

# NEWARK LIBERTY INTERNATIONAL AIRPORT VISION PLAN



**Newark Liberty**  
International Airport

**PORT  
AUTHORITY  
NY NJ**  
AIR LAND RAIL SEA

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## 1. LETTER OF TRANSMITTAL

Dear Governor Phil Murphy,

We are pleased to present this comprehensive Vision Plan for Newark Liberty International Airport (EWR), a foundational document that sets the course for the airport's development over the next several decades. This plan comes at a critical juncture in the airport's history. As one of the busiest airports in the United States, EWR plays a crucial role not only in facilitating regional travel and commerce but also in contributing to the economic vibrancy of the New York-New Jersey metropolitan area. With over 49 million passengers in 2023, the airport has experienced growth that both underscores its significance and highlights the pressing need for modernization.

The current infrastructure of EWR, particularly in its Central Terminal Area, was developed more than half a century ago, and while significant steps—such as the opening of the world-class Terminal A—have been taken to address these challenges, much remains to be done. The airport is facing a combination of growing passenger demand, aging facilities, congestion, and a lack of modern services that hinder its ability to meet the needs of the region and industry.

This Vision Plan provides a roadmap to reimagine Newark Liberty International Airport as a world-class facility that is prepared to serve the evolving needs of passengers, airlines, and the surrounding communities. It builds upon the success of recent developments while introducing innovative solutions in key areas: terminal facilities, access roads and parking, airside improvements, and utility upgrades.

Our goal is to provide the region with a world class Newark Liberty International Airport that reflects the culture and diversity of New Jersey while supporting the economic engine that EWR represents. Through sustainable infrastructure, improved passenger experience, and close collaboration with community stakeholders, we believe that EWR will become a model for airport redevelopment in the 21st century.

We look forward to your support in turning this vision into reality.

Sincerely,



Kevin J. O'Toole  
Chairman



Rick Cotton  
Executive Director

## 2. EXECUTIVE SUMMARY

### History and Evolution of Newark Liberty International Airport (EWR)

Newark Liberty International Airport, originally opened in 1928, was the first major airport in the New York metropolitan area and the United States' first major commercial airport. Its initial purpose was to accommodate air mail operations, but it soon expanded to serve passenger flights, becoming a cornerstone of American aviation. During the 1930s, the airport saw rapid growth, and by the end of World War II, it had become the region's primary airport. However, the airport faced competition in the mid-20th century with the rise of LaGuardia and John F. Kennedy International airports.

Over the decades, EWR has undergone significant expansions, including the development of multiple terminals and runways to accommodate the increasing demand for both domestic and international flights. In the 1970s, the construction of Terminals A, B, and C transformed the airport into a global hub, with Terminal C eventually becoming a major base for United Airlines. Further developments, including the opening of a new Terminal A in 2023, illustrate the airport's continuous modernization efforts to meet the evolving needs of the aviation industry, maintain its role as a critical economic engine, and address capacity challenges.

### An Economic Engine for the Region

EWR is more than just a transit hub; it is a significant economic engine for the New York-New Jersey metropolitan area. The airport employs approximately 23,000 people and supports industries ranging from logistics and tourism to retail and hospitality. In 2023, passenger volumes exceeded pre-pandemic levels, positioning the airport to surpass its pre-COVID-19 peak of 47.5 million passengers annually. This growth underscores the airport's central role in facilitating business, trade, and tourism, which collectively support the region's global competitiveness.

### EWR's Current Challenges

Despite its critical role, Newark Liberty International Airport is facing a series of operational and infrastructural challenges. The airport's legacy infrastructure, particularly its Central Terminal Area, is outdated and no longer meets the needs of modern air travel. Insufficient terminal capacity, congested roadways, and airside delays are major issues that hinder efficiency. Additionally, passenger expectations for world-class amenities and services, such as modern terminals, efficient transport options, and sustainable infrastructure, are not being fully met. These deficiencies have resulted in EWR having one of the highest frequencies of flight delays in the country.

### Efforts to Date: New Terminal A

The Port Authority has taken meaningful steps to address some of these challenges, most notably through the opening of the new Terminal A in 2023. This terminal, hailed as one of the best new airport terminals in the world by the preeminent global airport evaluation firm Skytrax, marks a critical first step toward modernizing the airport. It sets a new standard for passenger experience, operational efficiency, and sustainability at EWR. However, it is only the beginning of a much larger transformation that is needed to ensure the airport's long-term success.

