualified Personnel

Historical lack of qualified personnel will be partially mitigated through a steady year-round work schedule. Presently, three 100-person gangs are employed between the TLS and two Undercutters. While the plan to have the TLS and Undercutter work sequentially for 72 hours a week requires the addition of another 100-person gang, it eliminates the full duplication of workforce that would result from the TLS and Undercutter operating in parallel.

The benefits of a fixed workforce employed year-round are also significant, such as stability in key positions and the effectiveness derived from familiarity of tasks using productive, reliable equipment. Additionally, Engineering and Labor Relations are in discussions with the Brotherhood of Maintenance of Way Employees to eliminate specific work rules that interfere with holding qualified individuals in specific jobs, such as operators, foreman, ET and welders.

Track Time Availability

While obtaining sufficient track time for maintenance work is a challenge for all railroads, that challenge is much greater on the NEC than elsewhere on the U.S. rail system due to the density of its passenger train operations. The optimal solution to delivering increased steady state production while minimizing the impact on train service is to reduce track possession time in a given block. This requires more efficient production equipment, improved planning, and greater access to needed resources.

Currently Engineering has three 24/7 footprints on the Northeast Corridor (NEC) for two Undercutters and a Track Laying System (TLS). During FY 2021, the Engineering department successfully completed a "blitz" between Lehigh and Mantua on Track 1 during FY 2021. First, the rail and ties were replaced by the TLS, then the undercutter followed and replaced the ballast using the same continuous outage. This approach reduced the number of outages and returned the track with clean ballast, new rail, and new ties. Engineering intends to utilize this "blitz" approach in the future as well.

Improving our Strategies and Plans

As Amtrak moves to a steady state replacement cycle, the first iteration needs to be staged (prioritized) such that the ongoing work program is manageable year-over-year. The Asset Strategies in Appendix B describe planned replacement cycles and implementation strategies. This work will be further developed, refined, and implemented through the Plan period.

Moving Towards Normalized or Steady State Maintenance, continued

Addressing Funding

After decades of chronic underfunding, the backlog of work required to bring Amtrak's infrastructure assets to SOGR, determined using a mix of condition assessments and age, is estimated at $48.7 billion. Amtrak is ready to meet the challenge this presents, and Congress and the Administration have expressed confidence in our ability to deliver by providing transformative levels of funding for investments in Amtrak infrastructure over the next five years (FY 2022-2026). The recently enacted Infrastructure Investment and Jobs Act (IIJA) includes $58 billion for capital investments in intercity passenger rail. (See sidebar at right for details.)

The IIJA also provides other additional rail and transit funding that can be used for projects on Amtrak-owned infrastructure. The funding provided by the IIJA, in conjunction with the work done with by the NEC Commission to finalize a method for cost-sharing and mutual obligation for NEC projects that jointly benefit Amtrak and commuter rail, sets the stage for Amtrak and its partners to begin to address the SOGR backlog.

Federal Funding

The Bipartisan Infrastructure Deal (BID), provides $58 billion in one-time rail funding:

✓ **$22 billion for grants to Amtrak**

- $6 billion for NEC
- $16 billion for National Network

✓ **$36 billion for FRA Federal-State partnership grants**

- Up to $24 billion for NEC
- At least $12 billion for non-NEC

Reauthorization of federal rail policies (i.e. updates to the FAST Act) includes:

✓ **Increased authorized funding levels at $19 billion/5 years** for Amtrak's NEC and National Network grants (subject to future appropriation).

✓ **Corridor development**

- New FRA program to identify and select promising corridors
- New FRA grant programs for capital and operating assistance

✓ **Various updates,** improvements, and directives to Amtrak and FRA rail programs.

Asset Inventory

Amtrak is responsible for 2,364 track miles of track, 1,291 undergrade bridges, 1,467 track miles of electric traction, 226 signaling interlockings nationwide. This includes 1,154 track miles of main-line infrastructure along the Northeast corridor—the nation's highest speed rail line.

Overview

Amtrak owns and/or manages infrastructure nationwide with an estimated replacement value of $82.8 billion. The infrastructure is largely located on the NEC between Washington, DC and New Rochelle, NY and between New Haven, CT and the Massachusetts/Rhode Island border. Outside of the NEC, the majority is located on the Michigan Line in Illinois and Michigan.

NEC Main Line

Amtrak owns and operates 1,154 track miles of main-line infrastructure on the NEC main line (see Figure 1).

The corridor is largely built to operate as an FRA class 7 railroad with passenger speeds up to 125 mph. There are a limited number of track segments classified at class 8 status for 150 mph.

Figure 1: NEC Main Line and Branch Lines – Accountabilities

NEC Branch Lines

In addition to the main-line assets described above, Amtrak also owns branch lines which are considered part of the NEC in several contexts. These include:

- The 261 track miles of infrastructure up to 110 mph track along the Keystone Corridor from Philadelphia, PA to Harrisburg, PA.
- The 108 track miles of the Springfield Line from New Haven, CT to Springfield, MA.
- The 19 track miles of the West Side Connection from New York Penn Station to Spuyten Duyvil, NY.
- The 12 track miles of infrastructure on the Post Road Branch from Post Road Junction to Rensselaer, NY.

The Keystone Corridor and Springfield Line are largely built to operate as an FRA class 6 railroad with passenger speeds up to 110 mph.

In addition to the main-line, Amtrak maintains 53 track miles of sidings along the NEC Branch-lines.

Overview, continued

State of New York Supported Assets

Amtrak is the responsible infrastructure manager for the long-term leased infrastructure[1] on the 95 route miles Empire Corridor on the Hudson Line between Poughkeepsie, NY and Hoffmans (near Schenectady, NY), and owns outright two short segments of the Hudson Line in New York City and the Schenectady areas.

The State of New York contributes to the capital and operating expense of portions of this infrastructure.

National Rail Network

While 72% of the miles traveled by Amtrak trains are on tracks owned by other railroads, Amtrak is also responsible for track infrastructure assets nationwide, including:

- Owning and operating 84 track miles of up to 110 mph track from Porter, Ind. to Kalamazoo, MI, along with 17.5 track miles of sidings.
- Owning and operating 67 track miles of yard tracks and sidings in Chicago, Los Angeles, New Orleans, New York City, Oakland (Kirkham Street Yard), Orlando, Portland, Saint Paul and Seattle.
- Maintaining and operating seven track miles of yard tracks in Hialeah, near Miami, FL, leased from the State of Florida.

1. Amtrak entered into a lease agreement with owners CSX in 2012.

State of Michigan Supported Assets

Amtrak is responsible for maintaining and operating the 181 track miles of infrastructure from Kalamazoo, MI to Dearborn, MI owned by the state of Michigan, along with 41 track miles of sidings. The Michigan line (Chicago-Detroit Line) has been upgraded to operate as an FRA class 6 railroad with speeds up to 110 mph (see Figure 2).

Figure 2: National Network Infrastructure – Accountabilities


Wolverine Service at the John D. Dingell Transit Center in Dearborn's West Downtown.

Asset Inventory

Amtrak's Engineering Department organizes the infrastructure assets into **four asset classes**; Table 3 provides a summary.

Table 3: Amtrak Infrastructure Assets - Summarized by Route/Ownership

Track	Bridges and Buildings	Electric Traction	Communications and Signals
NEC MAIN LINE			
• 1,323 track miles of Rail main and siding • 1,883 Turnouts • 354,651 Wood ties • 2,623,447 Concrete ties	• 10 Movable bridges • 435 Signal bridges • 785 Undergrade bridges • 20,103 Bridge ties • 488 Culverts • 96,173 Linear feet of tunnel	Two systems: • 371 track miles 60 Hz constant tension in the north • 818.5 track miles 25 Hz fixed tension in the south • 23.5 track miles 60 Hz constant tension in the south	• 124 Interlockings • 2,063 Switch machines • 248 Switch heaters • 2,052 Signals • 2,355 Track circuits • 124 Central Instrument Houses (CIH) • 363 route miles of PTC
NEC BRANCH LINE			
• 453 track miles of Rail main and siding • 393 Turnouts • 856,624 Wood ties • 252,588 Concrete ties	• 1 Movable bridge • 87 Signal bridges • 280 Undergrade bridges • 2,202 Bridge ties • 349 Culverts • 2,681 Linear feet of tunnel	254 track mile 25Hz fixed tension on the Harrisburg line	• 40 Interlockings • 372 Switch machines • 80 Switch heaters • 489 Signals • 497 Track circuits • 40 CIH • 164 route miles of PTC
Infrastructure leased from CSX, Capital Funded by the State of New York and maintained and operated by Amtrak			
• 190 track miles of Rail main and siding • 68 Turnouts • 204,341 Wood ties • 44,782 Concrete ties	• 1 Movable bridge • 13 Signal bridges • 114 Undergrade bridges • 3,031 Bridge ties • 58 Culverts • 57 Linear feet of tunnel	There are no electric traction assets off the NEC corridor.	• 24 Interlockings • 95 Switch machines • 24 Switch heaters • 176 Signals • 253 Track circuits • 24 Central Instrument Houses (CIH) • 71 route miles of PTC
NATIONAL NETWORK			
• 176 track miles of rail main and siding • 558 turnouts • 399,555 wood ties • 2,957 concrete ties	• 2 Movable bridges • 4 Signal bridges • 52 Undergrade bridges • 0 Bridge ties • 0 Culverts • 0 Linear feet of tunnel	There are no electric traction assets off the NEC corridor.	• 18 Interlocking • 322 Switch machines • 18 Switch heaters • 90 Signals • 76 Track circuits • 18 CIH
Infrastructure owned by the State of Michigan and maintained and operated by Amtrak			
• 222 track miles of rail main and siding • 173 turnouts • 651,517 wood ties • 2,112 concrete ties	• 0 Movable bridges • 12 Signal bridges • 60 Undergrade bridges • 0 Bridge Ties • 4 Culverts • 0 Linear feet of tunnel	There are no electric traction assets off the NEC corridor.	• 20 Interlocking • 96 Switch machines • 20 Switch heater cabinets • 14 Signals • 121 Track circuits • 20 CIH

Asset Inventory, continued

Inventory Improvement Actions

The development of the 2019 Infrastructure Asset Line Plan highlighted the need to improve the confidence in infrastructure asset information, including the completeness, consistency and accuracy of the records held about the infrastructure Amtrak Engineering is responsible for. Good quality information will enable engineering analysis to address asset performance issues and improve efficient planning of capital investments.

Amtrak Engineering has undertaken an initiative to establish a robust information set to support asset decisions and management actions. The scope of this initiative includes defining the asset information requirements, leveraging industry leading geospatial database for location and asset inventory, collating information from existing sources and undertaking a program of field verification, where necessary, to improve the confidence in asset information—resulting in a complete data set that is consistent and accurate.

Asset Condition

Current Condition Monitoring (Inspection) Approaches

Amtrak currently conducts extensive condition monitoring (inspection) programs of its infrastructure assets, as further described in the Asset Strategies (Appendix B). The monitoring activities—many of which are federally mandated—ensure day-to-day safe operation of the railroad. They are used to identify faults and potential faults which require prioritized and scheduled maintenance.

Asset Condition Assessment

Except for Structures (bridges and tunnels), a challenge across all asset classes is that historically little has been done to assess long-term asset condition. This limits the level of predictive analysis to determine future investment needs based on the asset's SOGR.

In 2018, Amtrak Engineering developed and introduced an asset condition assessment framework which was designed to provide an indicator of long-term trends in an asset's SOGR. The framework's guidelines are used to inform capital replacement decisions and assign investment prioritization.

The asset condition assessment framework results in a measured SOGR index for each asset. Separate condition assessment guidelines have been developed for each of the major asset classes. Within each asset class, the 'parent level' to assess condition has been determined based on the intervention activity options. For each parent asset type, a condition assessment matrix has been produced that considers *one or more* of the following five factors:

1. **Age (or cumulative level of use):** Estimate based on the share of an asset's useful life elapsed.

2. **Visual Condition:** Assessment based on visually identifiable signs of asset wear or deterioration.

3. **Reliability:** Assessment based on an asset's ability to meet the required technical level of service.

4. **Measured Condition:** Assessment based on automatic, equipment-based, or manual measurement of one or more specific asset characteristics, which are indicative of the asset's overall condition.

5. **Maintenance Condition:** Assessment based on ability to maintain condition using planned maintenance activities, and the number of outstanding maintenance activities that exist within the system requiring unplanned interventions outside of routine maintenance.

For each factor, a grading system has been developed for the parent asset type that ranges from zero (asset is non-operable) through five (asset is new or nearly new). An assigned condition index has then been derived from a review of the above factors.

Asset Condition, continued

Defining State of Good Repair (SOGR)

Amtrak considers an asset to be in SOGR when it satisfies the following:

- It is in a condition where it can continue to meet and perform the functional requirements for which it was designed.
- The use of the asset in its current condition does not pose a safety risk.
- The lifecycle investment needs of the asset have been met including all scheduled maintenance and where no backlog of capital needs exist.

Amtrak grades an asset in SOGR if it scores 2.5 on its updated condition assessment framework.

IALP 2022 Condition Assessment Approach

Condition assessments are comprised of five components detailed above: age, visual condition, measured condition, maintenance condition, and reliability. Amtrak Engineering has introduced condition assessments for one asset type per technical discipline as detailed below. Depending on the asset type, a subset of the components maybe used to determine the overall asset SOGR score. In the absence of a condition assessment for the remaining asset types, age will continue to be used for assessing SOGR. The following score ranges are provided for guidance on the overall asset SOGR based on age:

- **Score 5:** Asset is new or nearly new; 76% to 100% of expected useful life benchmarks remaining.
- **Score 4:** Asset is at or nearing its midlife point; 50% to 75% of expected useful life benchmarks remaining.
- **Score 3:** Asset has passed its midlife point; 25% to 49% of expected useful life benchmarks remaining.
- **Score 2:** Asset is nearing the end of its useful life; 0% to 24% of expected useful life benchmarks remaining.
- **Score 1:** Asset is beyond its useful life; 0% of expected useful life benchmarks remaining.
- **Score 0:** Asset is non-operable.

The Electric Traction Department will be utilizing the condition assessment framework methodology as part of the catenary structure assessment commenced in FY 2020. A helicopter performs an aerial flight assessment of Amtrak's catenary, signal and transmission system structures, electrical lines, and components and system assets along the Right of Way (ROW). Qualified personnel review the baseline assessment and identify defects, as well as assign a condition rating of specified components based on a rubric developed following the above scoring model. These defects are created as work orders in Amtrak's Enterprise Asset Management System for action by the appropriate division personnel. This initiative will result in reliability centered maintenance regimes and improved capital planning for catenary structure renewal or replacement.

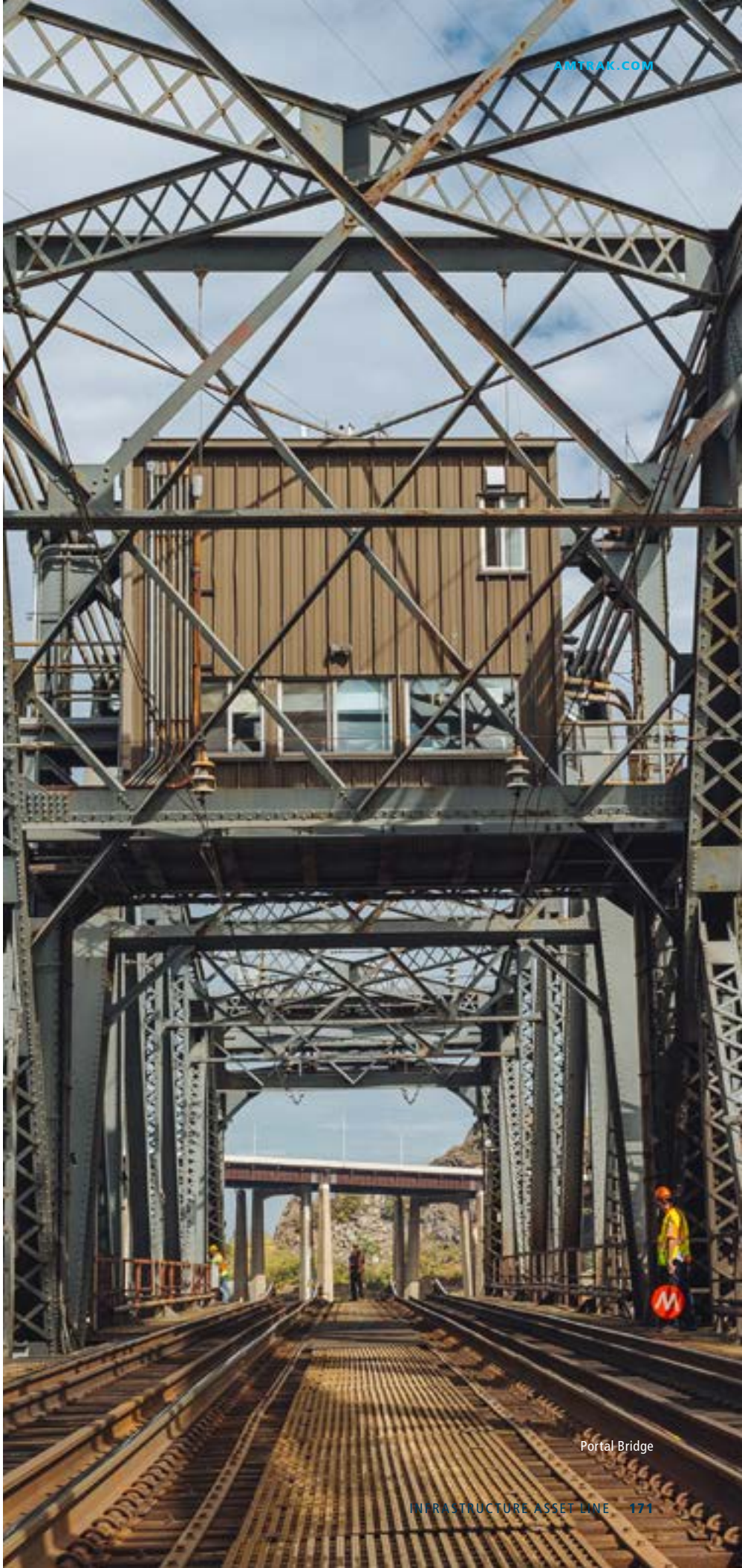
SOGR scores for catenary structures are be based on three factors of condition: visual, maintenance and age. The visual condition accounts for 55% of the structures SOGR score, with the maintenance condition 30%, and age 15%. The visual condition assessment is an aggregate value derived from the condition rating of each structure component. The maintenance condition is based on the total defects identified on the structure, with the 0 to 5 rating scale defining the allowable number of defects per condition score. The age SOGR score will remain unchanged from previous years but equate for a lower percentage of the overall asset condition. Catenary structures yet to be inspected during helicopter flights will continue to solely use age as the measure of condition.

The Track Department will also begin utilizing more advanced measures of asset condition assessment, bringing together disparate data sets (Sperry Car, ARMS, field data), projecting wear and fatigue, identifying the areas for required maintenance and scheduling and prioritizing necessary work holistically. As it transitions to these more advanced techniques, turnout inspections will continue to be used as a primary measure of condition, using the visual condition factor of the SOGR score. These will be assessed by track inspectors using a good, fair or poor rating, and will then be translated into a 0 to 5 score. Age will remain a component of overall asset condition, but as we gain more accurate and recent data on our track assets it will be factored in less and less.

The Structures Department will be utilizing required FRA yearly inspections and System level annual inspections as an additional measure of condition, representing the visual condition factor of the SOGR score. Culverts are visually inspected once per year by B&B inspectors, with each component receiving a score based on condition. The culvert SOGR score will be determined by evenly weighting both the visual condition and the age components.

In addition to culverts, B&B will be utilizing visual condition assessments for bridge ties. The bridge tie component of an undergrade bridge is inspected twice per year during the required FRA inspections. During these inspections, the bridge ties receive a condition score by a B&B inspector based on the visual appearance. Using the most recent inspection score at the time of reporting, a visual condition SOGR factor will be determined. Like the culverts, the SOGR score of bridge ties will be evenly weight the visual condition and the age components.

The C&S Department is continuing to determine the best approach for defining condition of its assets, outside of age, as many of them are run to fail. This makes it challenging to determine a condition score, since the assets are either working or not. Cables were determined to be the best asset type to target, since their inspection provides a rating beyond pass/fail. When a cable measurement value is outside of the defined parameters, the required inspection frequency increases. Determining the inspection frequency of each cable and correlating each frequency to a 0 to 5 condition score, will provide a measured condition factor for the SOGR score. The overall SOGR score for cables will be determined by evenly weighting the measured condition and the age components of each asset.



Portal Bridge

Assessed Asset Condition

Table 4 provides a summary of assessed condition by asset class, route and ownership. The replacement value of infrastructure, with assets having a condition rating below 2.5, is considered to be Amtrak's SOGR backlog for infrastructure and is estimated to be $48.7 billion in 2021 dollars.

Table 4: Summary Assessed Condition – by Asset Class, Route and Ownership

Asset Class	NEC Main Line		NEC Branch Line		National Network	
	Average SOGR Score	% Not in SOGR	Average SOGR Score	% Not in SOGR	Average SOGR Score	% Not in SOGR
ASSETS OWNED BY AMTRAK						
Track	2.93	37.2%	2.84	42.2%	2.97	47.7%
Bridges and Buildings	1.97	63.2%	2.05	77.5%	2.40	55.4%
Electric Traction	2.57	49.5%	1.71	65.1%	-	-
Comms and Signals	2.86	23.3%	2.31	92.0%	3.58	32.2%
ASSETS MAINTAINED AND OPERATED BY AMTRAK – OWNED BY OTHERS			**LEASED FROM CSX, CAPITAL FUNDED BY STATE OF NEW YORK**		**OWNED BY STATE OF MICHIGAN**	
Track			2.26	24.0%	2.82	46.5%
Bridges and Buildings			2.25	77.5%	2.12	68.1%
Comms and Signals			2.28	88.7%	3.85	28.5%

Note: Average SOGR's are weighted based on replacement value of the asset—not the proposed project value which could include additional improvements. The average SOGR score and the % not in SOGR are not directly proportional. Average SOGR scores are weighted based on replacement cost, so assets with higher replacement costs have greater impact on the values presented in the table above. Amtrak is working on asset information initiatives to improve the estimation of average SOGR scores.

