

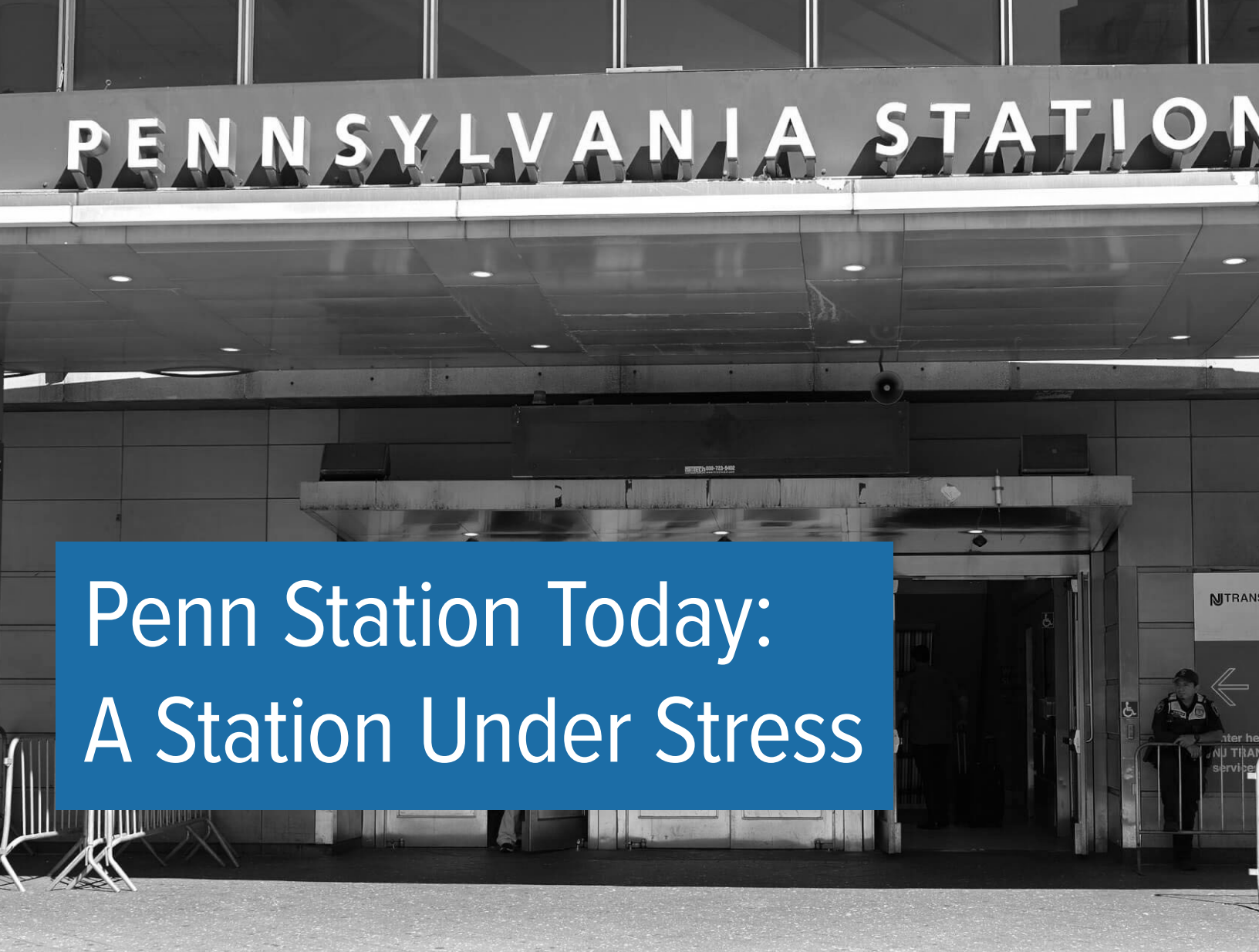


U.S. Department of Transportation
Federal Railroad Administration

NEW YORK PENN STATION

SERVICE OPTIMIZATION STUDY **PHASE I REPORT**

Executive Summary • June 2026



Penn Station Today: A Station Under Stress

New York Pennsylvania Station (Penn Station) is the busiest passenger rail hub in the United States, serving **more than 350,000 riders** every day across more than **1,000 daily train movements**.

But despite its scale and importance, the station has both physical and operating issues that make it challenging for both passengers and the railroads that use it.