### Next Steps: Proposed Solutions

The Vision Plan proposes a multi-phased redevelopment that will address the most pressing challenges facing Newark Liberty International Airport while preparing it for future growth and demands. The proposed solutions focus on the following key areas:

- **Terminal Facilities:** In addition to Terminal A, the plan envisions enhancements to Terminal C, the expansion of Terminal A, and the development of a new Terminal B to provide additional capacity and improve the passenger experience. These terminals will accommodate future growth while providing world-class amenities.
- **Access Roads & Parking:** To ease congestion and improve the flow of traffic, the plan will introduce a more intuitive roadway network with additional capacity. This will support the existing terminals and a future New Terminal B while offering enhanced access for cars, buses, and public transportation.
- **Utilities:** The airport's aging utility infrastructure will be modernized with more sustainable solutions, including the replacement of the Central Heating and Refrigeration Plant (CHRP) to meet future energy demands in a more environmentally friendly and sustainable way.
- **Airside Improvements:** To reduce delays and increase operational efficiency, the plan proposes improvements to the airport's taxiway network, deicing facilities, and aircraft parking systems.

# NEWARK LIBERTY INTERNATIONAL AIRPORT VISION PLAN

## Stakeholder Involvement and Community Benefits

This plan was developed with extensive input from local communities, on-airport stakeholders, and regional partners. The project includes benefits such as local job creation, increased business opportunities for minority-owned enterprises, and enhanced transportation access for nearby communities, further integrating EWR with its surrounding region.

The Vision Plan is designed to ensure that Newark Liberty International Airport remains a world-class gateway to the New York-New Jersey region for decades to come. By modernizing its infrastructure, enhancing passenger experiences, and fostering sustainable practices, the airport will continue to be a key economic driver and a source of pride for the region.

## Crafting a Vision for the Future of EWR

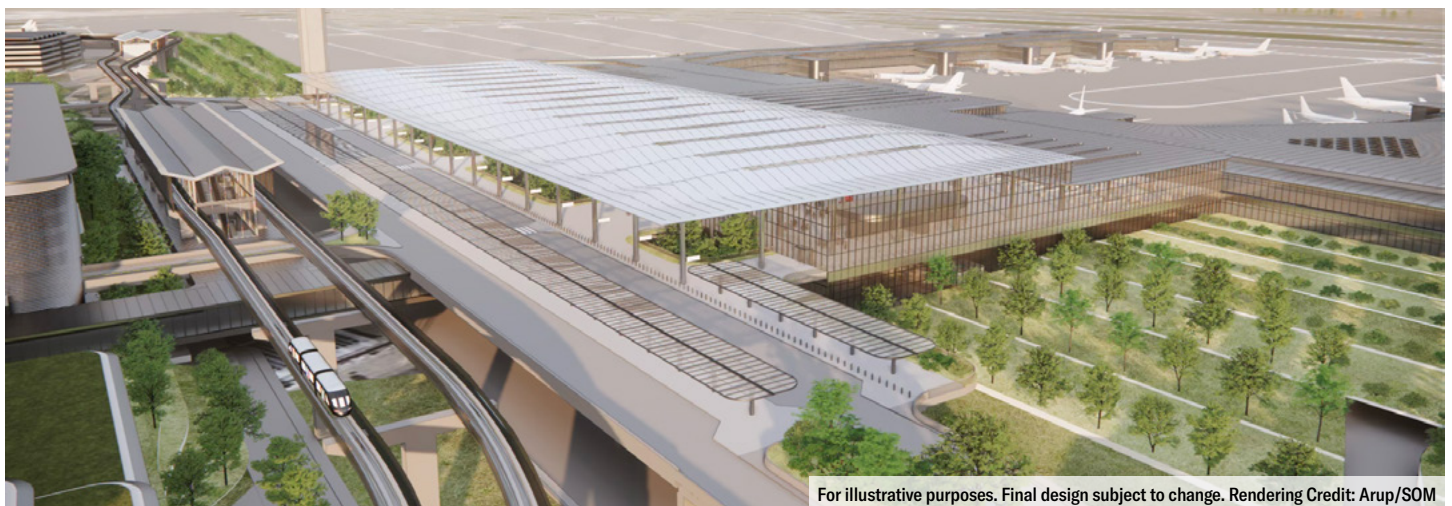
The Port Authority of New York & New Jersey collaborated with Arup and SOM to develop a transformative Vision Plan for Newark Liberty International Airport, with a focus on addressing both current and future needs. This comprehensive effort involved a deep analysis of existing airport infrastructure and operations, while anticipating evolving industry demands. The Vision Plan emphasizes efficiency, sustainability, and adaptability, ensuring that Newark Liberty remains a critical global gateway for decades to come.

Arup has brought more than 50 years of expertise in airport development to this project. The firm has led projects at some of the world's most prominent airports, such as John F. Kennedy International Airport, London Heathrow, and Singapore Changi Airport. Arup's global experience and its leadership in creating innovative, sustainable solutions for large-scale aviation hubs positioned it as an ideal partner for shaping Newark Liberty's future. The firm's engineering and sustainability practices were pivotal in envisioning ways to modernize the airport's aging infrastructure, particularly in areas like energy efficiency, environmental impact, and operational resilience, critical factors for the airport's continued success in a competitive industry.