It should be noted that this is the estimated value of assets that are past their useful life and which need replacement. It is not the forecast project costs associated with replacing these assets. The total value of the SOGR backlog is based on unit rates developed as part of the NEC Commission's Cost Allocation Policy update and confirmed by the Deputy Chief Engineers responsible for each asset class. Many of the highest priorities for SOGR are also identified as opportunities for network performance improvement (for example infrastructure assets under the Gateway Program). The SOGR backlog figure considers the refurbishment of the existing asset only and does not consider the proposed project costs of these capital improvement programs.

Figure 3 and Figure 4 below present the backlog by line and asset class. 93% of the total backlog or $43.7 billion is on the NEC main line and branch lines. About three quarters of the backlog is B&B, with ET and Track making up most of the remaining quarter. C&S accounts for a very small proportion of the overall SOGR backlog.

Assessed Asset Condition, continued

Figure 3: Assessed State of Good Repair Backlog by Line

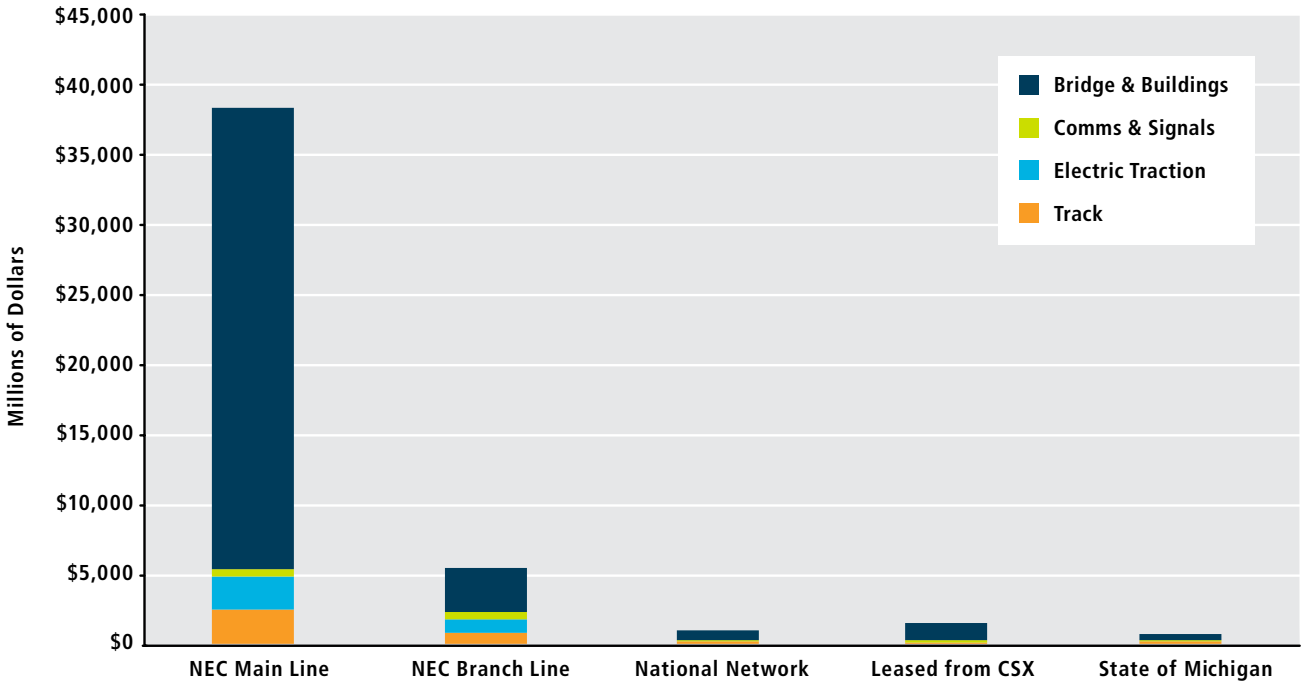
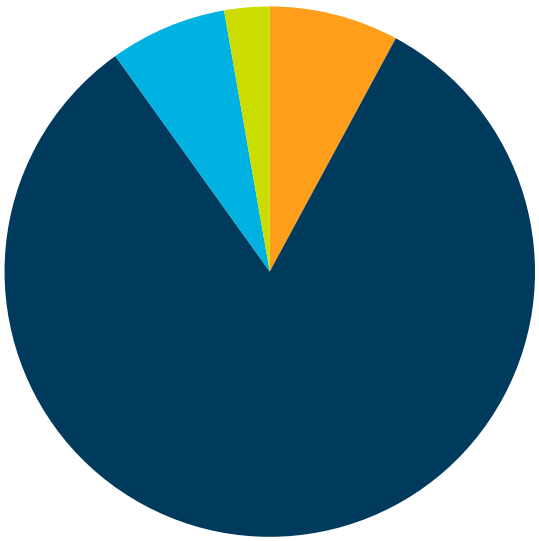


Figure 4: Assessed State of Good Repair Backlog by Discipline



Bridge & Buildings Backlog: $38.42B

Electric Traction Backlog: $3.33B

Comms & Signals Backlog: $1.29B

Track Backlog: $3.68B

$46.72B

Total Assessed Value of State of Good Repair Backlog

Five Year Capital Program

The capital spend plan for the FY 2023–2027 Infrastructure Asset Line Plan includes safety projects and mandates ($60 million), SOGR/normalized replacement programs ($3.5 billion), major backlog projects ($2.2 billion), and improvement projects and strategic initiatives ($2.2 billion). A large portion of the capital investment within the SOGR/normalized replacement programs is directed towards track investments ($1.9 billion) and electric traction investments ($716 million).

Over the past several decades, Amtrak's annual appropriations and limited discretionary funding available to intercity passenger rail hindered the company's ability to address its largest and most complex infrastructure priorities in an efficient and effective manner. With the passage of the IIJA, Amtrak is set to receive historic funding levels between fiscal years 2022 and 2026. This funding will help the company address its long-standing SOGR backlog and advance improvement projects and strategic initiatives to create a modern and resilient railroad with more frequent service, connections to new markets, and reduced travel times between communities.

Significant planning efforts—including the CONNECT NEC 2035 planning process led by the NEC Commission and *Amtrak Connects US*—are underway that seek to maximize the impact of this funding and our growing workforce and, most importantly, improve the travel experience for our passengers.

Pursuant to 49 U.S.C § 24320(a)(2), the planned capital spending presented in this section is based on funding levels authorized or otherwise available to Amtrak in a fiscal year. The figures presented for fiscal years 2023–2027 are fiscally constrained based on funding available in fiscal year 2022, plus inflation. The capital spending figures represented in this plan were prepared prior to the passage of the IIJA and will be updated in future plans to align with the significant increase in authorized funding levels for Amtrak and supplemental appropriations provided through fiscal year 2026.

Table 5: Infrastructure Asset Line Planned Capital Spend FY22–27 by FAST Act Investment Category (in millions USD $)

Investment Category	FY22 (Base Year)	FY23	FY24	FY25	FY26	FY27	FY23-27 Total
Safety and Mandates	20.6	12.1	11.8	12.0	12.0	12.1	60.0
SOGR/Normalized Replacement Programs	648.9	760.2	749.5	693.7	656.6	664.5	3,524.6
Track	377.0	405.0	399.6	375.0	369.5	376.1	1,925.3
Communication & Signals	142.3	163.9	136.2	123.4	95.9	98.5	618.0
Electric Traction	81.3	141.3	170.4	152.7	126.7	125.2	716.2
Structures	48.4	50.0	43.2	42.5	64.5	64.8	265.1
Major Backlog Projects	27.0	135.0	674.4	413.0	662.9	354.8	2,240.1
Improvement Projects and Strategic Initiatives	351.7	638.6	379.1	318.8	402.2	466.2	2,204.8
Total	**$1,048.2**	**$1,545.9**	**$1,814.8**	**$1,437.4**	**$1,733.8**	**$1,497.6**	**$8,029.4**

New *Acela* comes to DC.

Safety and Mandates

This section provides examples of projects and activities that enhance the safety of our right-of-way infrastructure and/or respond to legislative mandates, such as the continued implementation and advancement of Positive Train Control (PTC) technologies on Amtrak-owned right-of-way.

Penn Station NY SCADA Phase II

This project will create a new SCADA system for Fire and Life Safety elements from Weehawken, NJ to First Avenue in Long Island City including New York Penn Station. The new system will replace the existing SCADA Fire and Life Safety System to ensure efficient and safe operation of Amtrak's assets and infrastructure and maintain compliance with current regulations and standards.

Engineering Advanced Technology Track Inspection

This program provides for compliance with current regulations and the Tier III operation waiver for the new *Acela* trainsets. This work includes two projects which are (1) construction of a track geometry car and (2) the development of a computer-based visual inspection system to improve effectiveness of high-speed track inspections. This work will be performed over multiple years.

New AEI Tag Reader Wayside Defect Detection

This project will install a total of 28 single-track AEI Tag Reader sites at 18 new critical locations throughout the NEC over the next several years. The scope of work for this project relies on Maintenance-of-Way (MOW) Production crews, C&S Communication crews and/or contractor services to perform the installation of the AEI Tag Readers while the network interface will be performed by Amtrak's IT department. Tag readers assist managers with locating equipment which will enhance the ability to support track construction.

Amtrak Owned Positive Train Control Installation

Positive Train Control (PTC) is a safety measure mandated by the federal government for train operations which is used for collision avoidance, civil speed restrictions enforcement, temporary speed restrictions, and rail worker wayside safety. Moving forward this project will make upgrades to address conditions issued by FRA with Amtrak's PTC system certification, correct defects, and begin replacement of obsolete components. Critical activities are focused on modifications to onboard PTC software required to address the FRA conditions.

SOGR Programs

This section describes key activities within the four major SOGR/Normalized Replacement program categories for Amtrak-owned and maintained right-of-way infrastructure: (1) Track, (2) Structures, (3) Electric Traction, and (4) Communications & Signals. Activities within these programs are ongoing and support our efforts to achieve and maintain an SOGR on the NEC and across the US.

Major Track Program Capital Investments

Track Ballast

Perform work to progress the ballast assets towards a state of good repair. Examples include replacement through spot undercutting, removal of mud spots, system undercutting to improve track geometry and preserve ties and rail, and shoulder cleaning where total replacements are not needed.

Track Drainage

Renew and replace track drainage assets currently not in a state of good repair. If not corrected, poor drainage will result in slow orders and higher maintenance costs associated with the accelerated degradation of track geometry. Examples include the utilization of the slot-train, the Badger ditcher, and conventional earth moving equipment to re-profile existing drainage ditches and establish new ones.

Tie Replacement Program

Utilization of the TLS for the complete replacement of wood tie track with concrete cross ties and replacement of concrete ties that have been found to be defective or exceeded their useful life. This replacement program will reduce maintenance costs and potential slow orders, and improve OTP.

Timber Program

Replace crosstie and track timber along the NEC which will reduce train delays, track geometry degradation, FRA track defects, and switch failures. Examples include the installation of timber underneath turnouts in yards and block tie replacement at specific locations.

Track Geometry

Surfacing, realignment and re-profiling of track surface as required to meet FRA track safety standards, maintain ride quality and extend the life of track components.

Track Turnouts

Replacement of standard wood turnouts and associated components not currently in a state of good repair. Associated components include frogs, switch points, and wood and concrete switch timbers and other track turnout material.

Track Rail Replacement

Replacement of rail that is currently not in a state of good repair. Amtrak replaces an average of 35 miles of rail per year. Useful service life of rail has been exceeded once horizontal or vertical wear limits, internal defect rates, or surface conditions are approaching safety limits. This program will help to reduce maintenance costs and slow orders.

Rail Grinding

Cyclical grinding of rail to extend useful life by removing surface flaws before they become larger defects impacting other track components and optimize wheel/rail interface for ride quality.

Insulated Joint Repair

Replacement of defective or past useful life insulated joints to maintain properly functioning signal system and safe track structure.

Joint Elimination Program

Program replacement of joint elimination to improve operational performance.

Interlocking Renewal

Total renewal of the existing track structure within interlocking limits with new advanced technology; updates include repair or replacement of turnouts, concrete switch ties, movable point frogs, and switches. These interlocking renewal projects will move the railroad towards a state of good repair by eliminating failures and reducing maintenance costs.

Section Improvements

Replacement of track infrastructure to improve ride quality, increase speed, improve reliability and increase OTP (OTP)/Train Capacity.

SOGR Programs, continued

Major Structures Program Capital Investments

Movable Bridges

Progress Amtrak's movable bridges towards SOGR. Some of the bridges will be repaired through selective component replacement while others require complete replacement of movable structure, mechanical and electrical systems.

Undergrade Bridges

This program addresses undergrade bridges currently not in SOGR, including conversion of open deck undergrade bridges to ballast deck for improved train performance. Some of the undergrade bridges can be brought to SOGR through selective component replacement; others will require complete replacement.

Culverts

A program aimed at rehabilitating or replacing culverts currently not in SOGR. Projects will improve the right of way drainage for improved reliability.

Bridge Timber Replacement

Replacement of aging and deteriorated bridge timbers will address SOGR needs, improve safety, efficiency and operational reliability.

Tunnels

Tunnels will be progressed towards SOGR primarily through component replacement, or through complete replacement of the tunnel under extreme circumstances.

Facility Upgrades

Upgrades to Transportation, M/W, and M/E Facilities to address SOGR needs, improve safety, efficiency and security.

Retaining Wall Replacement

Rehabilitation or replacement of retaining walls to address SOGR needs and backlog repair. Projects will improve safety and reliability.

Major Electric Traction Program Capital Investments

Catenary

Replacement and renewal of catenary wire, insulators and hardware currently not in SOGR. Elements of this program include not only replacement of components that are beyond their useful life, but also the replacement of wire that is beyond the allowable wear percentages.

Catenary Pole

Many catenary poles are over 90 years old and are beyond their designed service life. Replacement will provide physical support to the power transmission and catenary systems.

Transmission

Replacement of traction power transmission wires and associated hardware currently not in SOGR. Much of the existing wire has been in service for over 70 years and has far exceeded its useful life. Work includes replacement of transmission lines, design, purchase and installation of new solid dielectric cable, demolition of the existing duct bank and construction of a new duct bank, terminations, splices and testing of the new cable.

Substations and Frequency Converters

Improvements to the electric traction and substations along the Northeast Corridor. Examples are replacement of traction power frequency converters, replacement or renewal of air break switches, and renewal of substation components such as power transformers, circuit breakers and control cables. The reliable operation of these assets is critical to on-time performance.

Signal Power Upgrades

Replacement and renewal of the existing signal power machines that generate the 6,900 volts for the signal transmission lines. This equipment runs 24 hours a day, seven days a week, has many rotating parts and requires extensive maintenance. Open signal power wire will also be upgraded to insulated cable at key locations.

Major Communications & Signals Program Capital Investments

Automatic Block Signaling (ABS)

ABS component failures have been identified as a major contributor to train delay. Signal upgrades will address SOGR needs and improve safety, OTP and reliability for all users.

ACSES

ACSES is the PTC system used on the NEC and mandated by the FRA for high-speed operation. This program includes upgrades to the Central Instrument House, radio transmission equipment and wayside interface units. For interoperability with freight carriers operating on the NEC, Amtrak will install I-ETMS overlay that will allow freight trains and some commuter trains to operate on the NEC without ACSES equipment. See the Positive Train Control section of this document for additional detail.

Interlocking - C&S

This program addresses interlocking signal system components not currently in a SOGR. Signal systems at interlockings will be upgraded to eliminate equipment failures and reduce maintenance costs. This program involves conversion of air switch machines to electric machines, automation of manual towers and replacement of obsolete interlocking signal-system components.

Communications Equipment Housing

Replacement of communication equipment houses to address SOGR needs. Procure and install new equipment houses and move existing equipment and cabling into new houses.

Work at Hanson Interlocking in New Carrollton, Maryland.

Radio Upgrades

With the conversion to FCC required narrow banding, radio coverage will become an issue as signal strength is restricted by bandwidth. Engineering work (including a coverage study) and design are needed to insure adequate coverage along the right of way. As a part of maintaining adequate radio coverage C&S will add additional and replace the existing analog radio voters (quality signal selector) with state-of-the-art voters on the NEC.

Grade Crossings

Upgrade highway crossing detection devices for more reliable operation of warning systems that will enhance grade crossing system safety while reducing maintenance costs. Work includes renewal of ties, rail, and crossing material at road crossings, as well as concrete tie installation at grade crossings.

NEC Major Backlog Projects

The NEC Commission's *Intercity and Commuter Rail Cost Allocation Policy* defines major backlog projects as "projects necessary for achieving a state of good repair, but are not undertaken on a routine basis, such as the rehabilitation or replacement of major bridges and tunnels." This section describes example Amtrak-led major backlog projects on the NEC advancing between FY 2022 and FY 2027.

Hudson Tunnel Project

This project will construct a new two-track rail tunnel beneath the Hudson River, rehabilitate and modernize the existing two-track North River Tunnel, and construct the third and final rail right-of-way preservation section beneath the extensive overbuild project that is planned to be constructed on a platform above the rail complex in Manhattan (immediately west of PSNY) known as "Hudson Yards." When complete, the project will provide increased reliability and operational flexibility for Amtrak and NJT on the NEC.

Pelham Bay Bridge Replacement

This project would replace the over 100-year-old Pelham Bay Bridge which spans the Hutchinson River in New York. The current bridge is an outdated, lift style, movable bridge that is required to open multiple times per day. The deteriorated overall condition restricts the speed of trains passing over the bridge.

Connecticut River Bridge Replacement

This project replaces the Connecticut River Bridge between Old Saybrook and Old Lyme, CT that carries Amtrak and Shore Line East trains. Completed in 1907, it is the oldest movable bridge between New Haven, CT and Boston, MA. A century of operation has taken a toll, restricting speeds over the bridge to 45mph. The frequent opening and closing of the bridge puts high demands on its aging components, increasing maintenance costs and reducing reliability for both railway and marine traffic. A full replacement of the existing bridge will have a two-track, electrified movable bridge, steel through-truss trunnion bascule span; a ballasted, reinforced concrete deck on steel girder approach spans; and at-grade approaches that tie into the existing railroad.

Sawtooth Bridge Replacement

This project will replace Amtrak's Sawtooth Bridges in Kearny, NJ, which currently limit the efficiency and reliability of rail operations along the NEC. The project replaces an approximately 1.1-mile-long segment of existing ROW with new structures that would result in a four-track segment of the NEC with improved design speed.

Susquehanna River Bridge Replacement

In order to address SOGR and to increase capacity, this project would replace the existing two-track movable Susquehanna River Bridge, built in 1906, with two modern high-level, fixed structures, each with two tracks.

East River Tunnel Rehabilitation

This project would rehabilitate Tubes 1 and 2 of the East River Tunnel between Penn Station, NY and Queens, NY. The tubes are in desperate need of rehabilitation and improvement due to continually worsening conditions given their age and damage from Superstorm Sandy. Completing this project would ensure continuation of operations for LIRR, NJ TRANSIT, and Amtrak and address current capacity constraints which cause bottlenecks in and out of Penn Station.

Baltimore and Potomac Tunnel Replacement – Phase 1

The current Civil War-era Baltimore and Potomac Tunnel in Baltimore, Maryland will be replaced by a new, state-of-the-art-tunnel named in honor of Frederick Douglass. The new tunnel will reduce trip-time by permitting speeds up to 100 mph, minimize operational conflicts among high-speed, intercity, and commuter passengers, and increase throughput capacity. Phase 1 of the Frederick Douglass Tunnel will be constructed as two single track bores to provide an inherent resiliency and robust Fire & Life Safety measures that meet contemporary standards.

Amtrak ACS-64 crosses over the Perryville Interlocking in Maryland.

Improvement Projects and Strategic Initiatives

While much of our infrastructure capital investment focuses on urgent SOGR/normalized replacement programs, Amtrak is committed to infrastructure improvements necessary to support and grow the business in the near- and long-term. The following section describes example improvement projects and strategic initiatives that will be progressed between FY 2022 and FY 2027 to improve reliability, safety, OTP, and capacity, including those identified as part of the *CONNECT NEC 2035* planning process.

Next Generation High Speed Fleet Infrastructure: Sunnyside Yard Facility Improvements

A new and expanded high-speed rail facility is necessary for commissioning, inspecting, servicing, and maintaining the new *Acela* trainsets. The facility will improve equipment and operational reliability in New York and throughout the NEC.

Keystone Corridor Automatic Block System (ABS) Park to Paoli

Recognizing that the signal system on Amtrak's Keystone Corridor, also served by SEPTA's Paoli-Thorndale Regional Rail Line, is functionally obsolete, PennDOT, in coordination with FRA, SEPTA and Amtrak, is proposing an upgrade the signal system. Currently, the Keystone Corridor has bi-directional ABS signals between Harrisburg and Park interlocking, but only single direction wayside signals between Park Interlocking and Philadelphia. This project will design, construct, and install a new ABS System between Park Interlocking and Paoli Interlocking.

Michigan Line West Cal Rod Improvements

This project will address switch failures on the west end of the Michigan Line during winter months due to freezing mechanisms by installing new Cal rods, pan heaters, and improved power supply. The Cal rods will improve safety and OTP by significantly reducing train delays, and will improve operational efficiency by allowing remote monitoring and troubleshooting of switch heating issues.

Baltimore Penn Station Infrastructure Improvements

This project will provide a comprehensive and integrated approach for Baltimore Penn Station to advance key near-term state-of-good-repair projects while establishing a development framework to leverage underutilized assets and accommodate future growth and redevelopment in and around the station.

Fitter Interlocking

This project includes the construction of a new, wired universal interlocking in Clinton, CT that subdivides a 16-mile segment between Guilford and View Interlockings into two shorter segments, allowing single track operation over a shorter distance during maintenance and resulting in less operational disruption and improved reliability.