Riders today navigate **platforms that are too narrow** for the crowds that use them, with **too few stairs, elevators and escalators** to move people on and off trains efficiently. **Platform clutter**, such as equipment, signage, trash receptacles, and other obstructions, further reduces usable space. **Signage is inconsistent**, making the station confusing for anyone who does not use it regularly. These conditions make the passenger experience unnecessarily difficult and slow down the boarding and alighting process for every train.

The reliability of operations at the station also leave room for improvement. When trains do not arrive or depart on schedule, delays often cascade such that a late train on one track can delay movements across the entire station. During the peak hour, Penn Station runs at or near full capacity, leaving almost no buffer to absorb disruption.

Only 76 percent of Amtrak trains arrived on time on the Northeast Corridor (NEC) in 2025.



New Jersey Transit (NJ Transit) reported an 81 percent on-time performance on its NEC Line for January 2026, its busiest service.



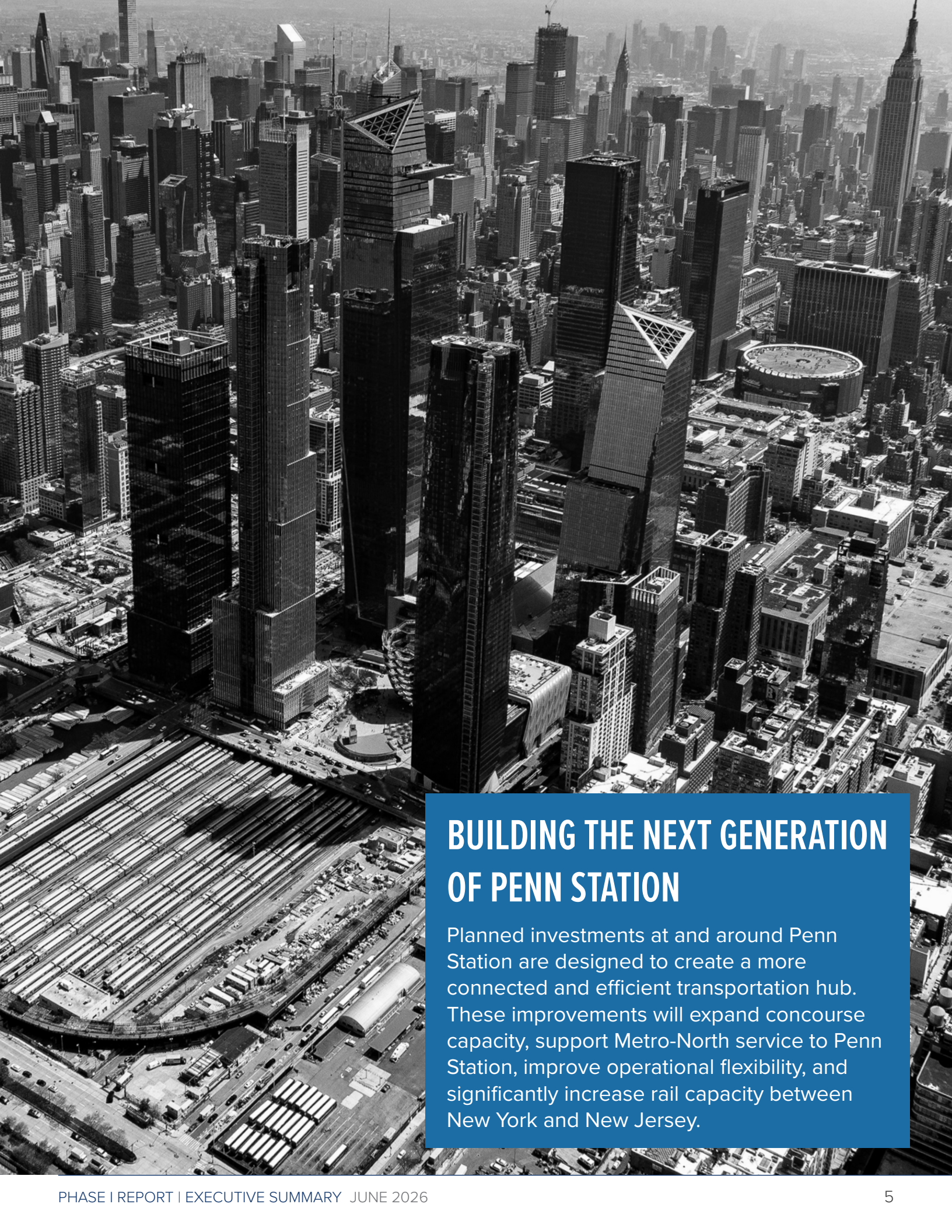


The problems facing Penn Station today are serious and will only become more severe as train service and ridership grow in the future.