SOM, an architectural and urban planning powerhouse, complemented Arup's engineering expertise by bringing award-winning design and planning experience to the EWR Vision Plan. With over 60 awards for excellence in aviation design, including for projects like Mumbai's Terminal 2 and Chicago O'Hare International Airport, SOM's expertise in creating world-class passenger experiences guided the planning for the redevelopment of Newark Liberty's terminals and facilities. Having previously contributed to the redevelopment of Newark's Terminal C in 2003, SOM is familiar with the airport's specific challenges and opportunities. Together with Arup, the firms created a forward-thinking, passenger-focused plan for EWR that will not only be functional but also aesthetically groundbreaking, making Newark Liberty a model for modern, global airports.

## Conclusion

In conclusion, Newark Liberty International Airport stands as a pivotal infrastructure for the New York-New Jersey region, both in its historical significance and its modern role as an economic powerhouse. While its legacy infrastructure presents challenges, significant steps have been taken toward modernization, such as the opening of the new Terminal A. The Vision Plan outlines a clear roadmap to address congestion, outdated facilities, and the demand for sustainable operations, ensuring the airport can meet future growth while enhancing passenger experience. The proposed redevelopment and stakeholder engagement indicate a strong commitment to securing EWR's position as a world-class transportation hub for decades to come. The airport's continued evolution, coupled with its economic contributions and regional integration, solidifies its essential role in global aviation and local prosperity.



For illustrative purposes. Final design subject to change. Rendering Credit: Arup/SOM



## 3. INTRODUCTION

### Background

In 2023, Newark Liberty International Airport (EWR), ranked the fifth-busiest airport in the United States in terms of international passenger traffic and the twelfth-busiest airport in terms of total passengers, with over thirty-one airlines serving over 49 million passengers and handling more than 690,000 tons of air cargo. EWR is the primary commercial airport for the State of New Jersey and, with John F. Kennedy International and LaGuardia airports in New York, is one of the three major airports serving the New York-New Jersey region.

EWR also is a significant source of employment for people in communities surrounding the airport, including the cities of Newark and Elizabeth; about 23,000 people are employed at EWR. The airport serves as an economic engine for the region, contributing more than \$29.3 billion in annual economic activity to the New York-New Jersey metropolitan region, supporting more than 137,000 total jobs, and nearly \$12.5 billion in annual wages.

Prior to the pandemic the airport handled a peak of 47.5 million passengers in 2019. In 2023, passenger volumes exceeded pre-pandemic levels with the airport handling over 49 million passengers.

### EWR Today

Newark Liberty International Airport occupies 2,027 acres, at roughly 10ft above sea-level elevation. It is bordered by the New Jersey Turnpike, Interstate 78 and U.S. Routes 1-9 and resides in both the cities of Newark and Elizabeth and counties of Essex and Union.

The Central Terminal Area (CTA) was designed more than a half-century ago, built as part of a large-scale airport redevelopment program in the 1960s and early 1970s. The CTA consists of three passenger terminals: A, B, and C. A globally acclaimed New Terminal A – it was designated best new airport terminal in the world in 2024 – opened to the public in January 2023 replacing the airport’s oldest terminal.

AirTrain Newark, the airport’s now-outdated automated monorail, opened for service on-airport between terminals and parking lots in 1996. The system was extended to a new rail station on the Northeast Corridor Rail Line in 2001, providing passengers with connections to NJ Transit and Amtrak trains for links between the airport and New York City, Philadelphia, points across New Jersey, and beyond.

#### AIRPORT INFRASTRUCTURE



3  
RUNWAYS



3  
TERMINALS

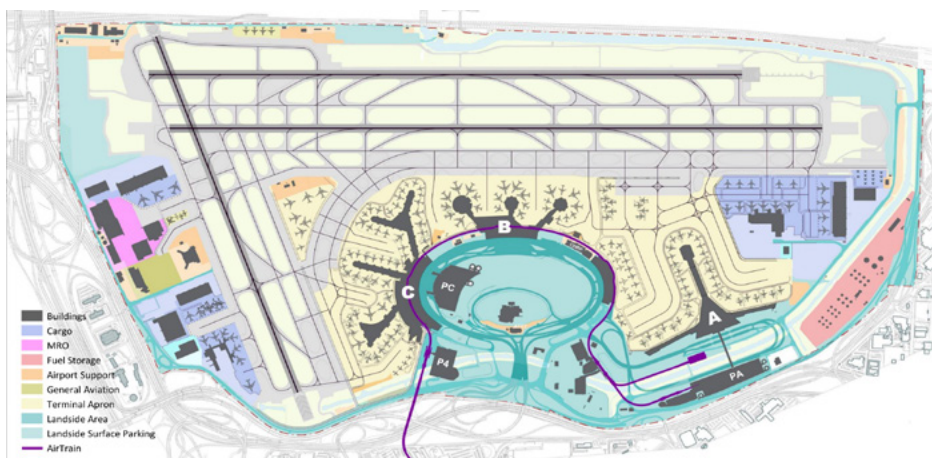


110  
GATES'

Figure 1 depicts the current land uses at the airport. The airport can be broadly divided into 5 key zones:

- **Airfield** – encompassing the runways, taxiways and associated movement area
- **Central Terminal Area (CTA)** – houses the passenger terminals, public parking, car rental facilities, the Marriott hotel and Air Traffic Control Tower
- **South Area** – located south of the CTA this area is occupied by the fuel farm, cargo, employee parking and vehicle staging
- **North Area** – located north of Runway 11/29 this area houses a variety of uses including cargo, maintenance, general aviation, administration, and public parking
- **East Area** – a narrow zone located between Runway 4R-22L and New Jersey Turnpike accommodating various airport support facilities

Figure 1: Newark Liberty International Airport – Current Land Use Plan



## 4. EXISTING CHALLENGES

Newark Liberty International Airport is at a critical point in its development. As the first commercial airport in the United States, EWR has historically been subject to many challenges because of its aging legacy infrastructure, notably:

- The inability of the airport to meet forecasted passenger growth, and the consequent strain on already congested airfield, terminals, roadway, and parking systems
- Insufficient terminal, gate, aircraft parking and airfield capacity; and difficulty accommodating widebody aircraft demand
- A lack of consistent world-class services and passenger experience
- Unreliable airport transportation access and confusing on-airport roadway networks
- Decades of fragmented unit terminal development without a comprehensive airport plan

Despite those challenges, EWR has become an increasingly popular passenger destination and sees continuous growth in passenger demand. 2024 is on track to becoming the busiest year for passenger traffic at EWR in its 95-year history. However, the combination of constrained facilities and heavy passenger demand has culminated in EWR historically experiencing some of the highest frequency of flight delays in the country.

As one of the three major commercial airports of the region, and the primary commercial airport for New Jersey, EWR's ability to safely and efficiently accommodate passenger demands into the future is of critical importance to the economic health and quality of life of the region. In 2022, the Port Authority articulated a need for a holistic, long-term EWR Vision Plan to continue its mission to improve customer experience and to accommodate future growth at EWR.

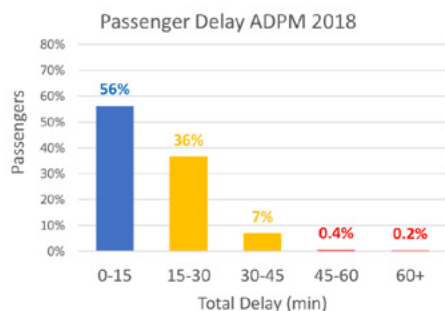


Figure 2: Newark Liberty International Airport – Existing Challenges

### Airside Challenges

- EWR currently experiences some of the most frequent and severe delays in the United States and has been subject to limitations by the Federal Aviation Administration (FAA) due to its operational performance, demand, and capacity.
- Cascading delays result from demand exceeding current runway / airspace capacity and undersized infrastructure delaying access and exit to gates

### Landside Challenges

- Existing roadways are congested and difficult to navigate
- Insufficient curb frontage & For Hire Vehicle (FHV) facilities and complex wayfinding with frequent vehicle weaving and short distances to decision points. Lack of local road, cycle & pedestrian connections.

### Terminal Challenges

- Legacy terminal facilities are aging and undersized.
- Lack of space, low ceiling heights, split operations and aging systems result in poor customer experience and operational inefficiencies for airlines and agencies.



## 5. VISION PLAN OBJECTIVES

In line with the Port Authority's mission to Keep the Region Moving and to become a World-Class Operator of World-Class Airports, the development of the Vision Plan was undertaken to define a framework to address current challenges, improve passenger experience, and to accommodate future passenger and cargo demands. Sustainability and resiliency will form an integral part of the future redevelopment as it has in the redevelopment of LaGuardia and in the ongoing transformation of JFK.

The Vision Plan aims to emphasize EWR's importance as the largest and primary international gateway for New Jersey. The airport should be highly emblematic of the cultural vibrancy of the state, and that the cities of Newark and Elizabeth see the airport as an asset that is reflective of their unique diverse communities.

Understanding both the challenges and opportunities at EWR, the following goals were set out to guide the development of the Vision Plan:

- Create a memorable, locally driven, world-class customer experience for New Jersey
- Provide capacity for long-term passenger demand
- Reduce delays and increase operational efficiency and resilience
- Make a feasible, phase-able plan to minimize impact on airport operations & customer experience, that coordinates with the Port Authority's Capital Plan capacity and constraints
- Enable access, business and employment opportunities for the local community
- Embed sustainability in every element, to establish EWR as the nation's most sustainable airport

A combination of new and renewed facilities, infrastructure, art, technology, and customer service will transform the airport into a world-class facility. This holistic approach considered a wide range of issues that could impact the redevelopment – such as the constructability of infrastructure; the operational and financial feasibility of improvements; the sustainability of improvements; storm resiliency; and the environmental, regulatory, and community impacts.

The Vision Plan will continue to build on the success of the acclaimed New Terminal A and work previously undertaken by the Port Authority as well as integrating with ongoing projects, including the replacement of the EWR AirTrain, and the Newark Station Access Project.