Veltri Interlocking – New England

This project includes the design and installation of a new universal interlocking at MP133 in Mystic, CT. Construction includes the installation of turnouts, rail, ties, sub-grade, ballast, overhead catenary, signal transformers, signals cables, signal bridges, switch heater, switch machines, switch houses, instrument houses, and interlocking lighting. This new interlocking will provide operating flexibility and improve reliability by subdividing an 18-mile segment between interlockings into two shorter segments.

Improvement Projects and Strategic Initiatives, continued

The following are examples of projects that were developed as part of the ***CONNECT NEC 2035 plan****. These projects support higher train speeds, greater operational flexibility, and reduced travel times along the corridor and are subject to further review and analysis by Amtrak through the CONNECT NEC planning process.*

Brook Interlocking

This project will improve on-time performance for all users traveling between New Haven and New London by improving reliability and supporting operational flexibility during maintenance-related track outages. It would add a westbound Track 2 to Track 1 right-hand crossover at Brook Interlocking that, when combined with the existing Saybrook Interlocking, will provide full universal interlocking functionality.

Edgewood Capacity Expansion

Two projects are planned that will enable greater train volumes and future service increase to Perryville, MD. The Four Track Expansion project would add 3 miles of four-track corridor north of Wood Interlocking in Edgewood, MD, extending to a new Beach Interlocking, just south of the Bush River Bridge. The new Beach Interlocking would allow for efficient movement of Amtrak and MARC trains through the area. The Infrastructure Realignment project would construct new catenary poles and signal bridges at Magnolia and Wood Interlockings.

High Capacity Signaling: Washington to Boston

This project to install a higher capacity signal system will significantly reduce minimum intervals between trains from the current signal system headway of about seven minutes to about three minutes. This will enable increased Amtrak and MARC train frequencies even though the BWI Airport Rail Station, where almost all MARC and Amtrak trains stop, has only two tracks adjacent to platforms, which means that the tracks trough the station are equivalent to two one-way streets. (Tracks 1 and 3)

Hook Interlocking Improvements

This project would move the SEPTA Marcus Hook turnback tracks off the main line to improve on-time performance and scheduling flexibility. This includes the replacement of the "23" & "32" #15 crossovers with #20 crossovers through which trains can operate at higher speeds, the addition of a Track 5 turnback pocket to Hook west/south of Marcus Hook station, and the repositioning of the Hook northbound home signal for Tracks 3 and 4 south of the station.

Sunnyside Yard/Loop Track Capacity Improvement

The project would provide capacity improvements at Sunnyside Yard, including upgrades to loop tracks, improvements to signaling, and the conversion of principal turnouts from hand-thrown to powered. These improvements will increase average speeds and reduce travel times for Amtrak and NJ TRANSIT trains using Sunnyside Yard, increasing equipment utilization and efficiency, and improving reliability when recovering from service disruptions.

Anacostia Interlocking

The proposed new Anacostia Interlocking would provide additional operational flexibility to reduce service impacts. This project includes a new universal interlocking with #32.75 crossovers allowing speeds of 80 mph, located north of the Anacostia River (MP AP-132) which would divide the 7-mile double track segment between Washington Union Station and New Carrollton.

Landlith Interlocking – Wine Interlocking NEC Section Improvement Project

This project will eliminate the last section in Wilmington, DE where Amtrak and SEPTA share a two-track bottleneck, thus reducing delays, improving OTP, and increasing scheduling flexibility. It will add a third main track from Landlith to Wine, complete Landlith Interlocking as a universal interlocking, retire Wine Interlocking, and restore track 1 from Landlith to Wine.

Moving Towards Steady State and Addressing SOGR Backlog

A principal goal of IALP2022 is to continue the implementation of a transition strategy to move to normalized investment levels to maintain SOGR. To achieve this, it is necessary to utilize new IIJA funding to continue to address the SOGR backlog.

Steady State Capital Replacement

The ability to maintain infrastructure assets in a reliable state, or SOGR, is accomplished by replacing capital components at the end of their useful lives (defined in the Asset Strategies section in Appendix B). For planning purposes, replacement units are calculated by taking the number of assets in the system and dividing them by their useful life. This is what we define as normalized capital replacement, or *steady state*. Based on the analysis presented in the asset strategies in the appendices, the steady state program is **estimated at $945 million annually.**

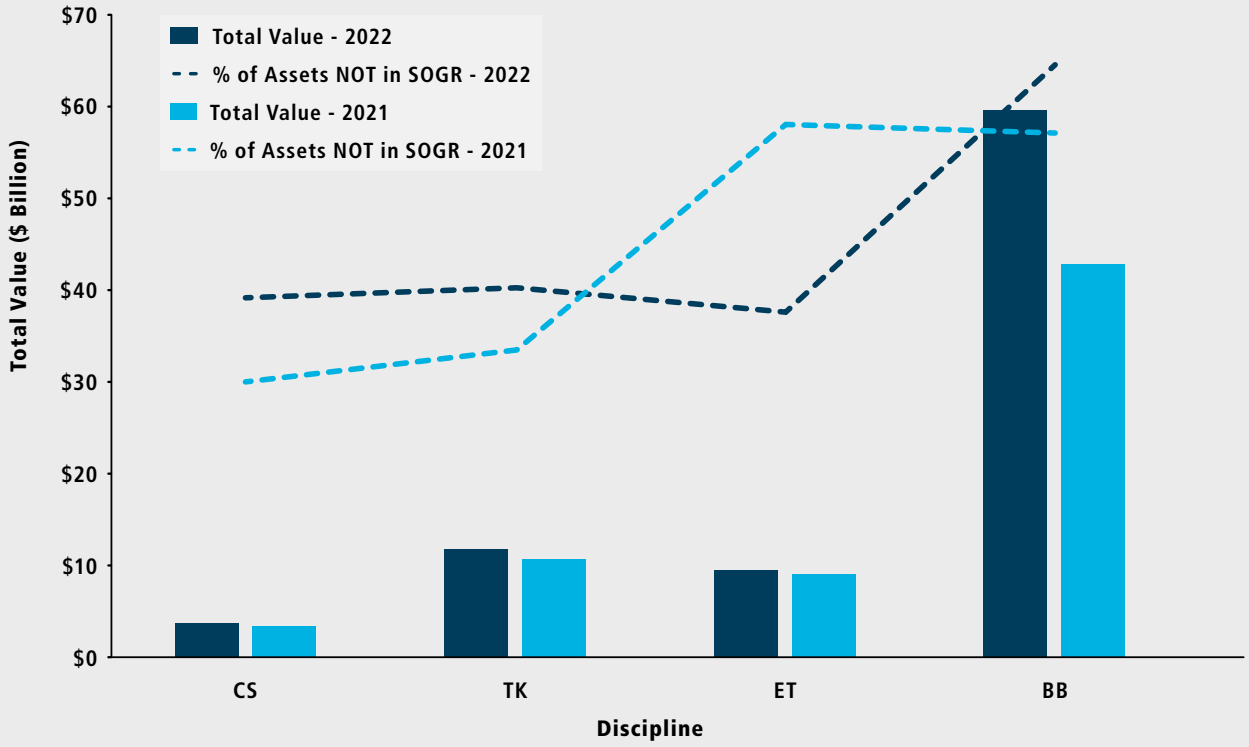
Historically, the substantial backlog of required replacement work has made achieving steady state, or true SOGR, out of reach. Amtrak did not previously receive the funding necessary to reach steady state replacement year over year, as reflected in the $530 million allocated for Engineering projects in the FY 2021 authorized capital plan for infrastructure. With the IIJA funding, we are now able to set new targets with a steady maintenance and replacement cycle in the foreseeable future. The sections that follow detail the plan to achieve and maintain that, from staffing ramp up to equipment acquisition.

SOGR Backlog

Maintaining infrastructure assets in a SOGR with a steady state maintenance approach is only possible if the backlog is first addressed in a timely manner. Delaying SOGR efforts widens the gap to steady state and increases risks to reliable service for the customer. To determine the SOGR backlog Amtrak has assessed the backlog of infrastructure investment using the condition assessment methodology detailed in the earlier Asset Condition section. Deferred work from prior years is now being prioritized and targeted for replacement.

Amtrak Engineering has assessed the **SOGR backlog at $48.7 billion (2021 $$)** for infrastructure nationally. Given the advancing age of the infrastructure, historical underinvestment, and the precipitous end of life facing major asset classes Amtrak Engineering has set a target of fifteen years to eliminate the SOGR backlog. Achieving a 15-year schedule for all asset types will require significantly more support resources (manpower, equipment, and track outages) than have been available in the past. With the additional funding provided by the IIJA, along with the MOW Equipment Acquisition program and proposed staffing ramp up, Amtrak has the ability to adhere to the scheduled targets. With $48.7 billion in backlog and a 15-year window, Amtrak estimates spending **$3.25 billion (2021 $$) per year to address SOGR across all the asset categories.** Using the FY 2022 to FY 2027 capital funding forecast, Amtrak will be able to address both the backlog and the steady state need moving forward. Funding required for the SOGR backlog is in addition to the necessary $945 million annually (2021 $$) to prevent further infrastructure deterioration in the steady state program. For this reason, Amtrak will continue to require annual appropriations for NEC and National Network grants at the levels authorized in the IIJA, additional funding from competitive federal grant programs, increased state funding, and consistent, adequate and reliable funding beyond the five-year term of the IIJA. Figure 5 below shows a visual summary by discipline of total value and percent of assets not in SOGR.

Figure 5: Summary by Discipline of Total Value and Percent of Assets Not in SOGR



After several years of fairly consistent hiring of agreement employees Amtrak Engineering has begun to implement a strategy to ramp up the agreement and management workforce to meet the challenge of the SOGR backlog, the demands of our customers, and the historic opportunity provided by the IIJA funding. This presents an exciting opportunity for Engineering bring new skillsets to the company, develop existing employees, take on SOGR projects that address the backlog, and deliver on commitments to stakeholders. As indicated in Table 6 (page 186) and Table 7 (page 189), total agreement headcount at the end of FY 2022 is projected to increase by approximately 17%, and management headcount by 56%, from FY 2021, a total increase of over 800 employees. Constraints such as track time and training regimens for new hires will still be present, but overall this is an exciting time with enormous opportunity for Amtrak and its current and future employees.

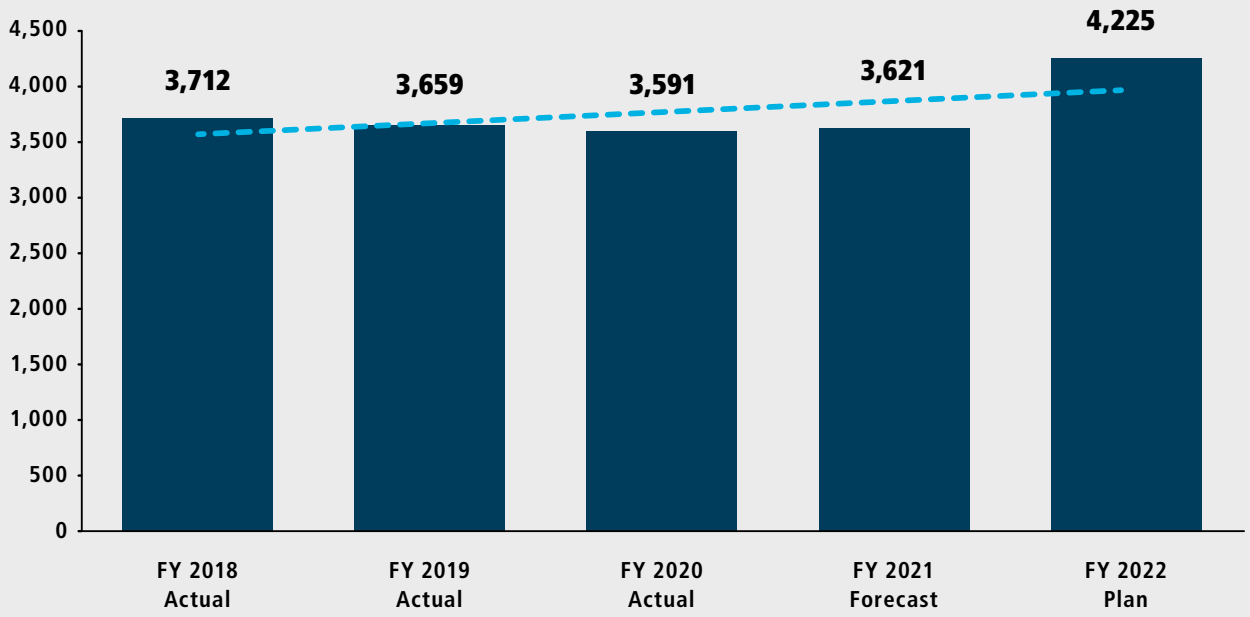
Amtrak Engineering has assessed the SOGR backlog at $48.7 billion for infrastructure nationally.

Total Agreement Headcount and Forecast

Table 6

	Actual FY18	Actual FY19	Actual FY20	Actual FY21	Plan FY22
Core	1,883	1,881	1,876	2,053	2,115
Reimbursable	275	272	292	281	320
Capital	1,554	1,506	1,423	1,287	1,791
Total	**3,712**	**3,659**	**3,591**	**3,621**	**4,225**

Figure 6

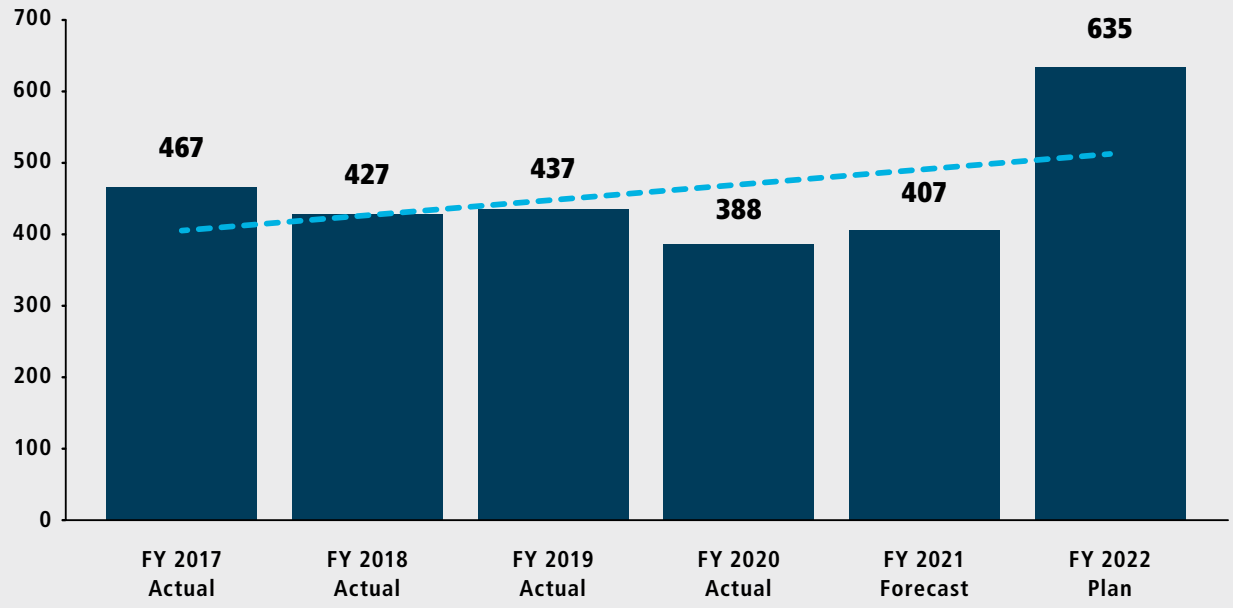


Total Management Headcount and Forecast

Table 7

	Actual FY17	Actual FY18	Actual FY19	Actual FY20	Actual FY21	Plan FY22
Core	264	188	206	155	209	299
Reimbursable	23	34	26	32	27	24
Capital	180	205	205	201	171	313
Total	**467**	**427**	**437**	**388**	**407**	**635**

Figure 7



Infrastructure Asset Line Financial Uses

(FY 2022–FY 2027)

($s in Thousands)	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Total
FINANCIAL USES (OPERATING)							
Maintenance of Way & Engineering Support	434,036	477,974	515,591	548,501	581,567	616,078	3,173,747
Total Operating Uses	**434,036**	**477,974**	**515,591**	**548,501**	**581,567**	**616,078**	**3,173,747**
FINANCIAL USES (DEBT SERVICE PAYMENTS)							
Debt Repayments	25,722	10,867	6,298	6,302	6,296	12,687	68,173
Total Debt Service Payments	**25,722**	**10,867**	**6,298**	**6,302**	**6,296**	**12,687**	**68,173**
FINANCIAL USES (CAPITAL)							
Normalized Replacement	691,526	884,487	1,241,613	1,316,015	1,409,783	1,812,025	7,355,450
Safety & Mandates	139,232	140,097	130,710	130,794	131,634	144,654	817,122
Major Backlog	77,579	277,759	767,466	948,492	1,096,841	1,294,880	4,463,016
Improvements	411,215	922,631	1,500,235	2,015,328	2,092,796	2,026,476	8,968,682
Environmental Remediation	15,760	18,490	13,845	13,845	13,020	-	74,960
Program Management	23,006	182,676	7,776	7,927	8,085	8,249	237,719
Total Capital Uses	**1,358,319**	**2,426,140**	**3,661,645**	**4,432,402**	**4,752,159**	**5,286,284**	**21,916,949**
Total Infrastructure Spend	**$1,818,077**	**$2,914,981**	**$4,183,534**	**$4,987,206**	**$5,340,022**	**$5,915,049**	**$25,158,869**

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National Assets and Corporate Services Asset Line

The National Assets and Corporate Services (NACS) Asset Line is responsible for cross-cutting assets such as systems for reservations, security, training, training centers, and others associated with Amtrak's national rail passenger transportation system. Corporate Services include company-wide functions such as legal, finance, government affairs, human resources, and information technology.

Primary Functions

Many of the functions that support the NACS asset line do not directly own or maintain physical assets. A summary of identified NACS assets is provided below.

Information Technology (IT)

IT owns few physical assets. Amtrak's strategy is to own less hardware and software and move to a managed service, cloud and software subscription model. The majority of our hardware is contracted for either under a managed service contract or through our cloud vendors. Many of our software titles are contracted for using a SaaS (software as a service) model for an annual subscription fee. Amtrak benefits from this IT model by gaining the ability to move quickly to set up new solutions and provide customers with up-to-date versions and patches, and a secure software environment.

Amtrak Police Department (APD)

Amtrak has its own police department, responsible for safeguarding Amtrak employees, customers, patrons and infrastructure through partnerships and best practices. For security reasons, only summarized information regarding APD assets is provided. APD's asset types include: Facilities in more than 20 locations; Police vehicles; Canine (K-9) detection dogs with supporting facilities (e.g., kennels, vehicle cages); and Tactical equipment such as training simulators, multimode threat detectors, thermal imaging cameras, explosive trace detectors and communication devices (e.g. police radios).

Human Resources

Our Human Resources organization supports technical skills training for employees, as well as providing core training programs that ensure compliance with regulatory training mandates and improve employee performance. Training and Development staff are located at various facilities, with training provided virtually and at locations that include Amtrak stations and other facilities.

The Infrastructure Investment and Jobs Act (IIJA) along with the Amtrak Connects US strategy will require additional support for a transforming and growing business. The rapidly expanding needs for technology and accelerated delivery will require Amtrak to continue to embrace cloud-based platforms and adoption of best practice processes and user experiences which will also provide greater resiliency for critical systems. A key focus area is user adoption of new technology. A holistic view of the overall user experience will be a key factor to ensure we can adapt to changing technology quickly and successfully.

Challenges and Mitigations

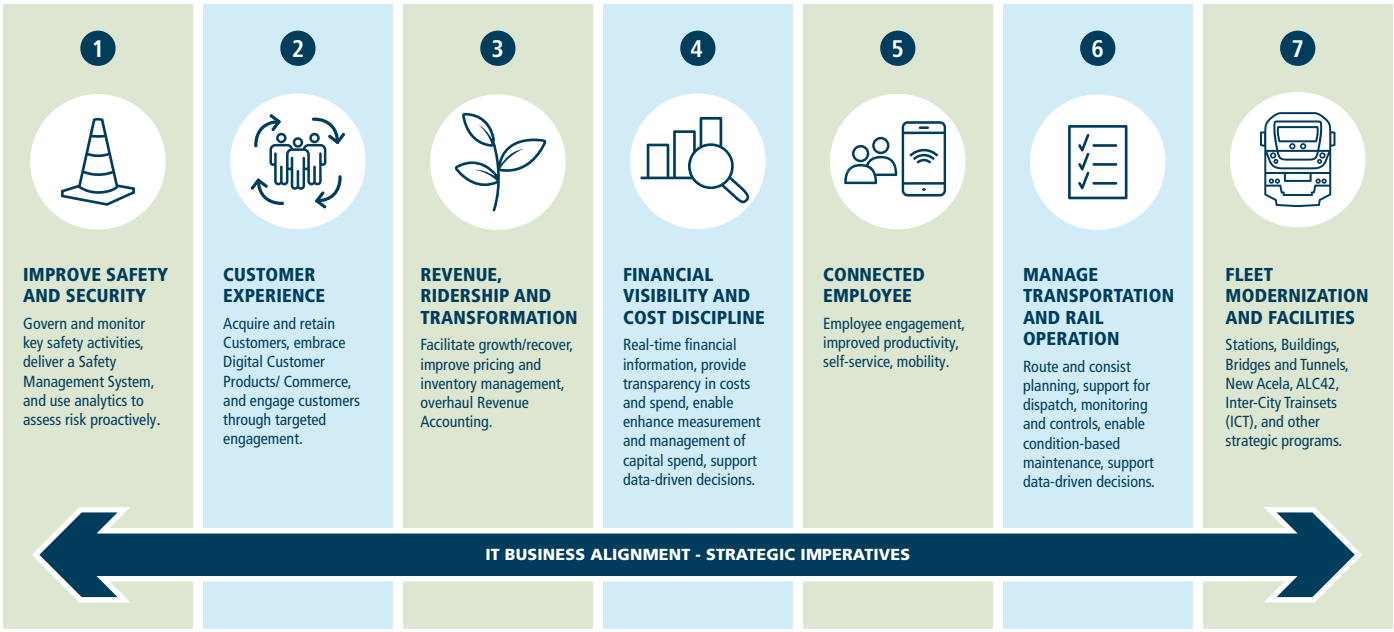
In the United States, talent shortages are at a 10-year high, with technology equipment also facing limited supply. HR is actively engaged with its departmental partners in re-evaluating staffing needs to prioritize critical sources and hiring less seasoned staff and providing training, as well as improving the skills and training of our existing staff to use them more effectively. We expect the current supply chain challenges to be significant in the short-term and to ease over time. We should expect challenges, particularly with large technology deployments, but we believe they will be manageable.