Several previously planned and ongoing capital programs centered on and around Penn Station aim to address anticipated passenger growth, expand concourse capacity, enable more efficient operations, and allow for new services including adding the Metropolitan Transportation Authority's (MTA) Metro-North Railroad (Metro-North) service via the Penn Station Access project. Chief among these is the Gateway Program, which includes a suite of critical rail infrastructure projects on the NEC between Newark, NJ and Penn Station. Upon completion, the Gateway Program is expected to expand trans-Hudson rail capacity, potentially doubling throughput from 24 to up to 48 trains per hour per direction.

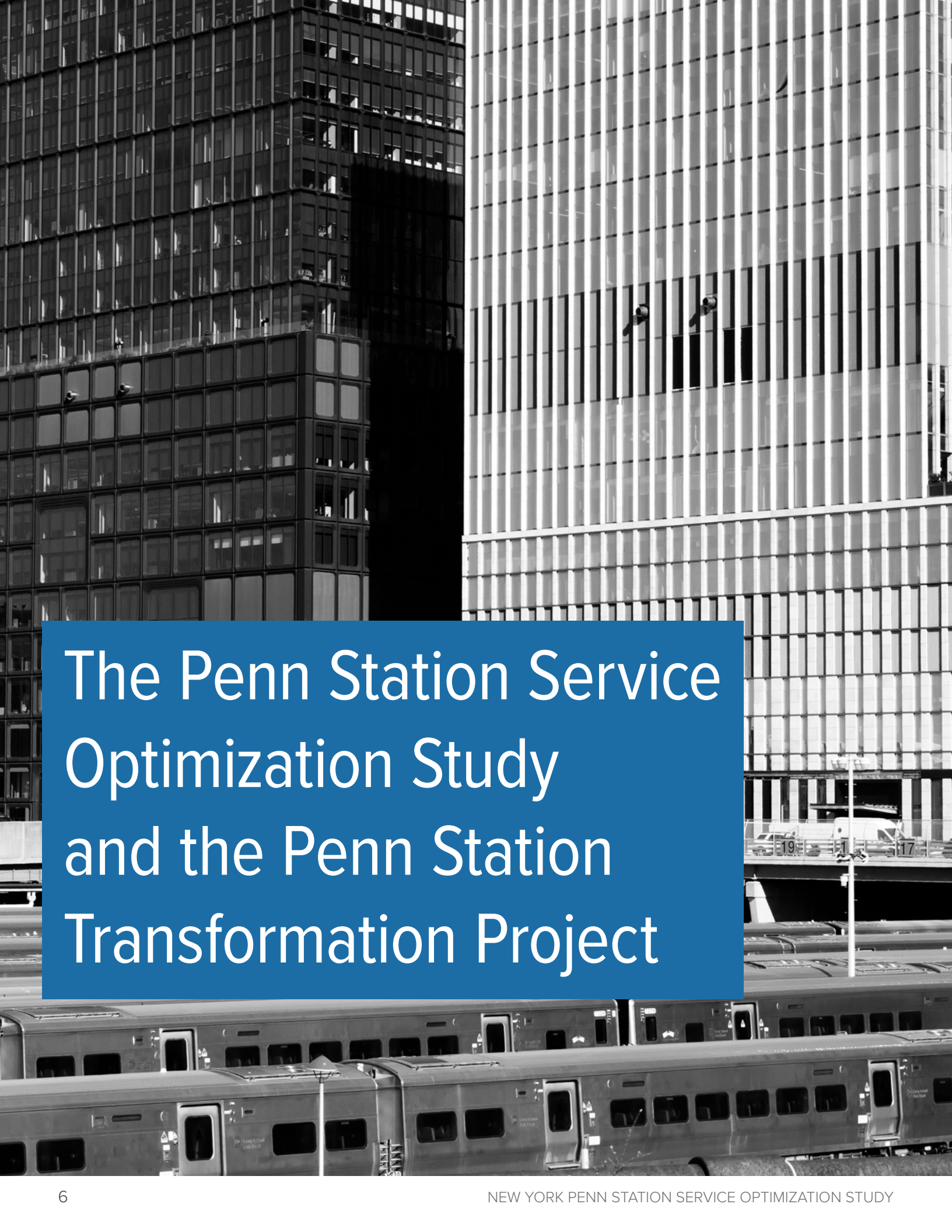
The Gateway Program includes the new Hudson River Tunnel, which is currently under construction and will take approximately 9 years to build (estimated completion 2035), and rehabilitation of the North River Tunnels (estimated completion 2038).