Figure 3: New Terminal A at EWR, Arrivals Hall



Figure 4: EWR AirTrain and New Terminal A Garage Solar Panel Array



## 6. VISION PLAN DEVELOPMENT

The purpose of the Vision Plan is to evaluate EWR's capacity to accommodate growing passenger and cargo demand, and deliver a comprehensive framework for the short-, medium-, and long-term development to meet future aviation demand, up to the year 2065. The Vision Plan was developed through an iterative process of demand analysis, option development & evaluation and stakeholder engagement.

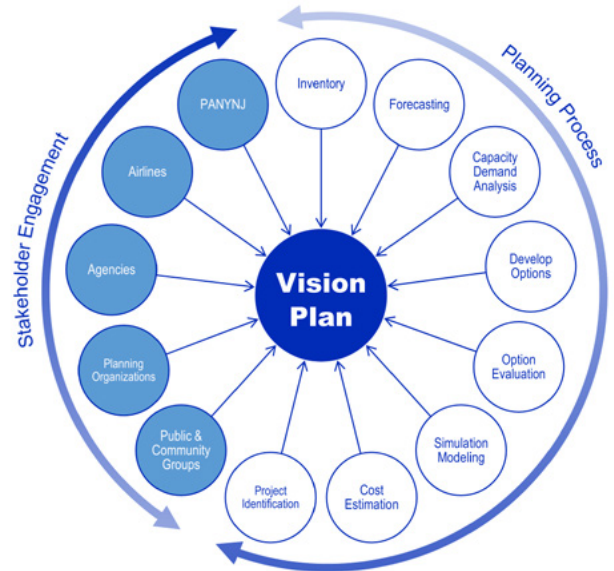


Figure 5: Vision Plan Development Approach

### Planning Process

The Vision Plan was developed through a series of interconnected tasks aimed at answering four core questions:

What exists today?	What will be needed in the future?	What is the optimum layout of future facilities?	How will you get from here to there?
Site Inventory	Aviation Forecasts	Study Best Practices	Project Identification
Existing Condition Assessment	Capacity Demand Analysis	Develop & Evaluate Options	Phasing & Implementation Plan
Identify Development Constraints	Facility Requirements	Simulate & Refine Options	
	Engage Stakeholders & the Community	Engage Stakeholders & the Community	

Figure 6: Vision Plan Development Tasks

The process began with an inventory of the existing facilities and operations at EWR to identify existing challenges and constraints and from there established a set of guiding principles for the Vision. Aviation forecasts were used to calculate facility requirements and various conceptual layouts and implementation plans were developed to accommodate these requirements. This process helped determine key focus areas and objectives for the Vision Plan.

### Stakeholder Engagement

Engagement with the airport and local community was a key priority of the Vision Plan. Throughout the project more than 200 meetings were held to collect input from internal and external stakeholders including on-airport tenants, government agencies, regional advisors, and the public. The engagement process included a combination of Listening Sessions – to collect information regarding stakeholder needs and aspirations, and Information Sessions – to gather feedback on the Vision Plan option development process. Meetings were held both virtually and in-person with feedback received through verbal participation and online feedback. Throughout the process feedback was recorded, distilled, and embedded within the plan.

On-Airport Stakeholders emphasized the need to modernize facilities with a focus on operational efficiency and world-class passenger experience. Sustainability, resilience, and flexibility will all be critical considerations to be able to respond to a rapidly changing market.

Engagement with the local community identified four main areas of interest: 1) Terminal Design and Amenities, 2) Local Collaboration, 3) Airport Access, and 4) Environment & Sustainability. Some of the most frequently heard feedback is highlighted below.

# NEWARK LIBERTY INTERNATIONAL AIRPORT VISION PLAN



## Terminal Design and Amenities

**Things to Do & Places to Wait** – Participants are looking for a great experience while waiting for their flights and are seeking improvements in amenities, services and experiences offered and a broader selection of retail and food options. Some suggestions included: local cuisines, prayer spaces, family-friendly areas, educational opportunities, comfortable seating, relaxation pods, gardens, and a flight observation area.

**Terminal Design** – Improvement in the overall aesthetic was desired with more natural light, views, high ceilings, art installations & special features, landscaping, better design for accessibility & low-sensory spaces and an overall calming environment – all elements included in the design of the New Terminal A.

**Airport Processes** – Participants reinforced the need for improved efficiency in all airport processes. Many commented on how technology is beneficial for efficiency, but in-person customer service is still critical, particularly for elderly or young travelers, non-English speakers, and when irregular operations occur.

**Terminal Navigation** – Concerns over long walking distances and the need for moving walkways and mobility assistance were noted frequently. Navigating the terminals and connecting between them can be confusing. The need for clear and intuitive wayfinding and information readily available on easily read screens and mobile app was emphasized.