Strategy

Business Alignment

Amtrak's strategy focuses on a set of strategic imperatives that apply information technology (IT) in alignment with the organization's strategic pillars and core business objectives.

Amtrak Strategic Alignment



Improving Safety and Security

Amtrak has established improved safety and security as a top priority for the enterprise. Success against this objective will require the effective delivery of new technology and analytics across a broad spectrum of safety processes and goals. The IT Safety and Security Technology team works collaboratively with the Safety and Security department to deliver required technology initiatives in support of the business roadmaps. These initiatives include capabilities for improved safety compliance, data analytics, predictive modeling, modernized and updated law enforcement and surveillance equipment, passenger prescreening programs, information sharing with intelligence and law enforcement communities and supporting systems for the Amtrak Police Department (APD), safety management, and continuous improvement. Key initiatives are summarized on the page 195.

Safety Management System (SMS)

SMS is a comprehensive technology application that supports the SMS framework to include safety promotion, safety assurance, safety risk management, and safety policy. The SMS technology project will enhance data collection, integration, reporting, and analysis that informs decision making to mitigate safety hazards and environmental and public health risks throughout the organization, as well as to increase compliance. This project serves as a foundation to Amtrak's SMS, required by 49 Code of Federal Regulations (CFR) Part 270, System Safety Program Plan. Voluntary reporting will be launched in FY 2022 and full implementation, to include customer and employee injury and illness reporting and other regulatory reporting is required by 2024.

Video Surveillance Systems (VSS)

Install VSS at key Amtrak locations in alignment with the targeted future state video management platform architecture and operating model, driving standardization of video camera device, storage, software, and network. Implementing VSS at key stations and facilities based on APD/Corporate Security priorities, also informed by Stations, Facilities, Properties, and Accessibilities (SFPA) and Operations needs, and expanding coverage to on-board passenger car video for new fleets/trainsets including the Intercity Trainsets (ICT), new *Acelas*, Siemens Venture cars (IDOT), helps ensure passenger and employee safety and security.

Safety Analytics

Create a large, complex portfolio of data related to safety outcomes, processes, and risk factors, including environmental and public health. Safety will need robust data assets to support advanced analytics, as well as capabilities for predictive modeling and other analytical techniques. This will help Amtrak move beyond measuring safety outcomes to understanding risk factors that lead to injuries and incidents. Actionable analytics will lower the frequency and severity of safety related incidents.

Mobile Document Compliance System

Access to safety critical and federally required documentation by Amtrak Operations employees electronically through an application on a mobile device, replacing a highly manual paper-based system. This will improve efficiency and safety compliance by ensuring up-to-date documentation is available to staff at any time. The distribution of tablets to Operations staff will also serve as the foundation for further automation and mobility.

Safety, Performance and Record Tracking Network (SPARTN)

Enhancements to SPARTN will provide new functionality for safety related audits and inspections, meeting Federal Railroad Administration regulatory requirements (e.g., 49 CFR parts 217, 240 and 242). Deployment of closed-loop feedback systems will continue to enable real-time intervention in risky situations, such as defects in fixed rolling assets. Enhanced reporting of Operational Testing will identify safety issues and target mitigations.

Aware 3.0

Enhancements to Aware, which provides location data and real-time alerts on conductor handheld devices in non-Positive Train Control (PTC) territory when trains are approaching locations where conductor-engineer communications are required by safety requirements. Aware will be further integrated within the Conductor device to support an improved user experience and enable conductors to provide specific issue feedback via their devices.

APD Communications

Equip the APD with upgraded and modern body radios and vehicle radios, along with an upgraded radio infrastructure, to provide enhanced capabilities for communication between officers and other law enforcement agencies. These improvements will document and record police activity and intervention as it happens and ensure that the activities of the APD can be undertaken safely for both the officers and the public they support.

Access Control Systems

Develop a detailed future state architecture and operating model to drive increased security and standardization of physical access control systems in buildings, yards, and -right-of-way. Implement a Visitor Management system for planned access to Amtrak buildings and yards. Integrate physical access control systems, including Lenel Smart ID and Genetec cameras systems, for increased security.

Customer Experience

As Amtrak manages the effects of the COVID-19 pandemic, we will continue to support the development of responsive technologies for Amtrak's passengers, employees, and business partners. Amtrak's technology platforms are continuously improving on time-to-market. This approach is planned to position Amtrak to regain passengers and maximize customer satisfaction in the post-pandemic market.

Amtrak will support all phases of the customer life cycle, across all channels, segments, and transactions. The customer experience strategy adheres to the principles of design, to include unified communications across all channels, devices, and locations; simplified, intuitive, customer interface that requires minimal customer effort to use; continuous exchange of information from Amtrak to passengers and vice versa; and creation of rich, connected, reliable and clean data assets. Digital payment solutions will evolve to support self-service for point of sales, cashless and touchless product offerings, future trends for onboarding, and customer-initiated check-in including automated ticket lifts. Moving forward, we will work with state partners to standardize innovative technology solutions that benefit customers, and operate and maintain them at the highest level, to help state partners improve their operations and provide them economies of scale.

Unifying all digital and physical customer channels with the Omni-channel program will deliver a singular customer experience to any location, including home, office, station, or train, and on any device.

Key initiatives are summarized below.

Amtrak Guest Rewards (AGR)

Continue the efforts to drive incremental ridership and revenue, recognize high value members, and fuel customer retention and new customer acquisition. The AGR system will enable support of purchase path enrollment, dynamic redemption fare point sales that will leverage consolidated and an optimized and modernized rules engine. The changes will be made to digitize and modernize Amtrak's member experience to grant access to our First Class and Metropolitan Lounges.

E-Commerce/ Customer Experience

The acceleration in e-commerce since the pandemic began is driving digital transformation and creative retailing. The IT strategy will drive the engaging customer experience in the customer facing eCommerce channels and agent systems to provide customers with an intuitive, personal, and simple experience when shopping, planning, and booking their travel. Building a customer centric experience that will provide a path forward to capitalize on unrealized revenue opportunities for differentiated service and relevant offers. These new revenue streams will require system and process changes to create, and a robust retail-like platform to display, sell and service.

Enhanced capabilities will be delivered in a regular frequent incremental fashion leveraging the portfolio level scaled lean agile framework. Some of the transformational capabilities are redesigned booking experience for long distance versus other routes, enhanced customer personalization and target promotions based on geographic location, driving the Omni channel experience across channels, allowing customers to order food via the mobile app and to self-lift the ticket on certain trains, enabling customers to see the notifications in the message center inbox, and overall home page experience improvement for both the Amtrak website and mobile applications. Newly implemented technologies will ensure eCommerce channels satisfy the international and federal data privacy and Accessibility regulations.

Customer Data Hub (CDH)

The CDH initiative, a data strategy to consolidate and reconcile disorganized silos of information, will develop a system of cloud-based platforms supporting high volumes of transactions that will generate business analytics and insights. The CDH is a single repository of more than thirty million customer records and will support the Commerce and Marketing eco-systems across all channels and vendors.

Customer 360

The CDH will be extended to interface with a Customer 360 Platform. This will support Artificial Intelligence (AI)-driven state-of-the-art segmentation and activation capabilities that will allow Amtrak to better understand customer behavior and buying habits. The functionality will enable Amtrak to get a complete and holistic view of each customer by aggregating and harmonizing data from every touchpoint of interaction, including discovery, commerce, service & support.

Next Generation Kiosks

New station ticketing kiosks currently being deployed will provide easy access to booking, information, and support capabilities on an Omni-channel platform for a modern and intuitive experience.

Customer Experience, continued

Customer Notification and Service Change Management

Improved customer notification and self-service functionality will provide accurate and timely information throughout the customer journey by enhancing pre-trip, enroute, gate/track, and advisory notifications to internal and external customers. To improve customer experience and reduce calls to Amtrak's contact center in times of service disruption and when auto reassignment is not possible, the self-service functionality will notify customers and allow them to access channels to cancel or modify their bookings.

Train Status

A single authoritative data store that will integrate with all current and future data stores will provide a single source of truth for all train, customer, and communication records. It will deliver travel information such as train status, delays, disruptions, and service capacity to stations with Passenger Information Display Systems (PIDS). The expansion of onboard technical capabilities on new equipment such as the *Acelas* and Siemens Venture cars through Onboard Information Systems will provide real-time information to enhance the customer experience.

On-Board Entertainment (OBE)

OBE enables customer Wi-Fi devices to access on-board movies, television, and other entertainment options. It reduces train-to-ground Wi-Fi congestion, reduces Amtrak's Wi-Fi data costs, and offers compelling entertainment in areas where cellular services may be limited or non-existent. OBE prototypes for Long Distance service are planned in FY 2022, with future service line roll-outs to follow.

Passenger Wi-Fi

Wi-Fi plays a vital part in influencing customer experience, so Amtrak will continue to invest in technical innovations and upgrades to the overall service offering. IT is working to transition long-distance and State Supported routes to a new service provider who will enhance Wi-Fi service under a unified national Wi-Fi strategy. We are also future proofing our onboard networks for the emergence of 5G and are expanding the role of Wi-Fi to provide connectivity for new systems such as Point-of-Sale, Video Surveillance, and others.

On-Board Food and Beverage Point-of-Sale

Streamline sales of food merchandise. On-board functionality to collect food and beverage sales data will streamline sales and improve analytics for revenue, profitability, and the mix of onboard products for sale; manage and replenish inventory; and provide better auditability.

Mobile Customer Service Representatives (CSRs)

Mobile CSRs will bring customer service employees into the Omni-channel eco-system, whether they are in stations, on trains or in a call center. Technology enhancements such as handheld devices with access to customer information and improved baggage tracking will provide better service to customers. Situational awareness of CSRs will be upgraded to include Service Change Management alerts.

Customer Satisfaction Data Collection

IT and Marketing will continue to extend the Customer Experience cloud platform to increase Customer Satisfaction data collection from 20% to 40% of passengers. Additionally, customer satisfaction data will be integrated into call center portals. This platform will enable Amtrak to target specific aspects of the travel experience with short surveys, request feedback from passengers in real time during their travel and reduce time for data collection.

Mobility as a Service (MaaS)

IT is working with Marketing and Commercial on a larger strategy around multi-modal capabilities, including journey planning for last mile coverage, that address customer needs around connecting transportation at the beginning and end of a passenger's journey on Amtrak. MaaS is emerging as the key driver that facilitates the shift from physically connected to digitally connected services. Amtrak will explore comprehensive strategic options within the MaaS ecosystem for target geographies, segments and partner interoperability to support digital ticketing for better and safer customer experience.

Revenue, Ridership, and Transformation

In response to changing market conditions affected by the COVID-19 pandemic, IT is delivering new and sophisticated technology services and solutions to support Amtrak's customer and revenue growth.

The priority of this strategic imperative is the overhaul of Amtrak's Revenue Accounting processes and platforms. This transformation will significantly decrease the overall complexity of the current platform by addressing antiquated technology, rules, and processes to enable better revenue reconciliation, accounting and reporting of revenue. Improved data, analytics and forecasting for the Pricing and Revenue Management group will facilitate pricing products and services optimally and effectively balance price versus demand at the margin.

Key initiatives are summarized below.

Road to Retailing

Create customer-centric, relevant products where the differentiator is the experience. Retailing requires a strategic shift away from reservation centric eco-systems to customer centric, revenue optimization product offerings. The four strategic pillars of this initiative are Offer Management, Inventory Management, Order Management, and Customer Experience.

Train Consist Planning

Provide a scalable software solution to plan future train consists that will handle multiple time zones, multiple trains with the same number on the same day, removing cars, adding cars, track work schedules, turn plans, crew statistics, and customer reporting. Train Consist Planning contributes to our data driven strategy and opens opportunities for rolling stock allocation simulations and modeling to meet future demand. As we pivot to future fleets that are trainset based, there will no longer be the need to remove and add cars, and this function will evolve to schedule and train planning.

Pricing and Revenue Management (PRM)

Implement a new Revenue Management System (RMS) that leverages big data and AI by integrating historical passenger booking activities, pricing and inventory data, and various real-time data sources to optimize revenue management. Improved competitive data and analytical tools to execute predictive modeling and what-if scenarios will help the company modify pricing in real time as demand patterns dictate.

Ancillary Offer Management

Transform ancillary merchandising, including the unbundling of fare and product attributes like baggage and seats, to include dynamic pricing for Amtrak's products and services. An early version of this platform already supports preordering of meals across selected services. The Upgrade Bidding program, BidUp, will use AI to maximize revenue by allowing customers to bid for premium offers and upgrade their existing booking. These programs provide an opportunity for better management of unsold inventory and capacity across service lines while enhancing the customer experience.

Sales Data Hub

Amtrak will develop a dynamic repository of near real-time data relating to all train and non-train revenue. This hub will be an accurate reflection of the current state of all orders in any transaction state, and will allow Amtrak to better measure and manage pricing and capacity in light of current bookings.

Sales Data Insights

As the country's demand for intercity travel rebounds, old patterns and heuristics relating to pricing, demand and customer travel patterns will likely be replaced by new ones. Improved forecasting and inventory management technology efforts will ensure that Amtrak can precisely understand capacity and load factors so that we can optimize supply against demand and develop enhanced pricing algorithms that deliver maximum revenue yield across the customer base.

Voice Call Recording and Analytics

Provide 100% call recording, voice analytics, and biometric fraud detection.


SURFLINER

Financial Viability and Cost Discipline

Amtrak continues to find opportunities to reduce operating costs and become a leaner, more efficient operation. Technology will play a vital role in enabling the organization to optimize its cost structure and spending. The strategy is based on key investments in data and analytics, process redesign and automation, and Enterprise Resource Planning (ERP) platform optimization. Key initiatives are summarized below.

Standardize and Optimize Revenue Accounting

Standardize the outflow of all train earning processes into a single unified set of attributes, known as the Unified Amtrak Customer Order. This customer order will create, and make available, the sole truth of any transaction at any time, for any transaction state (e.g., Active, Ticketed, Lifted, etc.). In addition, all Non-Train Earnings will be delivered with a consistent methodology for reconciliation and accounting.

Procurement and Supply Chain Management Insights

Analytics capabilities for Procurement and Supply Chain will enable line-item level spend analysis; provide greater visibility and insights to trend analysis, spend concentration, pricing variance and outliers, optimize inventory value and enable data driven procurement and inventory management decisions based on advanced analytic models. Amtrak has successfully built the data asset for procurement and material management in the Amtrak enterprise data warehouse (EDW), enabling data driven supply chain management decisions through self-service reporting and analytics. We are continuing to expand on the data foundation work by bringing in additional data from other relevant sources and providing more analytic capabilities for the end users. This will provide significant improvement over current spend analytics processes which are highly manual and only available at the supplier level due to the effort involved.

Financial Insights

The Finance Data Hub will develop a central repository of near-real time financial data for planning, analysis, and strategic decisions. This will facilitate sharing of key data across financial platforms, while ensuring that a single source of data is being used. With access to the right data, Finance can utilize analytics to identify trends and patterns to discover opportunities for streamlining costs or reducing spend. The Finance Data Hub will also contribute to the speed of monthly financial close.

Streamline Supply Chain Inventory and Warehouse Management Processes

Existing inventory and warehouse management processes are manual, time consuming and inefficient, and do not support tracking of materials stored alongside the track. The current processes involve manual data entry by the end-user that sometimes leads to input errors and delays in inventory and warranty processing. IT and Procurement are working together to identify opportunities and solutions to provide a robust, optimized inventory process by remote/mobile tracking of inventories within Amtrak warehouses and along the track integrated with Global Positioning System capabilities. This will reduce spend and maintain current inventory volume through inventory planning, warranty, and serialization management processes. By simplifying and digitizing these processes, Amtrak can eliminate costs and delays.

Improved Project/Portfolio Management and Reporting

Ongoing development of the Enterprise Project and Portfolio Management program will standardize, automate, and provide transparency in the planning, monitoring, and reporting of capital projects across the company. An integrated technology solution will improve efficiency, quality controls and analytics through a consistent lifecycle for project and portfolio management and execution.

Financial Viability and Cost Discipline, continued

Timekeeping Standardization

Amtrak will consolidate timekeeping systems to capture time across a diversified workforce; apply relevant pay rules, schedule employee shifts; and manage overtime and labor costs with ease. Solution implementation is expected to improve internal controls, reduce manual work, centralize pay rules, align to collective bargain agreements, provide aggregated insights into overtime, and minimize opportunities for fraud.

ERP Platform Optimization

Adopt a strategy that enables Amtrak's administrative and operational capabilities by fully leveraging the available capabilities of our current ERP and ancillary systems. Define investments required to support Amtrak's future vision and a future state of application architecture to support the digital transformation goals and understand business pain points so ERP optimization adds business value rather than a lift-and-shift. Identify simplifications and determine which systems and processes to renovate in the new architecture.

Continuous Process Improvements

Many current Finance, Procurement and Supply Chain Management processes are heavily manual and inefficient. Amtrak will identify opportunities to increase efficiency and reduce complexity by leveraging key capabilities of Robotic Process Automation (RPA) to automate repetitive and manual tasks. We will implement RPA technology based on use cases and collaborate with users to scale finance automation by defining a governance model that considers existing business demand and capacity for automation and streamline demand management using portfolio prioritization and assess automation feasibility. Improvements may also include a supply chain inventory and demand planning tool to better capture demand and optimize inventory management, a contract deliverable system to better track key contract provisions and deliverables, and other tools to address current business pain points.

Amtrak continues to refine its own processes, methodologies, and operating principles on its journey to become a world class technology organization and to better align with the business needs of Amtrak customers, employees and partners.

Connected Employee

The connected employee is an objective supported by every vertical service in IT as part of our overarching strategy to take a user-centric approach to delivery. An engaged employee is more motivated, productive, and committed to Amtrak's goals, leading to a more satisfied and retainable workforce.

Technology solutions that facilitate effective and efficient processes, standardized workflows, self-service capabilities, training, consolidated data; and easy access to HR functions such as compensation, performance, benefits, time off, and resolution of employment-related issues will create a better employee experience and are the key to success. Consolidation of core HR data along with a data-driven approach to workforce management, using built-in platform reporting and Enterprise Data Warehouse (EDW) for enterprise-level analysis, will drive efficiency and consistency.

A connected employee can access systems critical to perform their job functions anywhere, any time and on any device. The technology platform provides the structure for a series of flexible solutions adapted to employee information and support needs. A centralized platform that enhances the employee experience by utilizing self-service capabilities, mobile friendly interface, and expanding single sign-on capabilities serves as the means for the employee to easily locate, access, and utilize the systems they need to do their jobs. Amtrak's IT strategy will focus on providing search capabilities for employees to find enterprise information, policies, and rules, regulations and advisories; offering access to Office 365 productivity tools and the collaboration portal;, and increasing digital engagement with employees to facilitate training, corporate initiatives, and communications.

Key initiatives are summarized below.

Enhanced Case Management and Employee Self-Service

Case management systems are in place for IT services and are a part of the Omni experience for Amtrak's customers. An initial release of HR Case Management was introduced in FY 2021, providing a tool for HR to manage its workload. IT will continue to enhance case management capabilities for HR, Operations, and other areas of focus, with an emphasis on employee self-service, and will seek to unify the technical solution wherever possible to limit technology sprawl.

HR Information System (HRIS)

Building on the HR Transformation Assessment completed in FY 2021, IT will migrate the current core HRIS to the latest SuccessFactors platform to provide a unified platform for core HR functions and leverage available functionality to meet key business needs and address existing pain points. The platform will fully embrace SuccessFactors processes and functions to provide a single point of contact for employees and replace third-party add-ons and customizations with similar functionality in the core system. Employee discipline processes and systems will also be integrated.

Digital Adoption Platform

Implement a platform to improve adoption of enterprise systems such as Ariba, SAP and SuccessFactors. This solution will provide a directed, modern user interface to help users perform tasks and provide tutorial walkthroughs. This will assist users in adopting new technologies and enhance the employee experience by integrating with mobile and desktop applications.

Law Systems

Continue to expand capabilities for the Passport application which encompasses claims, matters management and invoicing. Implement an enterprise-wide records management tool to ensure compliance with external regulations and internal policies by managing the retention and disposition of content.

Employee Training

Deploy mobile devices to be used on a loaner basis by Operations staff to access the Electronic Learning Management Platform for required training. Centralize training and certifications, and implement tools and processes to provide remote training, as well as virtual reality options when appropriate.

Rewards and Recognition Platform

Implement a new technology platform to support real-time feedback, social recognition, peer to peer recognition, service milestone rewards, and other employee recognition. This platform will enhance communication, enable increased recognition of employee accomplishments, and create visibility for spot bonuses.

Knowledge Access

The ability to find information, both structured and unstructured, is a key part of ensuring workers can do their job effectively. All-Aboard, Microsoft Teams and email are key components of the Unified Communications approach, giving tools to employees to collaborate and stay connected. We will continue to evolve the All-Aboard intranet platform, including providing mobile access and expanding content and leveraging it as a central portal to provide access to key IT applications and information that employees need in the course of their daily work. This is a critical component in providing opportunities for real-time collaboration and meaningful connections.

Continuous Improvements

Leverage features within the core HR Information System (HRIS) platform and ancillary technologies to implement continuous improvements and enhance the employee experience. Focus will be given to streamlining and automating the recruitment and onboarding processes including leveraging AI, mobility, and other technology advancements. Additional improvements will include adding new capabilities such as employee referral to support hiring, introducing competencies to hire, and measuring and training employees.

Manage Transportation, Rail Operations and Assets

The systems and practices of many aspects of rail operations are ready for modernization.