Once these Gateway Program investments are complete, Penn Station itself—its tracks, platforms, stairs, and operations—becomes the binding constraint on how much passenger rail service the system can accommodate. If the station cannot process passengers quickly, safely, and more reliably, the benefits of these adjacent rail infrastructure investments will not reach riders.



BUILDING THE NEXT GENERATION OF PENN STATION

Planned investments at and around Penn Station are designed to create a more connected and efficient transportation hub. These improvements will expand concourse capacity, support Metro-North service to Penn Station, improve operational flexibility, and significantly increase rail capacity between New York and New Jersey.



The Penn Station Service Optimization Study and the Penn Station Transformation Project

There is no status quo at Penn Station; change is coming.

Under the direction of Secretary Sean Duffy, the United States Department of Transportation (USDOT) and the Federal Railroad Administration (FRA) intend to make a one-time investment with the Penn Transformation Project (Penn Transformation) that modernizes and improves not only the Penn Station passenger concourses, but the **tracks, platforms, and service operations** as well. The New York Penn Station Service Optimization Study (the Study) seeks to determine **how much additional service capacity could reasonably be unlocked** from the existing Penn Station complex through targeted, minimal infrastructure improvements, without substantially expanding the existing footprint or rebuilding the station. **Phase I of the Study focuses only on the existing footprint of the Penn Station complex.**

The infrastructure improvements identified in this Study are either intended to be implemented by Amtrak and relevant partners as part of, or in conjunction with, Penn Transformation—or critically,

must not be precluded by it. FRA, Amtrak, and a selected Master Developer procured by Amtrak will work collaboratively to advance the improvements that USDOT expects to see as part of Penn Transformation or delivered by Amtrak in conjunction with Penn Transformation.

Two primary factors currently constrain service at the station: **(1) conflicting train flows resulting from the mixing of terminal and through operations;** and **(2) long platform dwell times** (the total amount of time a train remains stationary at a station, primarily for the purpose of boarding/alighting passengers). The capacity of the new Hudson River Tunnel and related investments will be underutilized if these two constraints are not addressed. To increase capacity within the existing station footprint, the Study explores both physical and operational options to separate train flows and reduce dwell times by improving platform efficiency for both through-running and terminating trains.



HOW THE STUDY WAS STRUCTURED

The Study is being conducted in two phases. The scope of Phase I is limited to Penn Station's track, platform, and vertical circulation elements (stairs and escalators) within the existing station complex, between West 31st and West 33rd Streets and 6th to 10th Avenues. Phase I evaluates potential improvements limited to these elements of Penn Station.

Phase II will evaluate broader regional infrastructure and operational strategies that may further enable long-term service growth, including infrastructure beyond Penn Station, train fleets, and other important topics such as governance and labor. These improvements aim to increase future service levels at Penn Station, while also improving customer experience and safety at the platform level.

Phase I did not include a review of railroad expansion plans outside of

Penn Station; therefore, alignment or divergence with those plans has not been assessed and will be evaluated in Phase II.

The FRA Study Team (Study Team) drew from dozens of existing reports from government agencies, planning groups, and advocacy organizations, as well as direct input from Amtrak, NJ Transit, Long Island Rail Road (LIRR), and Metro-North staff with deep operational knowledge of the station.

The Study Team developed and tested concepts based on different ways of organizing train traffic through the station, ranging from keeping each railroad's operations largely separate to rebuilding the station and fully integrating all services across every track. Across these concepts, the Study Team tested a total of 86 scenarios spanning numerous combinations of operating parameters, including dwell times and train flows.



Phase I examines track, platform, and vertical circulation elements within Penn Station’s existing complex.



Phase II will evaluate broader regional infrastructure and operational strategies that may further enable long-term service growth, including infrastructure beyond Penn Station, train fleets, and other important topics such as governance and labor.

The Study Team’s Phase I analysis is based on four principles that have proven to maximize capacity at major rail stations around the world:

- **Interlocking Deconfliction**

Reducing conflicting train movements by realigning track usage to increase reliable throughput.

- **Platform Clearance**

Improving vertical access and boarding processes so passengers can clear platforms faster, shortening train dwell times.