## Local Collaboration

**Local Culture** – Residents highlighted the desire to reflect their diverse local communities at the airport. Some suggestions included: incorporating local & aviation history exhibits, showcasing local attractions – especially those close to the airport, featuring local musicians and artists, bringing in local shops and food vendors, and including local ambassadors from Newark and Elizabeth in the meeter/greeter areas.

**Jobs and Education** – Access to information on employment and training opportunities for the airport is essential - jobs at the airport are interesting but understanding the opportunities available to local residents can be challenging. Hiring local and reducing barriers in the contracting process for small & minority businesses and exposing youth to aviation careers through programs, internships & collaboration with local schools (ex. airport tours) would be valuable.

**Community Collaboration** – The importance of continuing to expand opportunities for local businesses in terminal concessions and integration with nearby developments to encourage denser economic development around the airport and the EWR RailLink Station. A collaborative approach to consultations and decision making for airport development program was also desired (ex. community advisory board, community benefits agreements, publicly accessible spaces for community programming).

## Airport Access

**Local Connections** – Currently it can be difficult to reach the airport, particularly for non-car owners from adjacent neighborhoods in Newark and Elizabeth because airport access is mainly restricted to highways and it is difficult to get across Highway 1&9. Bike paths, sidewalks and shuttle services were suggested.

**Roads** – Roads in and around EWR are difficult to navigate and often congested. Curbside areas are busy, and it is stressful to find a space. The cell phone lot is difficult to find, and cars parked on the side of the road create unsafe conditions.

**Transit** – A desire for improved transit access to the airport was expressed. Noting that current services can take a long time and are difficult to rely on and airport employees often require transportation outside of normal operating hours (ex. late nights and early mornings). Convenient access to the AirTrain was a priority; noting that the walk from Terminal A is long and shuttle service is not clear for many.

## Environment & Sustainability

**Energy Sources** – Participants expressed concerns about energy sources (natural gas and oil) and whether the airports' energy requirements would strain the electrical grid (ex. blackouts). A desire to transition to clean energy sources was highlighted.

**Flood Protection** – Given that Newark and Elizabeth have historically been vulnerable to heavy storms and flooding, participants suggested that flood proofing measures are enhanced, and green infrastructure added.

**Carbon Footprint** – Minimizing the airports carbon footprint was also highlighted. Some suggestions included, reducing airport waste (ex. water bottle filling stations, selling reusable options and reducing concession waste), environmentally conscious use and selection of materials, minimizing air pollution and noise in the local community and using greener technologies.

**Green Space** – More green space on the airport, providing a pleasant space for employees and passengers to spend time outside.



## 7. LONG-TERM VISION

The long-term vision for Newark Liberty International Airport includes the continued redevelopment of the central terminal area in a phased manner by replacing or renewing existing facilities. The long-term vision aims to provide world-class terminal, landside and airside facilities across the airport, accommodate phased growth in capacity that matches with demand, and provide interconnections between terminals for connecting passengers. The ongoing consolidation of parking, rental car facilities and redevelopment of the landside roads will also accommodate new utilities that will provide a pathway to the Port Authority's Net-Zero goals, as well as enable the necessary expansion of the airside and terminal area which is required to minimize delays and achieve a world-class operation.



Figure 7: EWR Central Terminal Area

## 8. AIRSIDE DEVELOPMENT STRATEGY

The current airside operations at EWR are among the most delayed of any airport in the United States. The airport experiences chronic delays and instances of extreme delays due to both on and off-site factors. Minimizing delays is an important component of achieving world class operations and customer experience.

The future vision of EWR is to maximize the performance of its airside in balance with runway throughput. The plan envisions improving operational efficiency by enhancing the taxiway / taxilane network, increasing aircraft parking capacity & flexibility, and creating redundancy to buffer delays in the event of irregular operations. Emerging best practices are to be considered to increase airfield safety across the development, including the reduction of direct access from apron to taxiway and increased straight taxiway segments. Key enhancements that are being considered include:

### Efficient & Flexible Apron

Airline fleet mix and traffic patterns are constantly evolving and a trend toward larger aircraft is anticipated in response to runway & airspace constraints. There is also significant variation in the size of aircraft on the ground over the course of a day; from predominately domestic narrowbody aircraft in the morning peak to a mix of widebody and narrowbody aircraft in the afternoon peak.

In response, the Vision Plan prioritizes flexibility in the configuration of the apron by maximizing the number of MARS (Multiple Apron Ramp System) stands, which can accommodate either 1 widebody or 2 narrowbody aircraft, and configure deicing positions to maximize remote parking and staging capacity when deicing operations are not required. All stands are expected to be sized to accommodate all aircraft types in the designated design group.

Safety and efficiency are enhanced through the provision of a continuous head of stand road network minimizing the need for taxilane crossings and providing GSE (Ground Support Equipment) parking and charging areas both on- & off-stand.