The current Amtrak culture relies heavily on legacy practices and a labor-intensive approach to producing results. Multiple platforms control systems such as train traffic and overhead (catenary) power, and some are nearing end of life. Inconsistent practices and safety protocols have led to issues with training, rules violations and maintenance. Manual processes related to labor management, incident management, yard workflow management, and other core Operations processes cause inefficiencies, delays and added cost.

Asset maintenance is an integral part of rail operations requiring a high degree of coordination to ensure optimum asset utilization. Amtrak's targeted approach to asset management addresses modernizing and automating practices and procedures for maintenance of physical assets consistently across the company. Modernization and automation goals extend beyond asset management to other aspects of Operations to leverage automation for improved efficiency across the entire department. Leveraging richer data, coupled with supporting analytical technologies, will enhance asset performance, identify productivity opportunities, and reduce unplanned issues, as well as help prioritize investments that lead to the largest performance improvement.

Key initiatives are summarized below.

Geographic Information Systems (GIS)

Consolidation of multiple existing GIS applications and services into an upgraded, scalable, single enterprise-wide application will leverage shared asset and location data across the Amtrak network. New insights will be gained from coupling both static and real time locational data (stations, properties, boundaries, fixed infrastructure assets, equipment) with other Amtrak and external data available (ridership, traffic patterns, population, weather, climate change, growth, demographics). These enriched data sources will drive action and identify new opportunities across different organizations throughout Amtrak, including Operations, Stations, Facilities, Marketing and Commercial, Safety & Security, Government Affairs.

Enterprise Asset Management (EAM)

Currently, Amtrak manages its physical assets with multiple systems, some of which are nearing end of life or are no longer supported by vendors. The EAM Program is a multi-department, multi-phase program to deliver a single EAM system for the Stations, Facilities, Properties, and Accessibility group and the Mechanical and Engineering Departments. The project will also create rich data assets that can be used to execute conditional maintenance and identify opportunities for improved processes and procedures throughout our network. As Operations adapts to this new capability and datasets, additional new tools will be used to support, streamline, enhance and modernize the asset management lifecycle. Using tools like geospatial information systems, wayside and onboard health monitoring, automated alerting, dashboards, and other leading asset management technologies, coupled with analytics capabilities, we plan to shift asset management to a more predictive focus.

Consolidated National Operations Center (CNOC) Modernization

Amtrak will create a new Unified Operations Center at its King Street location in Wilmington, DE with an operations focused Incident Management System that will provide a single system to monitor operations-related incidents from initiation to closure, including root cause analysis and remediation plans to avoid recurrence. Updating of technology and processes for incident management, train and consist schedule optimization, crew usage optimization, and rail traffic management will support Operations' goal of ensuring the new Center fundamentally changes and improves the way employees work.

Train Control Systems

Advances in train positioning, railroad management, Limit Compliance and Collision Avoidance Systems (LCCAS), implementation of Positive Train Stop Override and interoperability provide the foundation on which to build a safer railroad. Implementation of the Interoperable Electronic Train Management System for PTC nationwide, completed in FY 2021, provided interoperable PTC train operations for Amtrak trains on host railroads and for tenants on Amtrak territory. Maturation of the PTC, Positive Train Stop Release (PTSR) and LCCAS system across the Amtrak network will create additional benefits in ensuring passenger and employee safety.

Consolidation and standardization of the Electric Traction Supervisory Control and Data Acquisition (ET-SCADA) Systems to a standard modern platform will improve reliability, supportability, and safety. The initiative to standardize dispatch systems on the Amtrak-developed Amtrak Traffic & Electrification Control (AMTEC) platform to replace the legacy Collins dispatch system will provide a common dispatch platform for the NEC and Central division, a more reliable and resilient system, and a reduction in maintenance cost. An initiative to build interfaces between the new ET-SCADA & AMTEC train dispatch systems across the NEC will improve visibility for train dispatchers and power directors, allowing Amtrak to increase the emphasis on preventative maintenance practices while improving safety and security.

Integrated Labor Management System

Transportation will migrate from a legacy personnel management system, Labor Management System, residing on an IBM mainframe with limited outside visibility, to a modern cloud-based application. This shift will improve business function reporting, data access and the overall end-user experience. Current functionality leveraging kiosk, web and mobile interfaces includes Bulletins, Bids and Awards and Vacation Planning, with Long and Short-term Schedule Development and Maintenance (Position Control) in development. In addition to conductors and engineers, functionality will be extended to on-board service and other employees.

Advanced Analytics - Rolling Stock, Wayside and Other

Amtrak will accelerate the adoption of advanced analytics, using scanning technology and wayside detectors to collect data and images of the rolling stock; establishing wayside infrastructure data analytics; analyzing large data sets to proactively identify maintenance requirements and safety risks; leveraging data to better manage train performance and drive decisions; and developing Analytics at the Edge to collect real-time data including automated predictive alarms. These efforts will rely on Amtrak's EDW, Enterprise Data Lake (EDL), and established analytics and reporting tools like Tableau and Business Objects, as well as optimization and prescriptive analytics tools. This initiative will help identify opportunities within Operations to will improve safety, enhance the customer experience, and reduce costs.

Operational Improvements

Amtrak will continue to leverage technology to implement continuous improvements to address process inefficiencies, inconsistencies, and performance gaps. Possible initiatives include yard workflow management, automatic equipment identification tag readers, incident management, project management information system, computer aided design improvements, fleet availability management, asset tracking, illustrative parts visualization, work planning and scheduling, forecast and demand planning, integrated service planning, train and network simulations including track outage planning, and irregular operations management.

Fleet Modernization and Facilities

Amtrak is in a multi-year, multi-billion-dollar refresh of its fleet with modern locomotives, railcars and trainsets that is described in the Equipment Asset Line Plan. Included in this initiative is a comprehensive coordination of Amtrak's innovative technology solutions across the network. Amtrak will take full advantage of the technological advancements in new equipment to improve safety and the passenger experience, as well as simplify and economize operations and maintenance. The new ICTs will be fixed consists, which will fundamentally change how Amtrak plans, maintains, and schedules trainsets. Access to near-real-time data from modern digital trainsets, along with advanced analytics, will transform Amtrak's ability to gain key insights into safety, performance, and reliability of the fleet.

Additionally, IT regularly works with major projects, Stations, Facilities, Planning and Accessibility (SFPA) and Engineering to implement state of the art technology solutions for stations and operating facilities, most notably in 2021 with PIDS, station Wi-Fi and other technology for the opening of the Moynihan Train Hall at Penn Station in New York City. The focus on facilities represents a recognition that technology is an essential part of any facility and asset-based structure, which may incorporate technologies that include customer information systems, building automation, robotics, and sensors in bridges, tunnels, and right-of-way to provide real-time information on the condition of these facilities.

Key initiatives are summarized on page 207.

Amtrak's New *Acela* by Alstom.

One Fleet

Wherever possible Amtrak will seek to unify and harmonize the technology solutions for operation and maintenance of new fleet vehicles procured from multiple suppliers over a span of many years.

Safety and Security Insights

Amtrak is enhancing support for the critical Safety, Compliance and Training organization through the adoption of new train simulators, provisioning and access to train events and telemetry data, development of dashboards, and providing secure, easy access to on-line closed-circuit television video recordings.

Passenger Experience

On top of capabilities delivered by the manufacturer, Amtrak incorporates additional technologies into the equipment fleet to provide our customers with a positive and connected experience throughout their journey. Systems such as Wi-Fi and Food & Beverage Point of Sales are fully delivered by Amtrak, while the On-Board Information Service is delivered in partnership with the manufacturer to ensure strong integration and provide a unified customer information ecosystem (Omni channel) that delivers a consistent and accessible experience to our customers regardless of what equipment they are riding.

Cooperative Service and Maintenance

Amtrak supports new vendor cooperative models for service and maintenance through creation of common application programming interfaces that integrate Amtrak and vendor systems for seamless scheduling and dispatching of work. Standardized technical support and spare supply agreement technology is available for use by vendors to connect functions like virtual warehousing, parts masters, and procure-to-pay.

Condition and Performance

Amtrak will use event and telemetry data collection from new trainsets to evolve Amtrak's condition and performance insights. This approach will seek to use data to improve the efficiency of the operation by moving away from risky break-fix repairs toward condition-based and predictive maintenance models.

Fleet Cybersecurity

Amtrak's cybersecurity capabilities will extend into the advanced technology trainsets via tooling for scanning and monitoring. This approach includes developing partnerships with vendor cybersecurity operations centers for cooperative incident detection and response.

Stations, Facilities, and Infrastructure Modernization

Digital technology services are an integral part of creating the future Amtrak stations, operating facilities, and infrastructure that will support the growth of our services. In partnership with the Major Programs, SFPA, and the Engineering Construction Services department, IT will continue to optimize and modernize how integrated technology services are designed and deployed into new Amtrak stations, facilities, and mega construction projects. This includes data networking, building automation and monitoring, security and video surveillance, collaboration, PIDS, media, and other emerging technologies. Programs incorporating this approach include new maintenance facilities for the ICTs, major station development projects, the Gateway program, and the new Unified Operations Center. These capabilities also include extending Wi-Fi and cellular network communication and safety technology into bridges and tunnels on the Northeast Corridor.

Technology of the Future

The leading-edge technologies of today are often the mainstream technologies of tomorrow. Amtrak monitors emerging technologies and considers use when the technology is promising and has begun to show value in the market. As new business opportunities arise, we partner with business leaders to make decisions about deploying these new technologies.

NACS Asset Line Financial Uses

(FY 2022–FY 2027)

($s in Thousands)	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Total
FINANCIAL USES (OPERATING)							
Regional/Local Police	65,556	78,513	85,842	92,169	98,481	105,055	525,616
National Police and Safety	31,637	28,905	31,166	32,918	34,616	36,344	195,587
Non-Passenger Claims	-	12,811	13,840	14,637	15,410	16,197	72,896
Information Technology (IT)	140,113	173,230	186,967	197,601	207,916	218,414	1,124,241
Training and Training Centers	19,267	23,335	25,311	26,892	28,441	30,029	153,274
Insurance	131,753	129,869	140,245	148,185	155,859	163,655	869,566
Environmental	11,658	10,286	11,104	11,736	12,349	12,972	70,105
Real Estate & Lease Costs	-	1,145	1,278	1,365	1,448	1,531	6,767
Reservations & Call Centers	55,174	86,168	92,922	97,821	102,475	107,140	541,699
Corporate Operations	471,515	489,914	531,692	562,574	592,240	622,307	3,270,243
Total Operating Uses	**926,674**	**1,034,176**	**1,120,366**	**1,185,898**	**1,249,235**	**1,313,644**	**6,829,993**
FINANCIAL USES (DEBT SERVICE PAYMENTS)							
Debt Repayments	-	-	-	-	-	-	-
Total Debt Service Payments	**-**	**-**	**-**	**-**	**-**	**-**	**-**
FINANCIAL USES (CAPITAL)							
Information Technology (IT)	33,917	19,269	14,906	7,856	7,406	7,406	90,760
Station & Facility protection	10,900	13,415	10,965	10,965	10,965	10,965	68,177
Corporate Operations	127,652	92,611	47,109	23,006	16,134	23,760	330,272
Total Capital Uses	**172,470**	**125,295**	**72,981**	**41,827**	**34,505**	**42,131**	**489,210**
Total National Assets & Corporate Services Spend	**$1,099,144**	**$1,159,471**	**$1,193,347**	**$1,227,725**	**$1,283,740**	**$1,355,775**	**$7,319,202**

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Financial Assumptions

This year's Plan forecasts a similar view to what was presented in the FY 2021 Five-Year Plan, representing a recovery path from the COVID-19 pandemic. It describes Amtrak's forecasts for how and when travel demand, train operations, and expenses will return to pre-COVID-19 levels (generally defined as FY 2019) during the five-year Plan horizon. In addition, the Plan contains Amtrak's vision for not only returning to pre-COVID-19 activities but for growing far beyond by improving our existing infrastructure and expanding operations onto new and expanded corridors nationwide. These growth plans are expected to become reality through the multi-year federal funding provided by the passage of Infrastructure Investment and Jobs Act (IIJA).

The IIJA's purpose is to address the aging infrastructure backlog, provide for network expansion, and support critical improvement initiatives across the intercity passenger rail system, all of which will result in an acceleration of capital spending at Amtrak.

The Plan continues to set a path for operational improvement and includes robust assumptions on key capital project needs (fleet acquisition, Gateway, key infrastructure projects, etc.) along with additional capital spend expected with IIJA funding.

This year's Plan includes the restoration of full-service levels across the network, completing the restoration that began in FY 2021. Additionally, with the enactment of IIJA, the Plan includes significant operating initiatives to ramp up staffing, organizational capacity, and equipment to prepare for unprecedented levels of infrastructure, route planning, and development work that are expected to begin in FY 2022 and last through the five-year plan horizon.

Introduction, continued

Amtrak anticipates that the ongoing impact of COVID-19 will require a nimble and responsive process with respect to capital spend planning, capacity adjustments, and service level changes. As a result of this fluid and changing environment, we developed a capacity and driver-based Plan with critical assumptions including:

- Continuation of FY 2021 post vaccine rebound in travel demand with Gross Ticket Revenue and Ridership levels returning to pre-COVID-19 levels in FY 2024;
- Capacity recovery, which began in FY 2021, achieves pre- COVID-19 levels in FY 2023, slightly ahead of the scenario for demand recovery so as not to stifle demand recovery, should it occur more quickly than assumed;
- Continuation of most major capital priorities, while prioritizing ongoing capital maintenance and maintaining service across the entire network; and
- Significantly increased capital spend across the network, including Americans with Disabilities Act (ADA), Fleet and Gateway, to fully utilize the additional funding available through IIJA for Amtrak and its partners.

The main Plan themes in this five-year time frame are the continuation of COVID-19 recovery in line with the FY 2021 five-year Plan and the effects of IIJA funding. Over the Plan term, capacity returns to pre-COVID-19 levels by FY 2023, and revenues return to pre-COVID-19 levels by FY 2024, followed by continued growth. Adjusted Operating loss continues at roughly $1 billion across all 5 years of the Plan. The increased costs impacting both operating and capital expenses include assumed labor agreement wage increases, inflation, and increased operational expenditure resulting from IIJA funded capital programs. Additionally, 7.5% inflation is assumed across some accounts in FY 2022 to account for the current inflationary environment.

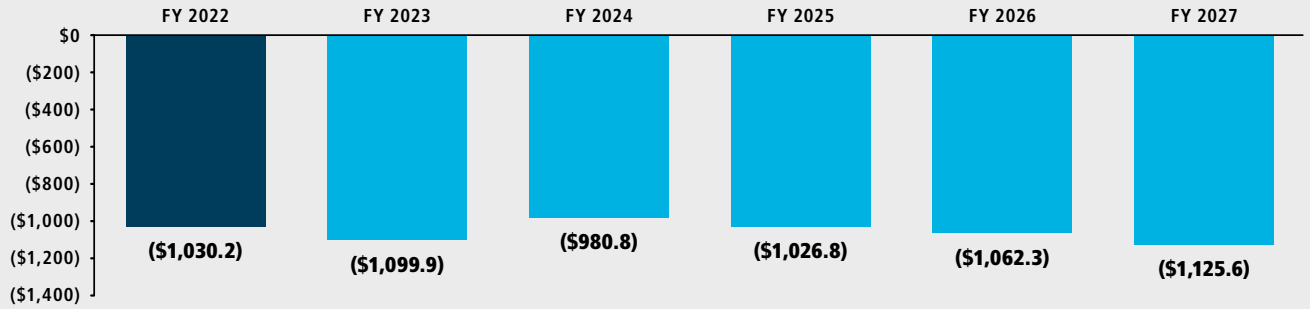
Though network and policy changes could significantly alter these assumptions, the Plan reflects an extension of the current policy and approximate levels set forth in the FAST Act. Overall expense, driven by Capital Delivery spending, grows at a 5.9% Compound Annual Growth Rate (CAGR) from FY 2019 through FY 2027, while total revenue lags at 2.9%. However, in support of IIJA, additional professional fees and labor operating expenses will be needed which will drive up total operating expenses in the near term but are necessary to lay the groundwork for expanded future Amtrak operations beyond the horizon of this five-year Plan. We will continue to work on cost escalation mitigations as we set goals to reduce key components of our cost structure and continue to look for efficiencies throughout the five-year plan period.

The five-year Capital Plan will increase significantly form historical levels with the passage of IIJA. Across all funding sources, spending will center around maintaining and upgrading railroad infrastructure, trip time improvement, re-fleeting through the acquisition of new rolling stock and associated facilities, as well as maintaining and upgrading Major Bridges and Tunnels.

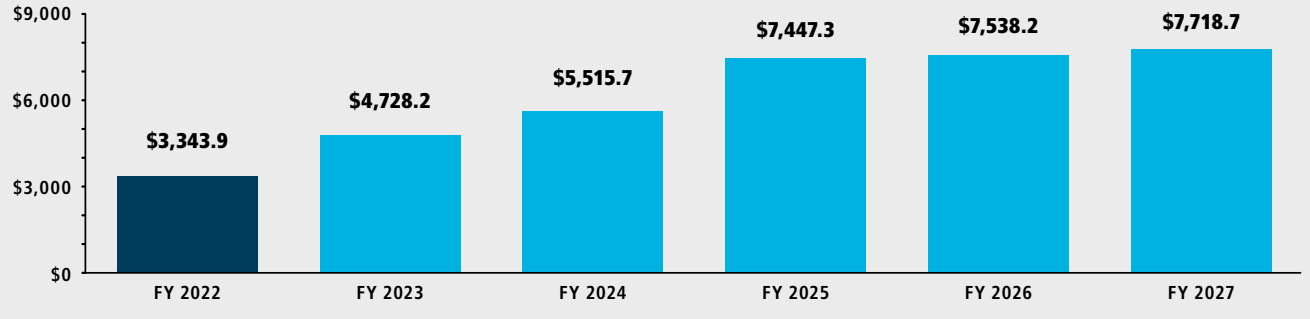
Key Financial Highlights

(Millions)	FY 2022		FY 2027	Total FY 2022–FY 2027
Frequency (Thousands)	102.4	→	124.0	694.6
Train Miles (Millions)	37.2	→	42.4	243.4
Ridership	23.2	→	37.8	196.4
Operating Revenue	$2,675.0	→	$ 4,163.5	$ 21,258.3
Operating Costs	$ 3,705.2	→	$ 5,289.2	$ 27,583.9
Adjusted Operating Results	($ 1,030.2)	→	($ 1,125.6)	($ 6,325.6)
Total Capital Spend	$ 3,343.9	→	$ 7,718.7	$ 36,289.0

Adjusted Operating Results ($ in Millions)



Total Capital Spend ($ in Millions)



Level of Operations Update

The Level of Operations compiled for the Plan includes key statistics and other information about how much capacity and scheduled train activity Amtrak expects to operate over the five-year planning horizon (FY 2023 through FY 2027). A key component to the Operating Plan is adjusting capacity across the network to match anticipated demand. As a measure of capacity recovery, the scenario included in the Plan assumes full recovery of capacity to FY 2019 (pre-COVID-19 levels) in FY 2023. Key assumptions incorporated into the Plan Level of Operations include:

Capacity increases are assumed across all service lines at varying levels over the five-year plan horizon:

- For State Supported and Long-Distance service, Train Miles, Seat Miles, and Frequencies will reach 90% -100% of FY 2019 levels in FY 2023 and exceed pre-COVID-19 operations in FY 2024.
- The NEC makes a full pre-COVID-19 capacity recovery in FY 2024 with Train Miles, Seat Miles, and Frequencies all reaching at least 100%.
- *Acela* returns to full pre-COVID-19 service in FY 2024. Capacity continues to increase in FY 2024 with the rollout of the new *Acela* trainsets (72% Y/Y increase in Seat Miles, 35% increase in Frequencies, and 43% increase in Train Miles) and remains constant until FY 2026 when schedules with an 18% increase in Frequencies will result in an increase of 11% for Seat Miles and an 11% increase in Train Miles.
- NEC service (including all Virginia trains and new Norfolk and Roanoke frequencies initiated in FY 2022) increases modestly beginning in FY 2023, by which time *Northeast Regional* service will be at approximately pre-COVID-19 levels, to meet ridership demand.

Amtrak is continuing pre-COVID-19 daily service within the Long-Distance service category.

Further information regarding Amtrak's plans to expand or initiate service between FY 2022 and FY 2027 are described in Amtrak's FY 2023 General and Legislative Annual Report to Congress.

Key Capacity Statistics FY 2022–FY 2027: Operating Statistics for National Train Service

	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027
Train Miles (Millions)	37.2	39.3	41.4	41.5	42.0	42.4
Seat Miles (Millions)	12,217.3	12,922.5	13,910.0	14,132.9	14,344.6	14,439.4
Frequencies	102,391	110,066	118,087	118,999	121,085	124,005

Operating Overview

Adjusted Operating Results over the five-year planning horizon are expected to remain relatively static from a FY 2022 AOP of ($1.03B) to a loss of ($1.13B) in FY 2027.