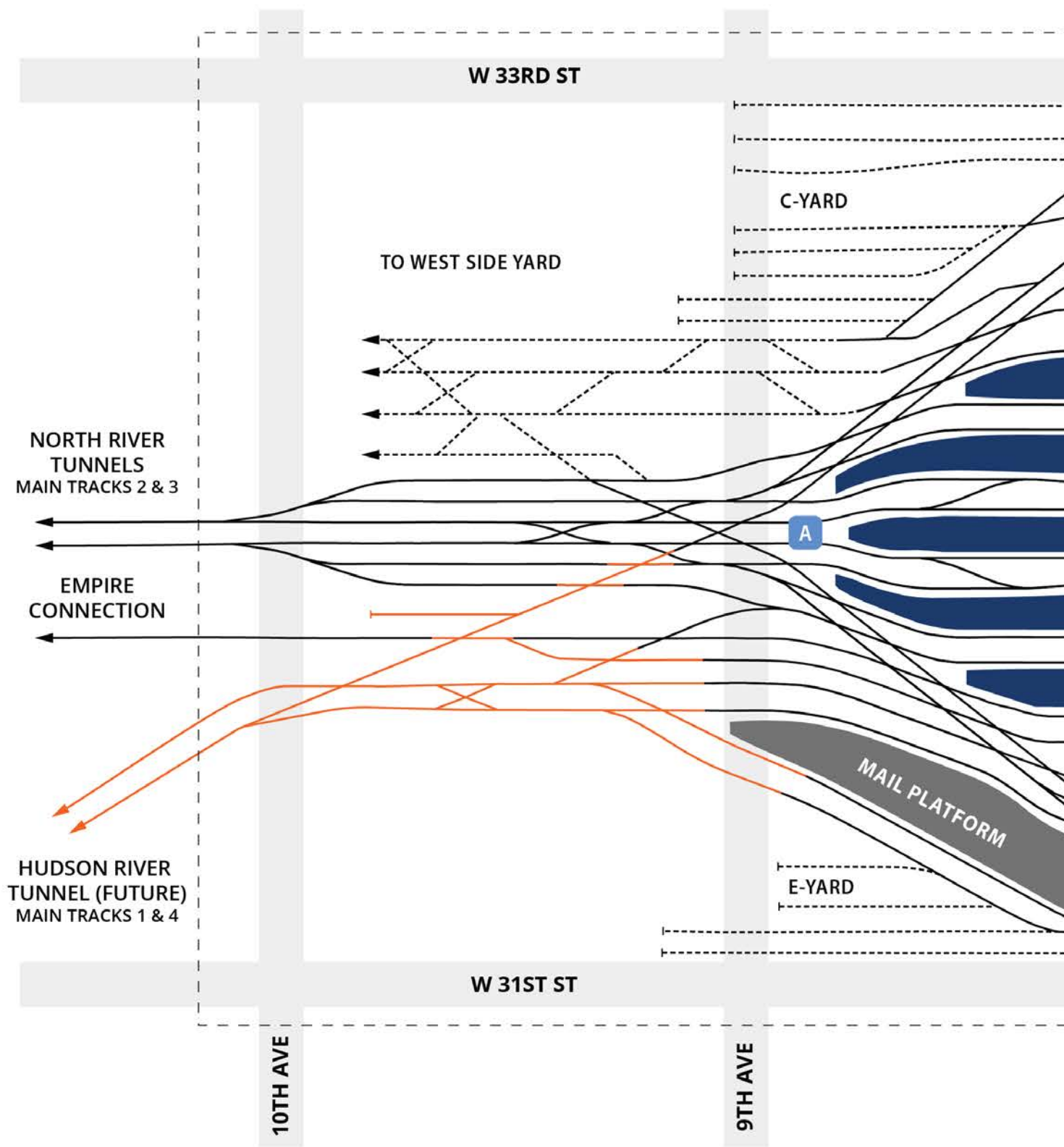
- **Through-Running Operations**

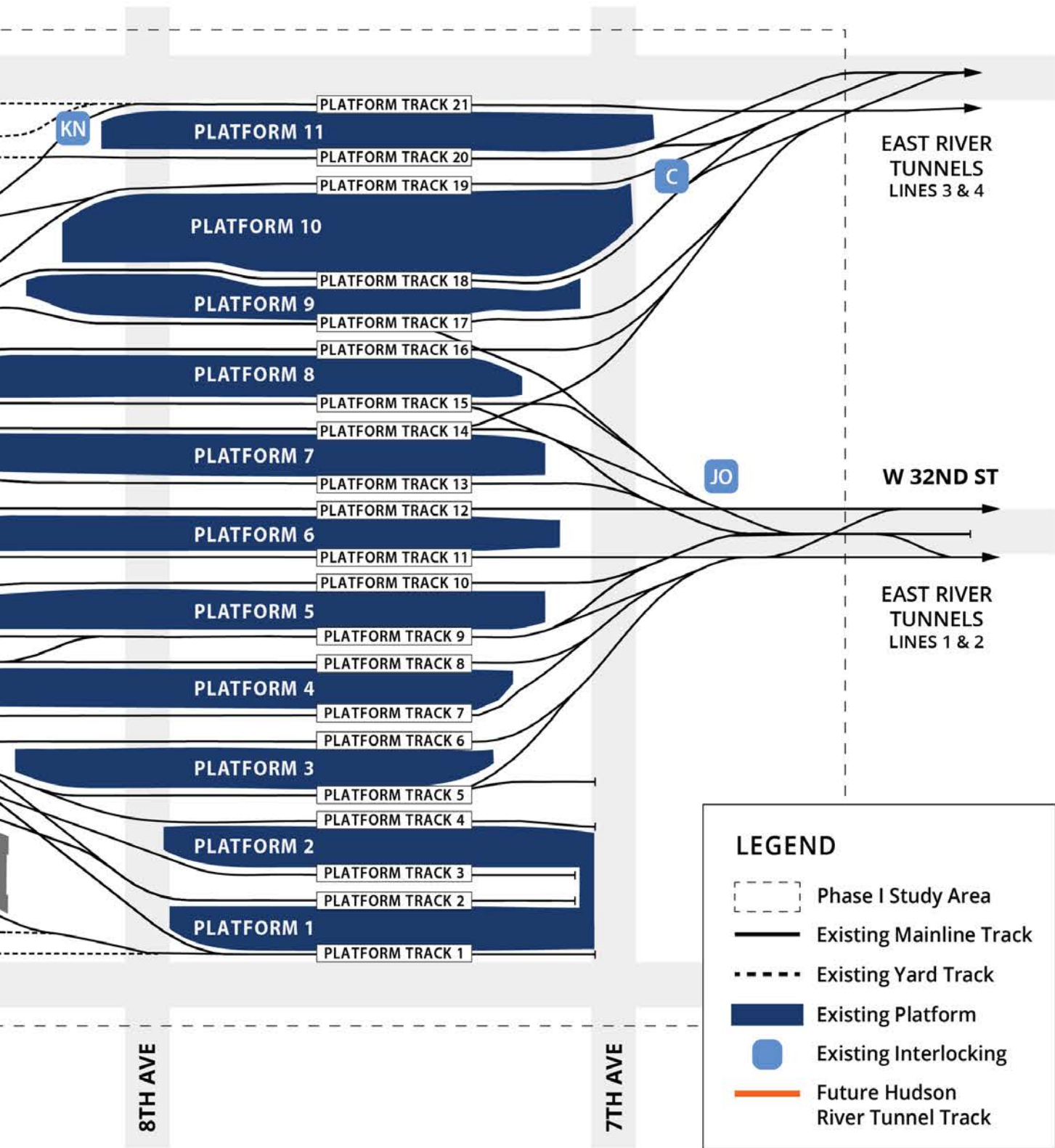
Reducing dwell times by running trains through the station rather than terminating them at the station and turning them on the platform.

- **Operational Discipline**

Building a terminal operating plan that uses performance management to drive continuous improvement.