### Deicing

Existing aircraft deicing operations at EWR are conducted at the gate. At-gate deicing increases parking position occupancy times, which contribute to winter delays, and results in the inefficient collection of spent fluids. The Vision Plan foresees additional deicing facilities to support maximum runway throughput and to minimize delays. These facilities will also improve the efficiency of deicing operations requiring less equipment and maximizes the recovery and recycling of spent fluids.

## 9. TERMINAL DEVELOPMENT STRATEGY

The following three key principles of the terminal development strategy are important components of achieving a world-class facility:

### Capacity

The Vision Plan projects spacious modern terminals sized to accommodate long-term demand, allowing the facility to operate at an optimum level of service. The pace of change in the aviation industry, coupled with the challenges of undertaking expansion and alteration projects in the operating environment of an airport, requires a focus on flexibility and adaptability. A variety of future proofing strategies have been considered to allow the facility to adapt to future changes more readily including:

- Incorporating a contingency allowance when calculating critical facility requirements.
- Maximizing the provision of sterile corridors to provide international gate allocation flexibility.
- Planning interior spaces to limit fixed constraints adjacent to key facilities and common pain points in order to minimize the impact of future alteration projects.
- Reserving space adjacent to the terminal building to provide options for potential expansion.

### Connectivity

The movement of passengers throughout the airport is a critical component of customer experience. Passengers value shorter distances, simplicity, assistance options and access to information. The terminal configuration needs to prioritize both airside and landside connectivity while reducing walking distances.

### Customer Experience

Customer experience is at the heart of the Vision Plan. In addition to functioning well, the terminals and their surroundings need to be comfortable, accessible, and engaging, leaving a lasting impression on passengers. Terminal and landscape design will reflect and embody a distinctive identity and sense of place for Newark, Elizabeth, and New Jersey; showcasing local art, culture, food, and businesses.

The terminals are expected to include a wide variety of special areas to engage passengers with a diversity of needs and affinities – universal accessibility, shopping, entertainment, rest, and relaxation – creating a satisfying and memorable experience. Clear and direct sight lines create routes between activity nodes distributed throughout the terminal.

Access to information is also an important component of the customer experience and wayfinding. The Vision Plan envisions a balance between intuitive, mobile, and agile digital tools, paired with the availability of knowledgeable, empathetic, and engaged service employees.



## 10. LANDSIDE DEVELOPMENT STRATEGY

The following four key principles of the landside development strategy are important components of achieving a world-class experience & operation:

### Capacity

Provisions for generous organized frontages along Terminal facilities are envisioned with frontage lengths sized to operate at a world-class level of service, and to provide access to a curb for all vehicles (ex. no double parking). The frontage plans are expected to prioritize the pedestrian experience by providing weather protection, minimizing walking distance, and providing ample space for passenger waiting, loading, and unloading. Adequate on-airport parking capacity is expected to be provided throughout the redevelopment.

### Multi-Modal Access

Multi-modal access is an important component of achieving both the community access and sustainability objectives of the Vision Plan. The multi modal strategy includes two key components:

- **Access to Public Transportation** – Pedestrian bridges provide intuitive, convenient, and comfortable access to both the AirTrain and local and regional bus services. The AirTrain provides passengers and airport employees access to New Jersey Transit and Amtrak rail service and the South Ward community via the Newark Station Access project.
- **Active Transportation Network** – Improving connectivity to the local community and surrounding off-airport parking and hotel areas in adjacent communities by improving access for pedestrians, cyclists, and service vehicles. A safe and convenient network of bicycle lanes, paths, and sidewalks are to be developed throughout the central terminal area and covered bicycle parking will be provided in garages and sides of the terminal close to employee entrances.

### Flexibility

The transportation industry and how passengers access the airport has seen significant change over the past decade and is expected to continue to evolve and change with the maturation of the for-hire vehicle (FHV) market, and the introduction of eVOTL (electric vertical take-off and landing) and autonomous vehicles.

Prioritizing flexibility in landside infrastructure is essential. Envisioned is the consolidation of several disparate parking areas on the airport – including public parking, cell phone lot and staging lots. Colocation provides the benefit of being able to easily respond to variations in parking requirements by use. Multiple vehicle entry and exits points, pedestrian bridges and parking provide flexible passenger pickup / drop off, expanded bus services, and other emerging applications.

### Clarity

EWR falls at the junctions of several major highways. The number of destinations and connections around the airport can make navigation difficult.

The Vision Plan aims to bring clarity to the network. Wayfinding is expected to be simplified by reducing decision points. Further clarity is realized by minimizing weaving and separating major flows with independent circulation for each terminal, providing clear line of sight to exits, increasing distance between decision points, reducing triple decision points, locating merging/diverging on a single side and limiting roads to 4 lanes or less to increase safety and passenger experience.



## 11. PROJECT IDENTIFICATION

Large-scale airport redevelopments of this nature are complex, costly and, by necessity, span many years. A phased redevelopment strategy is required to maintain capacity and minimize impact on customers and airport operations throughout the construction process.