Operating P&L FY 2022–FY 2027

($s in Millions)	Plan FY 2022	5YP FY 2023	5YP FY 2024	5YP FY 2025	5YP FY 2026	5YP FY 2027	Y/Y Growth 22-23	23-24	24-25	25-26	26-27
Ticket Revenue (Adjusted)	$ 1,619.0	$ 1,971.5	$ 2,376.8	$ 2,522.8	$ 2,672.2	$ 2,803.2	22%	21%	6%	6%	5%
Food & Beverage	46.5	59.7	71.4	74.9	78.4	82.1	28%	20%	5%	5%	5%
State Supported Train Revenue	372.7	404.3	417.5	459.0	498.9	533.4	8%	3%	10%	9%	7%
Subtotal Passenger Related Revenue	**2,038.3**	**2,435.5**	**2,865.7**	**3,056.8**	**3,249.5**	**3,418.7**	**19%**	**18%**	**7%**	**6%**	**5%**
Other Core Revenue	283.6	292.0	301.3	308.6	316.1	323.2	3%	3%	2%	2%	2%
Ancillary Revenue	353.2	385.1	394.0	402.9	412.2	421.6	9%	2%	2%	2%	2%
Total Revenue	**2,675.0**	**3,112.6**	**3,561.0**	**3,768.3**	**3,977.8**	**4,163.5**	**16%**	**14%**	**6%**	**6%**	**5%**
Salaries, Wages & Benefits	2,237.6	2,541.5	2,759.0	2,945.9	3,133.2	3,325.6	14%	9%	7%	6%	6%
Train Operations	304.1	318.2	331.5	341.3	351.6	354.3	4%	4%	3%	3%	1%
Fuel, Power & Utilities	252.9	264.7	273.7	279.6	285.7	292.8	5%	3%	2%	2%	3%
Materials	164.8	125.3	140.0	142.6	134.0	134.5	-24%	12%	2%	-6%	0%
Facility, Communication & Office	205.8	208.9	214.7	220.7	226.8	233.1	3%	3%	3%	3%	3%
Advertising and Sales	82.1	98.6	117.7	125.0	133.9	141.9	20%	19%	6%	7%	6%
Casualty and Other Claims	65.6	94.9	110.2	114.3	118.0	121.2	45%	16%	4%	3%	3%
Professional Fees & Data Processing	244.7	363.9	400.6	432.2	463.6	492.6	33%	10%	8%	7%	6%
All Other Expense	120.3	148.1	153.6	157.8	162.6	167.4	23%	4%	3%	3%	3%
Transfer to Capital & Ancillary	(269.9)	(254.7)	(268.5)	(279.5)	(291.2)	(302.5)	-6%	5%	4%	4%	4%
Core Expense	**3,408.0**	**3,909.4**	**4,232.5**	**4,479.7**	**4,718.3**	**4,960.9**	**15%**	**8%**	**6%**	**5%**	**5%**
Ancillary Expense	297.1	303.2	309.3	315.5	321.8	328.2	2%	2%	2%	2%	2%
Total Expense	**3,705.2**	**4,212.5**	**4,541.8**	**4,795.1**	**5,040.1**	**5,289.2**	14%	8%	6%	5%	5%
Adjusted Operating Earnings	**$ (1,030.2)**	**$ (1,099.9)**	**$ (980.8)**	**$ (1,026.8)**	**$ (1,062.3)**	**$ (1,125.6)**	**7%**	**-11%**	**5%**	**3%**	**6%**
Operating Margin	***-38.5%***	***-35.3%***	***-27.5%***	***-27.2%***	***-26.7%***	***-27.0%***					

The Plan assumes demand recovery to pre-COVID-19 levels in FY 2024 (ridership level achieves 106% and gross ticket revenue achieves 102%) with gross ticket revenue growth accelerating through FY 2024 then leveling off to an average of 4.9% growth through FY 2027. This growth is primarily driven by ridership gains as average ticket price is slow to recover to pre-COVID-19 levels and will only fully recover sometime in FY 2026. In addition, variable expense growth follows capacity increases.

Revenue and Ridership

Plan revenue and ridership growth are underpinned by the three main factors previously discussed:

- **Service recovery** following COVID-19 demand reductions in FY 2020 that have continued into FY 2022.
- **Service expansion** across 16 State Supported routes.
- Launch of the **new *Acela* fleet.**

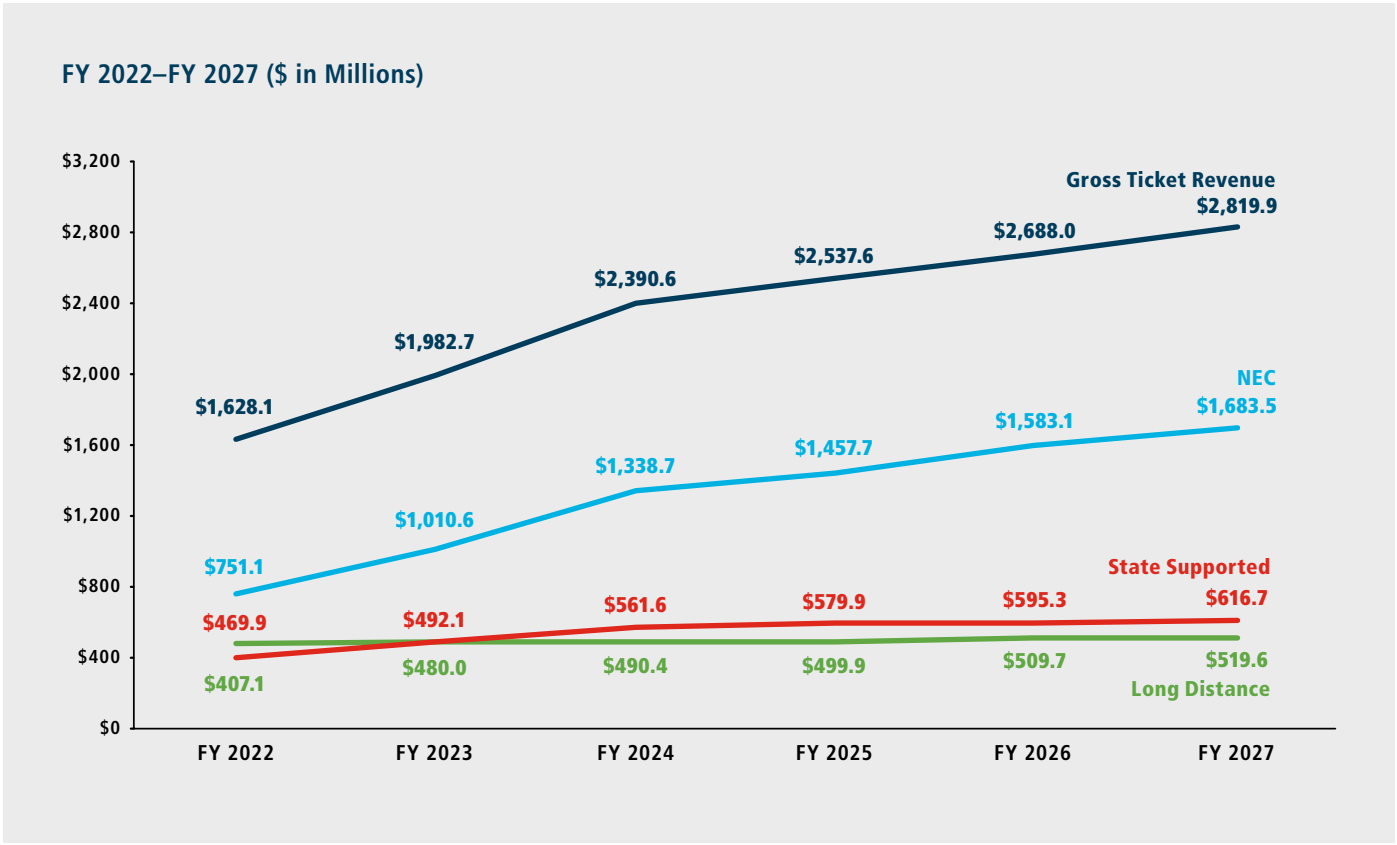
With the combination of these three factors, year over year Ticket Revenue growth is expected at 84.4% in FY 2022, 21.8% in FY 2023 and 20.6% in FY 2024 before slowing down to 6.1% in FY 2025, 5.9 % in FY 2026, and 4.9% in FY 2027. Ridership follows a similar profile, growing 91.0% in FY 2022, 24.0% in FY 2023 and 19.3% in FY 2024 before slowing down to 3.4% in FY 2025, 2.9% in and FY 2026, and 3.2% in FY 2027. In total, this represents an eight-year CAGR of 2.3% in ticket revenue over FY 2019 actuals, and a 1.9% CAGR for ridership over the same period. Baseline projections include assumptions for market growth, price changes, and service adjustments.

With the *Acela* program, significant ridership growth is expected in the Northeast Corridor (NEC), though toward the end of the five-year planning period, in line with increased capacity. Assumptions, consistent with the expected level of operations, include the following:

- Long Distance, State Supported, and NEC Schedules return generally to pre-COVID-19 service levels, and new *Acela* trainsets replace the existing fleet.
- New *Acela* schedule with added frequencies and increased capacity in place in FY 2024 continuing through FY 2025 with an additional *Acela* schedule enhancement in FY 2026.

All Other Revenue is expected to follow a relatively constant growth trend, beginning in FY 2023, assuming a healthy recovery to pre-COVID-19 metrics.

Gross Ticket Revenue

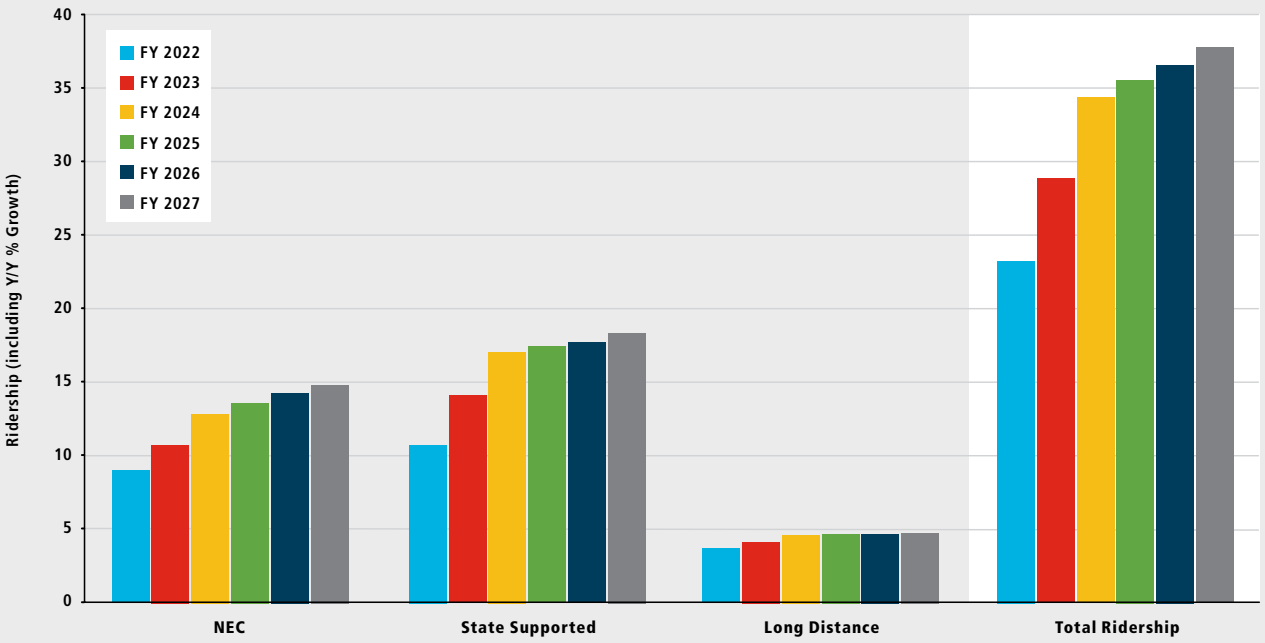


	GROSS TICKET REVENUE						5Y TOTAL
($ in Millions)	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY22–FY27
NEC	$ 751.1	$ 1,010.6	$ 1,338.7	$ 1,457.7	$ 1,583.1	$ 1,683.5	$ 7,824.7
State Supported	407.1	492.1	561.6	579.9	595.3	616.7	3,252.7
Long Distance	469.9	480.0	490.4	499.9	509.7	519.6	2,969.4
Total Gross Ticket Revenue	**$ 1,628.1**	**$ 1,982.7**	**$ 2,390.6**	**$ 2,537.6**	**$ 2,688.0**	**$ 2,819.9**	**$ 14,046.8**
% of FY 2019	**69%**	**84%**	**102%**	**108%**	**114%**	**120%**	

Revenue and Ridership, continued

Ridership

FY 2022–FY 2027 (Ridership in Millions)



	RIDERSHIP						5Y TOTAL
(Ridership in Millions)	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY22–FY27
NEC	8.96	10.69	12.87	13.54	14.24	14.74	75.04
State Supported	10.67	14.06	16.98	17.42	17.71	18.33	95.15
Long Distance	3.62	4.08	4.55	4.60	4.64	4.68	26.17
Total Ridership	**23.24**	**28.83**	**34.40**	**35.56**	**36.59**	**37.75**	**196.36**
% of FY 2019	**71%**	**89%**	**106%**	**109%**	**113%**	**116%**	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Key Expense Drivers

Variable expense growth over the planning horizon follows capacity changes in the level of operations, and so ramps up steadily from FY 2023 to FY 2027 due to service recovery and expansion and the launch of the new *Acela* trainsets. Growth also comes from operational support of IIJA development and capital programs.

Additional Growth Areas

Labor Expense (Operations Management)

Salaries and benefits along with professional fees are expected to grow in line with IIJA requirements through FY 2027.

Labor Expense (Agreement)

Wages and overtime are expected to increase steadily through the planning period in line with service recovery and expansion (volume), and the inclusion of assumed GWI increases.

Benefits Expense

Benefits expense is expected to increase steadily at an average of 8.9% over the five-year planning horizon. Of the growth, 50% is assumed to be attributable to volume from increasing management and labor staffing levels (to support increased capacity across the network), while the remaining 50% is attributed to increases in rate.

Fuel Expense

Increases dramatically in the FY 2022 AOP, driven largely from volume as Amtrak builds back to full capacity. Fuel expense growth increases slightly in FY 2023 from increased capacity and then levels off at 2% annual increase for FY 2024 through FY 2027.

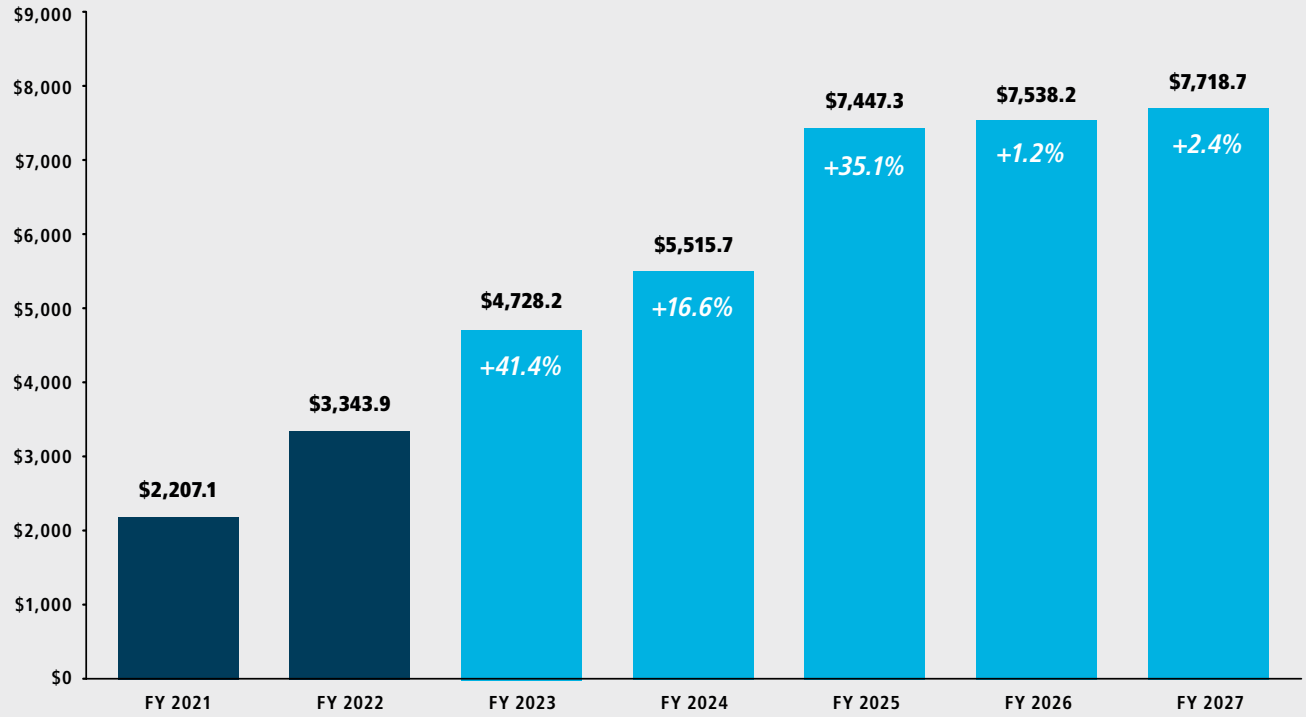
Host Railroad Expense

Assumes On Time Performance in line with the FY 2022 AOP.

Capital Overview

Total capital spend over the five-year planning horizon (FY 2023 through FY 2027) is expected to be approximately $32.9 billion, averaging roughly $6.5 billion annually. Capital spend will increase significantly from historical levels beginning in FY 2023 as a result of funding received from the passage of IIJA.

Total Capital Spend (All Fund Sources)
FY 2021–FY 2027



Capital Overview, continued

Total Capital Spend (All Fund Sources) FY 2022–FY 2027

($s in Millions)	PLAN FY 2022	FIVE-YEAR PLAN						Y/Y GROWTH				
		FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	TOTAL	FY22-23	FY23-24	FY24-25	FY25-26	FY26-27
Engineering	$ 1,071.8	$ 1,653.8	$ 2,084.6	$ 1,298.6	$ 1,843.8	$ 2,407.6	$ 9,288.4	54.3%	26.1%	(37.7%)	42.0%	30.6%
Mechanical	532.8	390.7	404.6	909.8	779.9	793.7	3,278.7	(26.7%)	3.6%	124.8%	(14.3%)	1.8%
Operations	25.3	13.4	13.5	13.5	13.5	13.5	67.4	(47.0%)	0.8%	0.0%	0.0%	0.0%
Total Operations	**$ 1,629.8**	**$ 2,057.9**	**$ 2,502.8**	**$ 2,221.9**	**$ 2,637.2**	**$ 2,637.2**	**$ 12,634.5**	**26.3%**	**21.6%**	**(11.2%)**	**18.7%**	**21.9%**
IT	172.4	177.6	182.9	188.4	194.1	194.1	942.9	3.0%	3.0%	3.0%	3.0%	3.0%
Real Estate, Stations & ADA	371.5	703.3	816.5	1,434.3	1,414.5	1,414.5	5,894.4	89.3%	16.1%	75.7%	(1.4%)	7.9%
Safety	128.1	140.7	135.0	135.0	135.0	135.0	680.6	9.8%	(4.0%)	(0.0%)	0.0%	0.0%
Procurement	13.4	15.6	13.9	14.0	14.1	14.1	69.9	16.6%	(10.8%)	0.8%	0.7%	(13.1%)
Gateway	184.0	650.1	802.0	2,058.5	1,730.5	1,730.5	6,164.5	253.2%	23.4%	156.7%	(15.9%)	(46.6%)
Planning & Strategy	153.6	208.2	369.2	441.6	503.0	503.0	2,368.1	35.5%	77.4%	19.6%	13.9%	68.2%
Major Programs	691.0	775.0	690.4	953.5	909.8	909.8	4,190.2	12.2%	(10.9%)	38.1%	(4.6%)	(5.3%)
Total Capital	**$ 3,343.9**	**$ 4,728.2**	**$ 5,512.7**	**$ 7,447.3**	**$ 7,538.2**	**$ 7,538.2**	**$ 32,945.1**	**41.4%**	**16.6%**	**35.1%**	**1.2%**	**2.4%**

Infrastructure Project Spending of $9.3B

Spending on Engineering activities for Amtrak infrastructure is expected to grow at an 18% annual rate from FY 2022 through FY 2027, with a focus on bridge and tunnel replacement programs, track replacements, interlocking renewal projects and tie & timber programs, as well as stations and facilities Maintenance.

Real Estate & ADA Spend of $5.9B

Spending in this category includes improvement work for Stations and Master Plans and bringing facilities into ADA compliance.

Fleet & Facility Spend (Major Programs) of $4.2B

Includes acquisition cost of equipment and facility modifications for the new Intercity trainsets, for equipment and required facilities necessary to house and service new rolling stock.

Gateway Program Spend of $5.9B

Includes Penn Station expansion, Hudson River and Yards property acquisition, and construction and rehabilitation of the North Portal Bridge.

Mechanical Spend of $3.3B

Spending consists mainly of overhauls to existing fleet and LCPM.