Figure ES-1: Service Optimization Study Phase I Study Area





Source: FRA Study Team

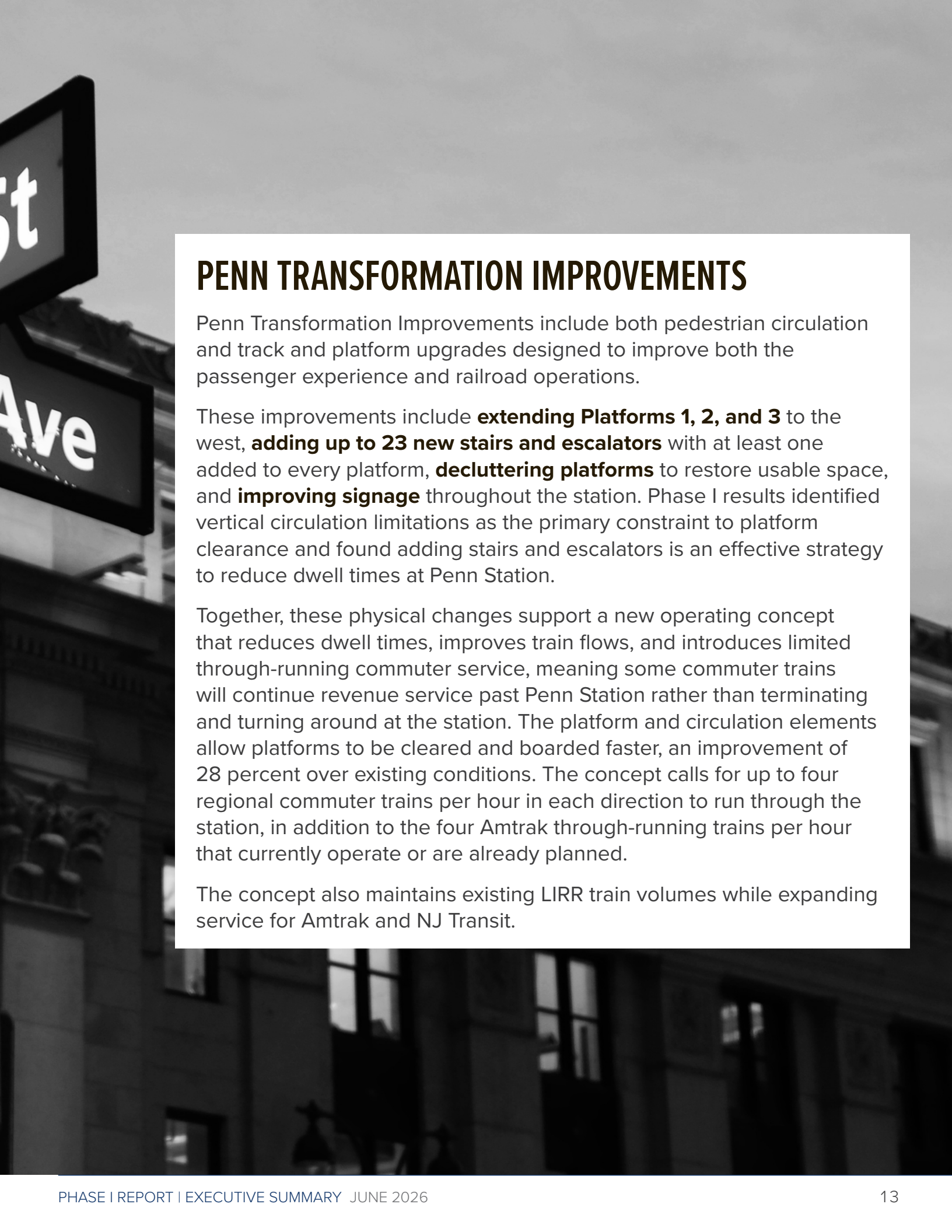
A black and white photograph of a street scene. In the foreground, a black street signpost holds a white sign with black text that reads "West 33rd St" and "400→470". In the background, a large, classical-style building with columns is visible.

What Phase I Found

The analysis found that organizing the station into three distinct operating zones offers the most promising balance of capacity, reliability, flexibility, and feasibility.

This approach builds on how Penn Station works today, adding targeted infrastructure changes to account for the new Hudson River Tunnel and improvements to platform clearance, dwell times, and train flow.

The improvements identified through the refined operating concepts are grouped in two infrastructure packages: Penn Transformation Improvements (pedestrian flow, track and platform improvements) and Penn Station Future (additional platform and track reconfiguration). Each infrastructure package includes investments to be incorporated into, or not precluded by, Penn Transformation, as well as additional improvements earmarked for further analysis in Phase II.



PENN TRANSFORMATION IMPROVEMENTS

Penn Transformation Improvements include both pedestrian circulation and track and platform upgrades designed to improve both the passenger experience and railroad operations.

These improvements include **extending Platforms 1, 2, and 3** to the west, **adding up to 23 new stairs and escalators** with at least one added to every platform, **decluttering platforms** to restore usable space, and **improving signage** throughout the station. Phase I results identified vertical circulation limitations as the primary constraint to platform clearance and found adding stairs and escalators is an effective strategy to reduce dwell times at Penn Station.