Cognizant of the cost and duration of this endeavor the Vision Plan identifies key phases where the redevelopment can pause to mitigate risk and provide flexibility in capital expenditure to respond to varying market conditions. The three major milestones considered are short-, medium- and long-term.

The initial focus of the redevelopment is the delivery of the short- and medium-term plans with projects that can be broadly grouped into four core areas, namely:

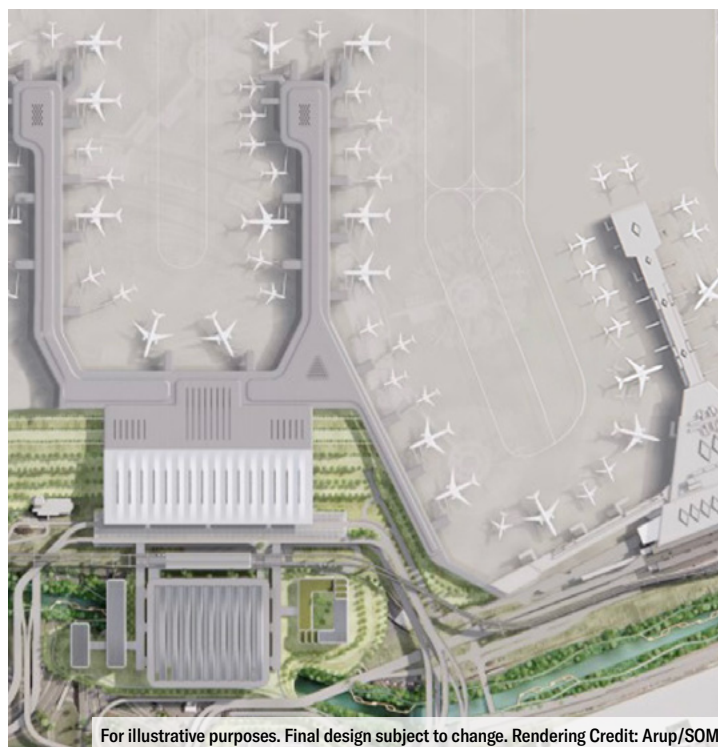
1. Terminal Facilities
  - a. Terminal C Enhancements: transform Terminal C into a world-class facility
  - b. Terminal A Expansion: add gates to maintain world-class Level of Service during irregular operations and busy times at Terminal A, and in response to rapid growth since its opening in 2023
  - c. New Terminal B: new world-class international terminal
2. Access Roads & Parking: provide more intuitive roadway network with additional capacity to improve level of service at existing terminals while accommodating a New Terminal B
3. Utilities: replace CHRP with newer and more sustainable utilities to serve existing and new terminals at EWR
4. Airside Improvements

This significant investment requires careful prioritization of projects and thoughtful phasing to eliminate temporary facilities wherever possible. Additional planning still needs to be completed to coordinate the Vision Plan with the Port Authority's Capital Plan capacity and constraints. This roadmap is envisioned to be informed by a Phase I planning effort that will be launched in 2025 to further develop program planning options, phasing strategies, partnership opportunities, and refine cost projections

## 12. CONSEQUENCES OF FAILING TO ACT

Passenger activity at EWR has already reached record levels in 2023 with a strong recovery after the pandemic and is expected to grow further. Continuing a status quo approach for the airport is not an option. It would leave EWR ill-equipped to adequately address existing challenges, accommodate changing passenger needs, capture future growth in demand, and to adapt to changes in airline operations and travel patterns. Recent airport redevelopments in the region such as LGA and JFK, as well as the new Terminal A at EWR have already set a new standard for a world-class level of service that is now expected by most passengers using the region's airports.

Not addressing the existing challenges at EWR would be enormously detrimental to the economies of the Cities, State, and the region. To remain competitive in a 21st century global economy, EWR requires the implementation of a comprehensive phased development plan that builds upon the success of the New Terminal A, addresses existing issues, and helps EWR become a world-class airport worthy of the region. A failure to implement such a plan would have long-lasting impacts to the strength of the region's economy.





# NEWARK LIBERTY INTERNATIONAL AIRPORT VISION PLAN

The Vision Plan sets out a framework to achieve the core goals and objectives for the future of Newark Liberty International Airport.

**A World-Class Gateway for New Jersey** – with spacious modern terminals providing an optimum level of service and reflecting the unique identity of the cities of Newark, Elizabeth, and the State of New Jersey.

**Long-Term Capacity** – with facilities planned to accommodate long-term demand and protect for potential future increase in runway throughput.

**Delay Reduction** – investing in infrastructure that significantly reduces airside and landside delays.

**Creating Access & Opportunity** – by providing local connections via pedestrian, bike, road, rail & bus and continuing to expand opportunities for local & minority businesses.

**A Phase-able Plan** – which maintains capacity during construction and minimizes impact on customers and airport operations.

**Sustainable & Resilient Infrastructure** – developing sustainable infrastructure that provides a path to NetZero, creates operational resilience, and supports a broad and holistic set of sustainability initiatives.



Figure 8: Long Term Plan Visualization