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Consolidated Account Structure Tables

Consolidated Account Structure: Northeast Corridor

FY 2022–FY 2027

($s in Thousands)	FY 2022	FY 2023	FY2024	FY 2025	FY 2026	FY 2027	Total
Financial Sources:							
Passenger Related Revenue							
Ticket Revenue (Adjusted)	743,782	1,002,899	1,328,441	1,446,586	1,570,952	1,670,629	7,763,289
Charter/Special Trains	1,500	-	-	-	-	-	1,500
Food and Beverage	14,724	18,751	23,015	24,710	26,490	27,978	135,669
Contractual Contribution (Operating)							
PRIIA 209 Operating Payments	-	-	-	-	-	-	-
PRIIA 212 Operating Payments	197,397	230,468	236,229	242,135	248,189	254,393	1,408,811
Commuter Operations	73,289	74,933	77,181	79,496	81,881	84,338	471,117
Reimbursable Contracts	107,530	153,829	157,164	160,506	163,959	167,464	910,452
Access Revenue	23,681	-	-	-	-	-	23,681
Commercial Revenue (incl. Pipe/Wire, Real Estate, Parking)	53,995	-	-	-	-	-	53,995
All Other Revenue (incl. Insurance Revenue, Cobranded Commissions, etc.)	9,842	18,458	20,998	21,853	22,889	22,903	116,943
Operating Sources Subtotal	**1,225,740**	**1,499,338**	**1,843,028**	**1,975,287**	**2,114,360**	**2,227,705**	**10,885,457**
Contractual Contribution (Capital)							
PRIIA 209 Capital Payments	-	-	-	-	-	-	-
PRIIA 212 Capital Payments	-	160,000	160,000	160,000	160,000	160,000	800,000
Other State/Local Mutual Benefit	113,309	-	-	-	-	-	113,309
Amtrak Internal Cash	156,116	118,082	9,812	2,649	5,198	14,037	305,894
Financing Proceeds Applied	425,240	473,334	86,554	30,250	-	-	1,015,378
Other Capital and Special Grants (incl., state/local sources)	-	-	-	-	-	-	-
Capital Sources Subtotal	**694,665**	**751,416**	**256,366**	**192,899**	**165,198**	**174,037**	**2,234,581**
Federal Grants to Amtrak							
Prior Year Carryover Grant Funds	748,882	347,810	128,091	-	-	-	1,224,783
Current Year FAST Sec 11101 Grants							
Operating	249,088	182,801	9,012	5,266	-	-	446,167
Capital	852,091	917,199	1,190,988	1,294,734	1,400,000	1,442,000	7,097,013
IIJA Supplemental	-	600,000	600,000	600,000	600,000	600,000	3,000,000
IIJA Discretionary	-	736,867	1,703,251	2,137,762	2,165,117	2,505,642	9,248,639
Other Federal Grants (incl., FRA/OST, FTA, DHS)	27,591	32,733	65,338	63,026	39,160	89,279	317,127
Federal Grants to Amtrak Subtotal	**1,877,653**	**2,817,410**	**3,696,680**	**4,100,788**	**4,204,277**	**4,636,921**	**21,333,728**
Total Financial Sources	**3,798,058**	**5,068,163**	**5,796,074**	**6,268,974**	**6,483,834**	**7,038,664**	**34,453,767**
Financial Uses (Operating):							
Service Line Management	10,276	15,340	16,393	17,223	18,031	18,861	96,125
Transportation	324,364	425,685	470,002	502,342	533,576	565,520	2,821,490
Equipment	246,957	322,528	354,295	376,634	397,977	419,666	2,118,058
Infrastructure	329,038	341,776	373,207	400,231	427,226	455,386	2,326,864
Stations	111,842	98,978	109,655	117,904	125,985	134,319	698,685
National Assets and Corporate Services	445,795	477,832	528,487	566,218	602,854	640,440	3,261,627
Total Operating Uses	**1,468,273**	**1,682,139**	**1,852,040**	**1,980,553**	**2,105,651**	**2,234,193**	**11,322,847**
Operating Surplus/Deficit *(Operating Sources - Operating Uses)*	**(242,533)**	**(182,801)**	**(9,012)**	**(5,266)**	**8,709**	**(6,487)**	**(437,390)**
Available for Capital Uses *(Capital Sources + Federal Grants to Amtrak + Operating Surplus/Deficit - Debt Service Payments)*	**2,329,785**	**3,386,024**	**3,944,034**	**4,288,421**	**4,378,183**	**4,804,471**	**23,130,919**
Financial Uses (Capital):							
Service Line Management	2,276	-	-	-	-	-	2,276
Transportation	138,300	44,797	8,785	7,448	4,344	4,307	207,981
Equipment	571,186	683,559	236,970	447,980	433,705	353,334	2,726,733
Infrastructure	901,195	1,832,509	2,755,904	3,397,728	3,538,555	4,050,726	16,476,617
Stations	202,472	477,777	573,725	1,081,094	979,527	936,547	4,251,142
National Assets and Corporate Services	80,358	61,852	39,115	23,225	20,802	29,188	254,540
Capital Expenditures	**1,895,787**	**3,100,494**	**3,614,499**	**4,957,475**	**4,976,932**	**5,374,102**	**23,919,289**
Debt Repayments	230,772	203,343	187,794	187,302	186,293	184,846	1,180,350
Total Capital Uses	**2,126,559**	**3,303,837**	**3,802,293**	**5,144,776**	**5,163,226**	**5,558,948**	**25,099,639**
Remaining Carryover Balance	**$ 203,226**	**$ 82,187**	**$ 141,741**	**$ (856,356)**	**$ (785,042)**	**$ (754,477)**	**$ (1,968,720)**

Consolidated Account Structure: National Network

FY 2022–FY 2027

($s in Thousands)	FY 2022	FY 2023	FY2024	FY 2025	FY 2026	FY 2027	Total
Financial Sources:							
Passenger Related Revenue							
Ticket Revenue (Adjusted)	873,670	968,604	1,048,372	1,076,238	1,101,207	1,132,555	6,200,646
Charter/Special Trains	71	-	-	-	-	-	71
Food and Beverage	31,763	40,909	48,384	50,223	51,906	54,122	277,308
Contractual Contribution (Operating)							
PRIIA 209 Operating Payments	372,744	404,330	417,535	459,035	498,933	533,424	2,686,000
PRIIA 212 Operating Payments	3,438	18,031	18,481	18,943	19,417	19,902	98,213
Commuter Operations	65,320	66,660	68,659	70,719	72,841	75,026	419,225
Reimbursable Contracts	65,455	89,713	90,965	92,213	93,488	94,807	526,642
Access Revenue	13,489	-	-	-	-	-	13,489
Commercial Revenue (incl. Pipe/Wire, Real Estate, Parking)	12,095	-	-	-	-	-	12,095
All Other Revenue (incl. Insurance Revenue, Cobranded Commissions, etc.)	11,236	25,057	25,619	25,635	25,652	25,989	139,188
Operating Sources Subtotal	**1,449,280**	**1,613,303**	**1,718,017**	**1,793,007**	**1,863,442**	**1,935,826**	**10,372,876**
Contractual Contribution (Capital)							
PRIIA 209 Capital Payments	3,511	20,391	60,921	59,407	58,458	59,045	261,732
PRIIA 212 Capital Payments	-	40,000	40,000	40,000	40,000	40,000	200,000
Other State/Local Mutual Benefit	28,647	-	-	-	-	-	28,647
Amtrak Internal Cash	106,140	9,072	4,375	1,465	2,059	3,359	126,470
Financing Proceeds Applied	-	-	-	-	-	-	-
Other Capital and Special Grants (incl., state/local sources)	-	-	-	-	-	-	-
Capital Sources Subtotal	**138,299**	**69,463**	**105,296**	**100,871**	**100,517**	**102,403**	**616,849**
Federal Grants to Amtrak							
Prior Year Carryover Grant Funds	756,215	135,563	341,381	-	-	-	1,233,159
Current Year FAST Sec 11101 Grants							
Operating	762,310	917,071	971,758	1,021,562	1,071,030	1,119,137	5,862,868
Capital	844,091	1,282,929	1,478,242	1,678,438	1,928,970	1,744,446	8,957,116
IIJA Supplemental	-	1,600,000	1,600,000	1,600,000	1,600,000	1,600,000	8,000,000
IIJA Discretionary	-	1,168	-	-	23,240	15,656	40,064
Other Federal Grants (incl., FRA/OST, FTA, DHS)	10,488	31,244	27,626	29,105	10,943	17,936	127,342
Federal Grants to Amtrak Subtotal	**2,373,104**	**3,967,975**	**4,419,007**	**4,329,105**	**4,634,183**	**4,497,175**	**24,220,550**
Total Financial Sources	**3,960,684**	**5,650,741**	**6,242,320**	**6,222,984**	**6,598,142**	**6,535,404**	**35,210,275**
Financial Uses (Operating):							
Service Line Management	11,923	12,637	13,525	14,235	14,914	15,608	82,842
Transportation	971,779	1,132,381	1,203,869	1,259,433	1,312,650	1,365,931	7,246,043
Equipment	475,252	490,223	521,561	545,609	568,549	591,509	3,192,703
Infrastructure	104,998	136,198	142,383	148,270	154,341	160,691	846,883
Stations	192,078	202,590	216,558	227,341	237,638	248,020	1,324,225
National Assets and Corporate Services	480,879	556,344	591,879	619,680	646,381	673,204	3,568,366
Total Operating Uses	**2,236,909**	**2,530,374**	**2,689,775**	**2,814,569**	**2,934,472**	**3,054,963**	**16,261,062**
Operating Surplus/Deficit *(Operating Sources - Operating Uses)*	**(787,628)**	**(917,071)**	**(971,758)**	**(1,021,562)**	**(1,071,030)**	**(1,119,137)**	**(5,888,186)**
Available for Capital Uses *(Capital Sources + Federal Grants to Amtrak + Operating Surplus/Deficit - Debt Service Payments)*	**1,723,775**	**3,120,367**	**3,552,546**	**3,408,415**	**3,663,669**	**3,480,441**	**18,949,213**
Financial Uses (Capital):							
Service Line Management	5,599	-	-	-	-	-	5,599
Transportation	129,063	14,395	8,008	5,321	3,787	3,391	163,966
Equipment	538,036	554,286	491,188	886,123	765,798	666,614	3,902,046
Infrastructure	457,124	593,631	905,742	1,034,674	1,213,604	1,235,558	5,440,332
Stations	226,164	402,000	459,422	545,103	564,346	426,068	2,623,103
National Assets and Corporate Services	92,112	63,444	33,865	18,602	13,703	12,944	234,669
Capital Expenditures	**1,448,098**	**1,627,755**	**1,898,225**	**2,489,823**	**2,561,239**	**2,344,575**	**12,369,715**
Debt Repayments	7,634	4,150	3,833	3,822	3,802	3,772	27,014
Total Capital Uses	**1,455,733**	**1,631,905**	**1,902,058**	**2,493,646**	**2,565,041**	**2,348,347**	**12,396,729**
Remaining Carryover Balance	**$ 268,043**	**$ 1,488,462**	**$ 1,650,488**	**$ 914,769**	**$ 1,098,629**	**$ 1,132,094**	**$ 6,552,484**

Consolidated Account Structure: Total Amtrak

FY 2022–FY 2027

($s in Thousands)	FY 2022	FY 2023	FY2024	FY 2025	FY 2026	FY 2027	Total
Financial Sources:							
Passenger Related Revenue							
Ticket Revenue (Adjusted)	1,617,452	1,971,503	2,376,813	2,522,824	2,672,159	2,803,184	13,963,935
Charter/Special Trains	1,571	-	-	-	-	-	1,571
Food and Beverage	46,487	59,661	71,400	74,933	78,396	82,100	412,977
Contractual Contribution (Operating)							
PRIIA 209 Operating Payments	372,744	404,330	417,535	459,035	498,933	533,424	2,686,000
PRIIA 212 Operating Payments	200,835	248,498	254,711	261,078	267,605	274,296	1,507,024
Commuter Operations	138,609	141,592	145,840	150,215	154,722	159,364	890,342
Reimbursable Contracts	172,985	243,542	248,129	252,719	257,447	262,272	1,437,094
Access Revenue	37,169	-	-	-	-	-	37,169
Commercial Revenue (incl. Pipe/Wire, Real Estate, Parking)	66,090	-	-	-	-	-	66,090
All Other Revenue (incl. Insurance Revenue, Cobranded Commissions, etc.)	21,077	43,515	46,617	47,489	48,540	48,892	256,131
Operating Sources Subtotal	**2,675,020**	**3,112,642**	**3,561,045**	**3,768,294**	**3,977,802**	**4,163,531**	**21,258,333**
Contractual Contribution (Capital)							
PRIIA 209 Capital Payments	3,511	20,391	60,921	59,407	58,458	59,045	261,732
PRIIA 212 Capital Payments	-	200,000	200,000	200,000	200,000	200,000	1,000,000
Other State/Local Mutual Benefit	141,957	-	-	-	-	-	141,957
Amtrak Internal Cash	262,256	127,154	14,187	4,114	7,257	17,396	432,363
Financing Proceeds Applied	425,240	473,334	86,554	30,250	-	-	1,015,378
Other Capital and Special Grants (incl., state/local sources)	-	-	-	-	-	-	-
Capital Sources Subtotal	**832,964**	**820,878**	**361,662**	**293,770**	**265,715**	**276,441**	**2,851,430**
Federal Grants to Amtrak							
Prior Year Carryover Grant Funds	1,505,097	483,372	469,473	-	-	-	2,457,942
Current Year FAST Sec 11101 Grants							
Operating	1,011,398	1,099,871	980,770	1,026,828	1,071,030	1,119,137	6,309,035
Capital	1,696,183	2,200,129	2,669,230	2,973,172	3,328,970	3,186,446	16,054,129
IIJA Supplemental	-	2,200,000	2,200,000	2,200,000	2,200,000	2,200,000	11,000,000
IIJA Discretionary	-	738,036	1,703,251	2,137,762	2,188,356	2,521,298	9,288,703
Other Federal Grants (incl., FRA/OST, FTA, DHS)	38,079	63,977	92,964	92,131	50,103	107,215	444,469
Federal Grants to Amtrak Subtotal	**4,250,758**	**6,785,385**	**8,115,687**	**8,429,893**	**8,838,459**	**9,134,096**	**45,554,278**
Total Financial Sources	**7,758,742**	**10,718,904**	**12,038,394**	**12,491,957**	**13,081,976**	**13,574,068**	**69,664,041**
Financial Uses (Operating):							
Service Line Management	22,200	27,977	29,917	31,459	32,945	34,468	178,966
Transportation	1,296,144	1,558,066	1,673,871	1,761,775	1,846,226	1,931,451	10,067,533
Equipment	722,209	812,751	875,856	922,243	966,526	1,011,175	5,310,761
Infrastructure	434,036	477,974	515,591	548,501	581,567	616,078	3,173,747
Stations	303,920	301,568	326,214	345,246	363,623	382,339	2,022,910
National Assets and Corporate Services	926,674	1,034,176	1,120,366	1,185,898	1,249,235	1,313,644	6,829,993
Total Operating Uses	**3,705,181**	**4,212,513**	**4,541,814**	**4,795,122**	**5,040,123**	**5,289,156**	**27,583,909**
Operating Surplus/Deficit *(Operating Sources - Operating Uses)*	**(1,030,161)**	**(1,099,871)**	**(980,770)**	**(1,026,828)**	**(1,062,321)**	**(1,125,625)**	**(6,325,576)**
Financial Uses (Debt Service Payments):							
RRIF debt repayments	-	-	-	-	-	-	-
Total Debt Service Payments	**-**	**-**	**-**	**-**	**-**	**-**	**-**
Available for Capital Uses *(Capital Sources + Federal Grants to Amtrak + Operating Surplus/Deficit - Debt Service Payments)*	**4,053,560**	**6,506,391**	**7,496,580**	**7,696,835**	**8,041,853**	**8,284,912**	**42,080,132**
Financial Uses (Capital):							
Service Line Management	7,875	-	-	-	-	-	7,875
Transportation	267,363	59,191	16,794	12,769	8,131	7,698	371,946
Equipment	1,109,222	1,237,845	728,158	1,334,103	1,199,503	1,019,948	6,628,779
Infrastructure	1,358,319	2,426,140	3,661,645	4,432,402	4,752,159	5,286,284	21,916,949
Stations	428,636	879,777	1,033,147	1,626,197	1,543,873	1,362,615	6,874,245
National Assets and Corporate Services	172,470	125,295	72,981	41,827	34,505	42,131	489,210
Capital Expenditures	**3,343,885**	**4,728,248**	**5,512,724**	**7,447,298**	**7,538,171**	**7,718,677**	**36,289,004**
Debt Repayments	238,407	207,493	191,626	191,124	190,095	188,618	1,207,364
Total Capital Uses	**3,582,292**	**4,935,742**	**5,704,351**	**7,638,422**	**7,728,266**	**7,907,295**	**37,496,368**
Remaining Carryover Balance	**471,269**	**1,570,650**	**1,792,229**	**58,413**	**313,586**	**377,617**	**4,583,764**

Ridership Projections

FY 2022 Ridership Projections

($s in Millions)	Ridership (000s)	Allocated Operating Sources	Allocated Operating Uses	Allocated Contribution/ (Loss)	Allocated Contribution/ (Loss) per Rider
NEC					
Acela	1,990.3	$287.9	$355.0	$(67.1)	$(33.7)
Regional	6,966.6	488.1	500.9	$(12.8)	(1.8)
NEC Special Trains & Adjustments	3.1	1.8	7.0	$(5.2)	-
NEC	8,960.0	$777.8	$862.8	$(85.0)	$(9.5)
STATE SUPPORTED					
Ethan Allen Express	67.1	$6.0	$3.8	$2.2	$32.3
Vermonter	81.4	14.7	9.6	5.2	63.6
Maple Leaf	352.5	33.9	32.4	1.5	4.2
The Downeaster	451.2	18.1	27.3	(9.3)	(20.5)
New Haven - Springfield	486.5	26.1	44.3	(18.3)	(37.5
Keystone Service	956.9	50.3	61.4	(11.0)	(11.5)
Empire Service	952.4	49.3	75.7	(26.4)	(27.8)
Chicago-St.Louis	464.4	36.5	34.9	1.6	3.4
Hiawathas	566.8	23.6	26.1	(2.5)	(4.4)
Twin Cities	-	-	-	-	-
Wolverines	362.1	36.4	37.6	(1.2)	(3.3)
Illini	255.9	19.7	24.4	(4.7)	(18.5)
Illinois Zephyr	143.7	17.3	12.7	4.6	31.8
Moline	-	-	-	-	-
Rockford	-	-	-	-	-
Gulf Coast	7.9	5.9	3.2	2.8	349.4
Heartland Flyer	56.5	6.6	7.8	(1.3)	(22.3)
Pacific Surfliner	1,429.2	102.9	138.8	(35.9	(25.1
Cascades	538.7	59.9	58.1	1.8	3.3
Capitols	836.8	57.2	75.6	(18.4)	(22.0)
San Joaquins	714.9	83.1	94.7	(11.6	(16.3)
Adirondack	78.7	9.9	11.3	(1.4)	(18.2)
Blue Water	143.1	12.0	11.7	0.3	2.2
Washington-Lynchburg	249.6	15.1	11.9	3.1	12.6
Washington - Newport News	286.8	21.2	16.8	4.4	15.3
Washington - Norfolk	269.1	22.5	15.8	6.6	24.6
Washington - Richmond	84.6	9.6	6.8	2.8	-
Hoosier State	-	-	-	-	-
Kansas City-St.Louis	151.1	15.9	13.1	2.8	18.6
Pennsylvanian	180.8	16.8	17.2	(0.4)	(2.1)
Pere Marquette	83.5	3.9	11.8	(7.9)	(94.0)
Carolinian	203.4	20.5	18.9	1.6	7.8
Piedmont	210.2	9.5	12.7	(3.2)	(15.3)
Non-NEC Special Trains & Adjustments	0.0	0.1	9.4	(9.4)	
State Supported	10,665.8	$804.4	$926.1	$(121.7)	$(11.4
LONG DISTANCE					
Silver Star	316.9	$33.2	$72.8	$(39.5)	$(124.8)
Cardinal	104.0	9.1	24.6	(15.5)	(149.5)
Silver Meteor	279.7	38.8	70.6	(31.9)	(113.9)
Empire Builder	336.8	54.3	114.9	(60.6)	(180.0)
Capitol Limited	189.5	19.4	37.3	(17.8)	(94.2)
California Zephyr	320.8	51.3	110.5	(59.2)	(184.4)
Southwest Chief	250.5	45.6	104.9	(59.3)	(236.5)
City of New Orleans	188.1	16.0	52.8	(36.8)	(195.7)
Texas Eagle	259.6	22.5	64.1	(41.6)	(160.1)
Sunset Limited	71.5	10.2	54.1	(43.9)	(614.1)
Coast Starlight	297.2	30.3	87.2	(56.9)	(191.6)
Lake Shore Limited	318.6	29.9	69.1	(39.2)	(123.1)
Palmetto	300.9	25.3	37.3	(12.0)	(39.9)
Crescent	202.1	31.6	88.6	(57.0)	(282.2)
Auto Train	181.6	80.6	80.9	(0.4)	(1.9)
Long Distance Adjustments		-	1.10	(1.10)	-
Long Distance	3,617.8	$498.1	$1,070.8	$(572.8)	$(0.2)
NTS	23,243.6	$2,080.3	$2,859.8	$(779.5	$(21.1)
Ancillary		351.0	370.4	(19.5)	
Infrastructure		243.7	475.0	(231.2)	
AMTRAK	**23,243.6**	**$2,675.0**	**$3,705.2**	**$(1,030.2)**	