Together, these physical changes support a new operating concept that reduces dwell times, improves train flows, and introduces limited through-running commuter service, meaning some commuter trains will continue revenue service past Penn Station rather than terminating and turning around at the station. The platform and circulation elements allow platforms to be cleared and boarded faster, an improvement of 28 percent over existing conditions. The concept calls for up to four regional commuter trains per hour in each direction to run through the station, in addition to the four Amtrak through-running trains per hour that currently operate or are already planned.

The concept also maintains existing LIRR train volumes while expanding service for Amtrak and NJ Transit.

BUILDING CAPACITY ACROSS THE HUDSON

The Penn Transformation Improvements, combined with reduced dwell times and accounting for current levels of operational variability, can increase cross-Hudson rail capacity by up to a third.

Using railroad operations and pedestrian simulation models, the Study Team determined that these improvements, combined with reduced dwell times and accounting for current levels of operational variability, can increase cross-Hudson rail capacity from 24 trains per hour per direction to **up to 32 trains per hour per direction in the morning peak period** and **30 trains per hour per direction in the evening peak period**.

This operating concept works within the existing station footprint and supports either current commuter rail service concepts (with revenue trains terminating at Penn Station) or a gradual shift toward a more integrated regional rail system (with through-running trains), phased in over time.

Importantly, these improvements will deliver real benefits to passengers and railroad operations before the broader Gateway Program infrastructure investments in New Jersey come online. Better vertical circulation between the concourse and track connections, decluttered platforms, and clearer signage will improve passenger flow and reduce friction in daily operations regardless of when regional operational and infrastructure upgrades are implemented.



PENN STATION FUTURE

Penn Station Future would build on Penn Transformation to enable a fundamentally different way of operating the station, albeit with the same train capacity as Penn Transformation. By combining Platforms 5 and 6 into a single, wider platform, and adding stairs and escalators to serve it, the station could support **up to eight regional commuter through-running trains** per hour in each direction, in addition to the planned Amtrak service of **four through-running trains** per hour in the peak period.

The Penn Transformation design will keep this Penn Station Future option open by preserving space for future stairs and escalators and avoiding new structural columns where tracks are removed and platforms are widened. Penn Station Future needs further analysis in Phase II due to a lack of regional reliability and high variability in train arrivals.

Table ES-1 provides an overview of the primary benefits and outputs of the infrastructure packages. Full details on train counts, platform clearance, and other outputs are included in the full Phase I Study Report.



Table ES-1: Infrastructure Package and Operating Concept Overview

INFRASTRUCTURE PACKAGE	OPERATING CONCEPT	TRANS-HUDSON CAPACITY		BENEFITS
		MORNING PEAK	EVENING PEAK	
Penn Base Existing Conditions	Existing Operations	24 trains per hour per direction	24 trains per hour per direction	N/A
Penn Transformation Improvements ■ Adds vertical circulation elements, declutters platforms, and improves signage ■ Extends Platforms 1, 2, 3 with associated track work (and additional vertical circulation elements on platforms)	Concept 1 See full description in Section 4.2 of the full Phase I Study Report	Up to 32 trains per hour per direction (including 4 intercity, 4 through-running commuter)	Up to 30 trains per hour per direction (including 4 intercity, 4 through-running commuter)	■ Improves safety and customer experience ■ Increases station throughput ■ Increases reliability ■ Allows NJ Transit to increase train length/capacity
Penn Future ■ Creates a super-wide platform with additional vertical circulation elements	Concept 2 See full description in Section 4.2 of the full Phase I Study Report	Up to 32 trains per hour per direction (including 4 intercity, 8 through-running commuter)	Up to 30 trains per hour per direction (including 4 intercity, 8 through-running commuter)	■ Allows for reduced dwell times ■ Improves safety and customer experience ■ Enables a shift to regional rail







Next Steps

Phase II will expand the Study's analysis beyond the existing footprint of the Penn Station complex to cover the service areas of Metro-North, LIRR, and NJ Transit, focusing on additional capital projects and operational changes throughout the region that are necessary to provide the additional service filling the added capacity at the future Penn Station. Phase II also will include an evaluation of the governance, fleet, operational costs, funding strategies, and agreements necessary to implement these changes over the long term. As in Phase I, the FRA will continue to engage and collaborate with Amtrak, NJ Transit, MTA, the Federal Transit Administration (FTA), and other key stakeholders to inform the Phase II Study.



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