FY 2023 Ridership Projections

($s in Millions)	Ridership (000s)	Allocated Operating Sources	Allocated Operating Uses	Allocated Contribution/ (Loss)	Allocated Contribution/ (Loss) per Rider
NEC					
Acela	2,765.5	$269.1	$345.4	$(76.3)	$(27.6)
Regional	7,928.0	771.3	688.3	83.0	10.5
NEC Special Trains & Adjustments	-	-	-	0.0	-
NEC	10,693.5	$1,040.4	$1,033.7	$6.7	$0.6
STATE SUPPORTED					
Ethan Allen Express	71.7	$8.6	$5.9	$2.7	$37.7
Vermonter	91.4	$12.3	$10.2	$2.1	23.1
Maple Leaf	383.6	$45.4	$35.5	$10.0	26.1
The Downeaster	514.7	$18.1	$31.8	$(13.7)	(26.5)
New Haven - Springfield	543.4	$21.4	$46.6	$(25.2)	(46.3)
Keystone Service	1,270.0	$79.0	$65.0	$14.0	11.0
Empire Service	1,104.8	$92.9	$81.7	$11.2	10.1
Chicago-St.Louis	555.2	$28.7	$46.3	$(17.7)	(31.9)
Hiawathas	716.7	$31.2	$27.1	$4.0	5.6
Twin Cities	55.2	$4.8	$15.3	$(10.5)	-
Wolverines	503.6	$43.3	$39.2	$4.0	8.0
Illini	266.4	$12.6	$25.6	$(13.0)	(48.6)
Illinois Zephyr	170.4	$7.8	$13.4	$(5.6)	(32.9)
Moline	-	-	-	-	-
Rockford	-	-	-	-	-
Gulf Coast	56.7	$2.7	$17.0	$(14.3)	(253.0)
Heartland Flyer	64.7	$3.2	$8.0	$(4.8)	(75.0)
Pacific Surfliner	2,387.6	$132.0	$146.7	$(14.7)	(6.2)
Cascades	867.3	$64.3	$82.2	$(17.9)	(20.6)
Capitols	1,271.8	$47.3	$80.6	$(33.3)	(26.2)
San Joaquins	933.2	$53.0	$101.2	$(48.2)	(51.7)
Adirondack	111.6	$12.4	$11.9	$0.5	4.4
Blue Water	153.1	$10.3	$13.7	$(3.5)	(22.8)
Washington-Lynchburg	320.7	$37.7	$13.3	$24.4	76.0
Washington - Newport News	316.0	$35.4	$17.7	$17.7	56.1
Washington - Norfolk	343.0	$41.6	$16.7	$24.9	72.5
Washington - Richmond	97.3	$10.4	$7.2	$3.2	-
Hoosier State	-	-	-	-	-
Kansas City-St.Louis	152.3	$9.4	$14.3	$(5.0)	(32.6)
Pennsylvanian	200.6	$21.5	$18.2	$3.2	16.0
Pere Marquette	90.8	$6.1	$13.3	$(7.3)	(80.0)
Carolinian	225.6	$28.1	$21.2	$6.9	30.8
Piedmont	219.2	$8.9	$13.1	$(4.2)	(19.3)
Non-NEC Special Trains & Adjustments	-	-	-	-	-
State Supported	14,058.4	$930.2	$1,040.2	$(110.0)	$(7.8)
LONG DISTANCE					
Silver Star	350.4	$43.7	$91.4	$(47.6)	$(136.0)
Cardinal	107.7	13.4	29.9	(16.5)	(153.1)
Silver Meteor	315.5	39.4	84.0	(44.6)	(141.3)
Empire Builder	385.1	48.1	155.7	(107.6)	(279.4)
Capitol Limited	200.8	25.1	47.1	(22.0)	(109.6)
California Zephyr	367.9	45.9	147.3	(101.4)	(275.7)
Southwest Chief	294.5	36.8	138.3	(101.5)	(344.8)
City of New Orleans	209.8	26.2	56.4	(30.2)	(144.0)
Texas Eagle	288.5	36.0	78.4	(42.4)	(147.0)
Sunset Limited	82.7	10.3	51.6	(41.2)	(498.8)
Coast Starlight	354.3	44.2	84.1	(39.8)	(112.4)
Lake Shore Limited	343.7	42.9	70.3	(27.3)	(79.6)
Palmetto	318.9	39.8	50.0	(10.2)	(31.9)
Crescent	249.2	31.1	83.2	(52.1)	(208.9)
Auto Train	212.0	26.5	51.6	(25.1)	(118.5)
Long Distance Adjustments	-	-	-	-	-
Long Distance	4,080.9	$509.4	$1,219.1	$(709.7)	$(0.2)
NTS	28,832.8	$2,480.0	$3,293.0	$(813.0)	$(28.2)
Ancillary		382.8	399.2	(16.4)	
Infrastructure		249.8	520.3	(270.5)	
AMTRAK	**28,832.8**	**$3,112.6**	**$4,212.5**	**$(1,099.9)**	

FY 2024 Ridership Projections

($s in Millions)	Ridership (000s)	Allocated Operating Sources	Allocated Operating Uses	Allocated Contribution/ (Loss)	Allocated Contribution/ (Loss) per Rider
NEC					
Acela	4,043.8	$431.4	$481.0	$(49.6)	$(12.3)
Regional	8,824.1	941.4	672.3	269.2	30.5
NEC Special Trains & Adjustments	-	-	-	0.0	-
NEC	12,867.9	$1,372.8	$1,153.2	$219.6	$17.1
STATE SUPPORTED					
Ethan Allen Express	83.7	$9.7	$6.2	$3.5	$41.5
Vermonter	101.5	$12.2	$10.6	$1.6	15.3
Maple Leaf	409.7	$45.1	$37.4	$7.7	18.8
The Downeaster	578.1	$19.2	$33.1	$(14.0)	(24.1)
New Haven - Springfield	550.8	$22.0	$47.8	$(25.8)	(46.8)
Keystone Service	1,549.6	$86.5	$67.1	$19.3	12.5
Empire Service	1,225.9	$98.3	$84.8	$13.5	11.0
Chicago-St.Louis	646.0	$29.8	$48.5	$(18.7)	(28.9)
Hiawathas	1,144.9	$46.3	$41.0	$5.3	4.6
Twin Cities	66.7	$5.4	$16.1	$(10.7)	-
Wolverines	587.0	$47.0	$40.9	$6.0	10.3
Illini	276.9	$12.6	$26.7	$(14.1)	(51.1)
Illinois Zephyr	197.1	$8.4	$14.4	$(6.0)	(30.2)
Moline	-	-	-	-	-
Rockford	-	-	-	-	-
Gulf Coast	70.0	$3.2	$26.3	$(23.1)	(330.6)
Heartland Flyer	72.8	$3.4	$8.4	$(5.0)	(68.6)
Pacific Surfliner	2,966.8	$145.5	$157.5	$(12.0)	(4.1)
Cascades	1,019.1	$71.2	$85.3	$(14.0)	(13.8)
Capitols	1,853.5	$65.5	$97.0	$(31.5)	(17.0)
San Joaquins	1,090.4	$56.4	$105.3	$(48.9)	(44.9)
Adirondack	118.0	$12.5	$12.3	$0.2	1.4
Blue Water	171.6	$10.4	$14.3	$(4.0)	(23.1)
Washington-Lynchburg	367.9	$38.8	$16.0	$22.8	62.0
Washington - Newport News	345.1	$35.1	$18.8	$16.3	47.1
Washington - Norfolk	374.2	$41.4	$17.9	$23.5	62.9
Washington - Richmond	109.9	$10.4	$7.5	$2.9	-
Hoosier State	-	-	-	-	-
Kansas City-St.Louis	153.4	$8.9	$15.4	$(6.5)	(42.4)
Pennsylvanian	220.4	$20.6	$18.9	$1.7	7.7
Pere Marquette	98.1	$5.8	$13.9	$(8.0)	(81.8)
Carolinian	242.4	$28.1	$21.5	$6.6	27.3
Piedmont	284.6	$11.4	$14.0	$(2.6)	(9.3)
Non-NEC Special Trains & Adjustments		$7.1	-	$7.1	-
State Supported	16,976.1	$1,018.0	$1,125.0	$(107.0)	$(6.3)
LONG DISTANCE					
Silver Star	383.8	$44.1	$96.1	$(52.0)	$(135.6)
Cardinal	111.4	12.8	31.5	(18.7)	(167.8)
Silver Meteor	351.2	40.3	88.3	(48.0)	(136.6)
Empire Builder	433.5	49.8	163.8	(114.0)	(263.0)
Capitol Limited	212.1	24.4	49.5	(25.2)	(118.6)
California Zephyr	415.0	47.7	155.0	(107.3)	(258.6)
Southwest Chief	338.5	38.9	145.5	(106.6)	(314.9)
City of New Orleans	231.5	26.6	59.3	(32.7)	(141.4)
Texas Eagle	317.4	36.4	82.5	(46.0)	(145.1)
Sunset Limited	93.9	10.8	54.2	(43.5)	(463.0)
Coast Starlight	419.7	48.2	88.4	(40.2)	(95.8)
Lake Shore Limited	368.8	42.3	73.9	(31.5)	(85.5)
Palmetto	336.8	38.7	52.6	(13.9)	(41.3)
Crescent	296.3	34.0	87.5	(53.4)	(180.4)
Auto Train	242.4	27.8	54.3	(26.4)	(109.0)
Long Distance Adjustments	-	-	-	-	-
Long Distance	4,552.3	$522.7	$1,282.3	$(759.5)	$(0.2)
NTS	34,396.4	$2,913.5	$3,560.4	$(646.9)	$(18.8)
Ancillary		391.5	411.1	(19.6)	
Infrastructure		256.1	570.3	(314.2)	
AMTRAK	**34,396.4**	**$3,561.0**	**$4,541.8**	**$(980.8)**	

FY 2025 Ridership Projections

($s in Millions)	Ridership (000s)	Allocated Operating Sources	Allocated Operating Uses	Allocated Contribution/ (Loss)	Allocated Contribution/ (Loss) per Rider
NEC					
Acela	4,673.5	$515.3	$542.6	$(27.2)	$(5.8)
Regional	8,871.0	978.2	689.7	288.5	32.5
NEC Special Trains & Adjustments	-	-	-	0.0	-
NEC	13,544.5	$1,493.6	$1,232.3	$261.3	$19.3
STATE SUPPORTED					
Ethan Allen Express	85.0	$10.2	$6.6	$3.6	$41.9
Vermonter	103.0	$12.8	$11.2	$1.6	15.3
Maple Leaf	413.8	$47.2	$40.0	$7.2	17.4
The Downeaster	587.0	$20.2	$35.0	$(14.8)	(25.2)
New Haven - Springfield	557.1	$23.1	$49.4	$(26.3)	(47.3)
Keystone Service	1,576.6	$91.2	$70.0	$21.2	13.4
Empire Service	1,243.9	$103.3	$88.9	$14.4	11.6
Chicago-St.Louis	653.0	$31.2	$51.3	$(20.1)	(30.8)
Hiawathas	1,157.1	$48.4	$42.9	$5.5	4.8
Twin Cities	67.4	$5.6	$17.1	$(11.5)	-
Wolverines	591.9	$49.1	$43.2	$5.9	9.9
Illini	278.3	$13.1	$28.3	$(15.2)	(54.5)
Illinois Zephyr	197.0	$8.7	$15.7	$(7.0)	(35.3)
Moline	-	-	-	-	-
Rockford	-	-	-	-	-
Gulf Coast	70.7	$3.3	$28.1	$(24.8)	(350.2)
Heartland Flyer	73.6	$3.6	$9.0	$(5.3)	(72.7)
Pacific Surfliner	3,042.0	$154.6	$164.1	$(9.5)	(3.1)
Cascades	1,029.7	$74.6	$89.5	$(14.9)	(14.5)
Capitols	2,038.8	$75.6	$101.6	$(26.0)	(12.8)
San Joaquins	1,113.1	$59.7	$110.8	$(51.2)	(46.0)
Adirondack	120.3	$13.2	$12.9	$0.3	2.3
Blue Water	173.1	$10.8	$15.1	$(4.3)	(24.8)
Washington-Lynchburg	375.3	$41.0	$17.2	$23.8	63.4
Washington - Newport News	351.5	$37.0	$20.3	$16.7	47.6
Washington - Norfolk	381.2	$43.7	$19.4	$24.3	63.8
Washington - Richmond	112.1	$11.0	$7.8	$3.1	-
Hoosier State	-	-	-	-	-
Kansas City-St.Louis	156.2	$9.3	$16.8	$(7.4)	(47.6)
Pennsylvanian	223.7	$21.7	$19.8	$1.9	8.4
Pere Marquette	99.0	$6.1	$14.6	$(8.5)	(85.6)
Carolinian	247.8	$29.8	$22.0	$7.8	31.7
Piedmont	296.0	$12.3	$15.3	$(3.0)	(10.0)
Non-NEC Special Trains & Adjustments	-	$7.4	-	$7.4	-
State Supported	17,415.4	$1,078.9	$1,183.9	$(105.0)	$(6.0)
LONG DISTANCE					
Silver Star	387.6	$44.9	$100.2	$(55.2)	$(142.5)
Cardinal	112.5	13.0	32.8	$(19.8)	(175.7)
Silver Meteor	354.7	41.1	92.0	$(50.9)	(143.5)
Empire Builder	437.5	50.7	170.7	$(119.9)	(274.1)
Capitol Limited	214.1	24.8	51.6	$(26.8)	(125.1)
California Zephyr	418.9	48.6	161.5	$(112.9)	(269.6)
Southwest Chief	341.8	39.6	151.6	$(112.0)	(327.6)
City of New Orleans	233.1	27.0	61.8	$(34.8)	(149.2)
Texas Eagle	320.5	37.2	86.0	$(48.8)	(152.3)
Sunset Limited	94.7	11.0	56.5	$(45.5)	(480.7)
Coast Starlight	423.8	49.1	92.1	$(43.0)	(101.5)
Lake Shore Limited	372.2	43.2	77.0	$(33.8)	(90.9)
Palmetto	340.6	39.5	54.8	$(15.3)	(44.9)
Crescent	299.0	34.7	91.2	$(56.5)	(188.9)
Auto Train	244.6	28.4	56.5	$(28.2)	(115.2)
Long Distance Adjustments	-	-	-	-	-
Long Distance	4,595.6	$532.9	$1,336.4	$(803.4)	$(0.2)
NTS	35,555.5	$3,105.4	$3,752.6	$(647.2)	$(18.2)
Ancillary		400.4	422.6	(22.3)	
Infrastructure		262.5	619.9	(357.4)	
AMTRAK	**35,555.5**	**$3,768.3**	**$4,795.1**	**$(1,026.8)**	

FY 2026 Ridership Projections

($s in Millions)	Ridership (000s)	Allocated Operating Sources	Allocated Operating Uses	Allocated Contribution/ (Loss)	Allocated Contribution/ (Loss) per Rider
NEC					
Acela	5,316.0	$605.3	$609.2	$(3.9)	$(0.7)
Regional	8,919.4	1,015.5	697.7	317.8	35.6
NEC Special Trains & Adjustments	-	-	-	0.0	-
NEC	14,235.5	$1,620.8	$1,306.9	$313.9	$22.0
STATE SUPPORTED					
Ethan Allen Express	86.4	$10.7	$7.0	$3.7	$42.7
Vermonter	104.4	$13.4	$11.8	$1.7	15.8
Maple Leaf	417.7	$49.3	$42.4	$6.9	16.6
The Downeaster	596.0	$21.2	$36.7	$(15.5)	(25.9)
New Haven - Springfield	563.4	$24.1	$50.9	$(26.7)	(47.5)
Keystone Service	1,602.9	$95.9	$72.6	$23.3	14.5
Empire Service	1,261.6	$108.5	$92.7	$15.8	12.5
Chicago-St.Louis	659.9	$32.6	$53.9	$(21.3)	(32.3)
Hiawathas	1,168.8	$50.7	$44.7	$6.0	5.1
Twin Cities	68.1	$5.8	$18.1	$(12.3)	-
Wolverines	596.6	$51.2	$45.4	$5.9	9.9
Illini	279.4	$13.6	$29.7	$(16.1)	(57.6)
Illinois Zephyr	196.5	$9.0	$16.9	$(7.9)	(40.1)
Moline	-	-	-	-	-
Rockford	-	-	-	-	-
Gulf Coast	71.5	$3.4	$29.7	$(26.3)	(367.4)
Heartland Flyer	74.3	$3.8	$9.4	$(5.7)	(76.2)
Pacific Surfliner	3,118.5	$164.0	$170.1	$(6.0)	(1.9)
Cascades	1,040.5	$78.0	$93.3	$(15.3)	(14.7)
Capitols	2,081.3	$79.9	$105.9	$(26.0)	(12.5)
San Joaquins	1,136.3	$63.0	$115.9	$(52.9)	(46.5)
Adirondack	122.6	$13.9	$13.5	$0.5	3.7
Blue Water	174.5	$11.3	$15.9	$(4.6)	(26.1)
Washington-Lynchburg	382.8	$43.3	$18.3	$24.9	65.2
Washington - Newport News	357.8	$39.0	$21.6	$17.4	48.6
Washington - Norfolk	388.2	$46.1	$20.8	$25.3	65.0
Washington - Richmond	114.3	$11.6	$8.1	$3.4	-
Hoosier State	-	-	-	-	-
Kansas City-St.Louis	158.8	$9.8	$18.1	$(8.2)	(51.8)
Pennsylvanian	226.8	$22.7	$20.6	$2.1	9.4
Pere Marquette	99.9	$6.4	$15.3	$(8.9)	(88.8)
Carolinian	253.5	$31.5	$22.4	$9.2	36.2
Piedmont	307.8	$13.2	$16.4	$(3.1)	(10.2)
Non-NEC Special Trains & Adjustments		$7.8	-	$7.8	-
State Supported	17,711.0	$1,135.1	$1,238.1	$(103.0)	$(5.8)
LONG DISTANCE					
Silver Star	391.3	$45.8	$104.2	$(58.4)	$(149.1)
Cardinal	113.6	13.3	34.1	$(20.8)	(183.4)
Silver Meteor	358.1	41.9	95.7	$(53.8)	(150.2)
Empire Builder	441.6	51.7	177.5	$(125.8)	(284.9)
Capitol Limited	216.0	25.3	53.7	$(28.4)	(131.4)
California Zephyr	422.8	49.5	168.0	$(118.5)	(280.3)
Southwest Chief	345.1	40.4	157.7	$(117.3)	(339.8)
City of New Orleans	234.6	27.5	64.3	$(36.8)	(157.0)
Texas Eagle	323.6	37.9	89.4	$(51.5)	(159.2)
Sunset Limited	95.6	11.2	58.8	$(47.6)	(497.7)
Coast Starlight	427.9	50.1	95.9	$(45.7)	(106.9)
Lake Shore Limited	375.7	44.0	80.1	$(36.1)	(96.1)
Palmetto	344.5	40.3	57.0	$(16.7)	(48.3)
Crescent	301.8	35.3	94.8	$(59.5)	(197.0)
Auto Train	246.9	28.9	58.8	$(29.9)	(121.1)
Long Distance Adjustments	-	-	-	-	-
Long Distance	4,639.1	$543.3	$1,390.1	$(846.7)	$(0.2)
NTS	36,585.6	$3,299.2	$3,935.1	$(635.8)	$(17.4)
Ancillary		409.6	434.3	(24.7)	
Infrastructure		269.0	670.8	(401.7)	
AMTRAK	**36,585.6**	**$3,977.8**	**$5,040.1**	**$(1,062.3)**	

FY 2027 Ridership Projections

($s in Millions)	Ridership (000s)	Allocated Operating Sources	Allocated Operating Uses	Allocated Contribution/ (Loss)	Allocated Contribution/ (Loss) per Rider
NEC					
Acela	5,754.3	$672.2	$644.2	$28.0	$4.9
Regional	8,986.2	1,049.7	737.9	311.8	34.7
NEC Special Trains & Adjustments	-	-	-	0.0	-
NEC	14,740.5	$1,721.9	$1,382.2	$339.8	$23.1
STATE SUPPORTED					
Ethan Allen Express	87.7	$11.1	$7.2	$3.9	$44.7
Vermonter	105.8	$14.0	$12.1	$1.9	17.8
Maple Leaf	421.8	$51.0	$43.6	$7.5	17.7
The Downeaster	604.8	$22.1	$37.5	$(15.4)	(25.5)
New Haven - Springfield	570.0	$25.0	$51.6	$(26.6)	(46.7)
Keystone Service	1,629.1	$99.9	$74.0	$25.9	15.9
Empire Service	1,279.7	$112.7	$94.6	$18.1	14.2
Chicago-St.Louis	666.6	$33.7	$55.2	$(21.5)	(32.2)
Hiawathas	1,180.6	$52.4	$45.6	$6.8	5.8
Twin Cities	68.8	$5.9	$18.6	$(12.6)	-
Wolverines	601.5	$52.9	$46.4	$6.5	10.8
Illini	282.2	$14.1	$30.4	$(16.3)	(57.8)
Illinois Zephyr	197.9	$9.3	$17.5	$(8.2)	(41.3)
Moline	170.9	$7.1	$18.9	$(11.8)	-
Rockford	141.0	$3.9	$9.2	$(5.3)	-
Gulf Coast	72.2	$3.5	$30.5	$(27.0)	(373.4)
Heartland Flyer	75.1	$3.9	$9.7	$(5.8)	(76.8)
Pacific Surfliner	3,195.8	$172.2	$173.0	$(0.9)	(0.3)
Cascades	1,051.3	$80.8	$95.2	$(14.5)	(13.8)
Capitols	2,124.6	$83.5	$108.0	$(24.5)	(11.5)
San Joaquins	1,160.0	$65.9	$118.4	$(52.5)	(45.3)
Adirondack	125.0	$14.6	$13.8	$0.8	6.4
Blue Water	175.9	$11.7	$16.2	$(4.5)	(25.8)
Washington - Lynchburg	390.5	$45.2	$18.9	$26.3	67.4
Washington - Newport News	364.2	$40.6	$22.3	$18.4	50.5
Washington - Norfolk	395.3	$48.1	$21.5	$26.5	67.1
Washington - Richmond	116.5	$12.1	$8.3	$3.8	-
Hoosier State	-	-	-	-	-
Kansas City-St.Louis	161.5	$10.2	$18.7	$(8.5)	(52.4)
Pennsylvanian	230.1	$23.6	$21.0	$2.6	11.4
Pere Marquette	100.8	$6.6	$15.6	$(9.0)	(89.2)
Carolinian	259.3	$33.1	$22.6	$10.5	40.5
Piedmont	320.1	$14.1	$16.9	$(2.8)	(8.8)
Non-NEC Special Trains & Adjustments		$8.0	-	$8.0	-
State Supported	18,326.6	$1,192.8	$1,292.8	$(100.0)	$(5.5)
LONG DISTANCE					
Silver Star	395.1	$46.7	$108.2	$(61.4)	$(155.4)
Cardinal	114.7	13.6	35.4	(21.9)	(190.7)
Silver Meteor	361.6	42.8	99.4	(56.6)	(156.5)
Empire Builder	445.7	52.7	184.3	(131.6)	(295.2)
Capitol Limited	217.9	25.8	55.7	(30.0)	(137.4)
California Zephyr	426.7	50.5	174.4	(123.9)	(290.5)
Southwest Chief	348.5	41.2	163.7	(122.5)	(351.5)
City of New Orleans	236.4	28.0	66.8	(38.8)	(164.1)
Texas Eagle	326.8	38.7	92.8	(54.2)	(165.8)
Sunset Limited	96.5	11.4	61.0	(49.6)	(514.2)
Coast Starlight	432.1	51.1	99.5	(48.4)	(112.0)
Lake Shore Limited	379.2	44.9	83.2	(38.3)	(101.0)
Palmetto	348.4	41.2	59.2	(18.0)	(51.5)
Crescent	304.6	36.0	98.4	(62.4)	(204.9)
Auto Train	249.2	29.5	61.1	(31.6)	(126.7)
Long Distance Adjustments	-	-		-	-
Long Distance	4,683.4	$554.0	$1,443.1	$(889.1)	$(0.2)
NTS	37,750.5	$3,468.8	$4,118.1	$(649.3)	$(17.2)
Ancillary		419.0	446.4	(27.5)	
Infrastructure		275.8	724.6	(448.9)	
AMTRAK	**37,750.5**	**$4,163.5**	**$5,289.2**	**$(1,125.6)**	

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