Airport Standards Manual for Pedestrian Signing & Wayfinding

Executive Summary

PORT AUTHORITY NY NJ

AIR LAND RAIL SEA

Airport Standards Manual for Pedestrian Signing & Wayfinding
Executive Summary

John F. Kennedy International Airport
Newark Liberty International Airport
LaGuardia Airport
New York Stewart International Airport

Contents

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4 World Trade Center, 18th Floor
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Prepared by
Mijksenaar USA
W&CO

Introduction

The Port Authority of New York and New Jersey is setting a visionary standard for a world-class, passenger-focused wayfinding experience.

The Wayfinding Standards Manual outlines principles and guidelines to implement and maintain an exceptional wayfinding system across all Port Authority Aviation facilities.

The Port Authority established an award-winning, internationally-recognized wayfinding system for its airports 20 years ago. The Port Authority led a reassessment of the wayfinding system to see what works, what doesn't, and how we can improve it for the next 20 years—and beyond.

Driven by a commitment to create modern, 21st-century airports with world-class customer experience to match, we are revitalizing our wayfinding system to provide a unified, cohesive experience.

The new Wayfinding Manual proactively addresses a rapidly evolving industry and redevelopment of the airport network. The new wayfinding system builds on a solid foundation of what works from the current system with additional improvements to support governance, streamline information, and infuse a unique New York/New Jersey sense of place.

The purpose of this Executive Summary is to give a brief yet holistic overview of the principles and subjects that, taken together, comprise a world-class wayfinding experience. Each of the subjects included in this Executive Summary are expounded upon with specific guidelines in the Wayfinding Standards Manual.

What is Wayfinding?

Three pillars are the foundation of a world-class wayfinding experience. By focusing on consistent implementation and maintenance of basic elements; a restrained approach to providing streamlined information; and creating concentrated moments of delight—together, these pillars will provide an exceptional wayfinding experience never before seen.

Three pillars are the foundation of a world-class wayfinding experience:

1. Brilliant Basics
2. Less is More
3. Surpass Expectations

Brilliant Basics
Wayfinding content and design are in accordance with worldwide standards and best practices. All wayfinding is clear, comprehensive, consistent, conspicuous, and catchy.

Getting the basics right—like clarity of information, consistent visuals, and conspicuous placement—is hard to do. Investing in this fundamental practice will already cement Port Authority airports in the top ranks of airport experience.

Less is More
The environment is free of visual clutter, allowing an optimal customer experience of architecture, art, interior, branding, and commercial activities. Wayfinding elements are carefully designed and integrated into the architectural design and scale. Signs are placed where necessary to provide the right information at the right time.

Keeping the wayfinding experience up-to-date is crucial in providing a reliable, enjoyable experience. Much of this work is limiting and removing the amount of information in the environment, rather than adding new information.

Surpass Expectations
Establishing the fundamental wayfinding needs ensures passengers are not stressed, but comfortable in finding their way. This unlocks the opportunity to “wow” passengers with new and delightful experiences that truly reflect the energy of the New York/New Jersey region.

Natural Wayfinding

Wayfinding is about much more than signage: it's about all the ways that people find their way.

Architecture plays an essential role in building passengers' understanding of a space through cues like form and light. These elements support mental understanding, encourage natural movement, and enhance spatial perception.

Natural wayfinding is based on quick perception and direct interpretation of a space, without consciously thinking about it. Natural wayfinding reduces the need for signage, using it in a limited way to confirm users' intuition.

This section in the Wayfinding Manual explains how lighting, architectural, and interior design enhance spatial legibility and provide navigation and orientation cues.

New Terminals
New (or significantly renovated) terminals provide an outsized opportunity to embed natural wayfinding from the earliest stages. The Wayfinding Manual outlines guidelines to aid collaboration between architects, wayfinding experts, interior designers, and others in order to create an environment that is understandable, easy to navigate, and inviting to explore.

In new terminals, wayfinding can be fully integrated with the architecture as a complementary system, rather than supplementary layer—lessening the overall need for signage.

Legacy Terminals
When addressing existing terminals, natural wayfinding can enhance cues already present in the architecture without distracting or adding superfluous elements.

Interventions in the space focus on keeping flows and sight lines clear, using light to steer movement, and placing landmarks as reference points. Signage supplements with only the necessary information needed at key points along the journey.

Unique landmarks, such as prominent architectural features or art installations, are memorable reference points for orientation and navigation. The unique form of this skylight, paired with the open atrium, enhance perception between zones.

Daxing International Airport, Beijing

Natural light enhances the delineation of the flow area while also creating a comfortable atmosphere. The use of neutral colors in the architecture supports a clear, calming environment, while allowing wayfinding signage to clearly stand out.

Heathrow Airport, London

Spatial Zoning

In a complex environment like an international airport, multiple parties communicate different messages through various media. To prevent elements from competing for space, effect, and attention, it is important they are organized spatially.

Consistently placing similar information in predictable locations helps build an understanding of the airport environment, allowing users to more easily perceive the space and find information.

Goals of Spatial Zoning

- Assign the most effective location for different types of information and media
- Ensure the location of information is expected and predictable
- Create clear lines of sight on the main path and wayfinding elements
- Ensure all media enhance the overall airport experience
- Guarantee visibility by preventing different types of media from interfering with each other

F Flow Zone

W Wayfinding Zone

O Overhead Media Zone

P Parallel Media Zone

L Lateral Zone

C Central Zone

B Buffer Zone

The wayfinding zone is placed directly above the flow zone. This keeps wayfinding always in passengers' optimal field of view and free of visual distractions.

Amsterdam Schiphol Airport

The wayfinding zone is clearly separated from commercial media by a buffer zone. A designated space for each media type reduces competition and allows passengers to digest both types of media.

Singapore Changi Airport

Along the Journey
Airport users go through different areas and steps throughout their journey. Information needs, mental state, and attention levels vary along the way. Receptiveness to environmental stimuli, like commercial media, varies as well.

Certain points, such as those noted in the Arrivals journey diagram below, offer better opportunities for engagement. Areas where less cognitive attention is required—such as long corridors or waiting areas—are opportunities for branded or commercial media.

At other points in the journey, such stimuli should be avoided, as users are likely to take little notice or even become stressed by it. This mainly concerns points where passengers must make decisions or focus on the process, e.g. main decision points or security checkpoints. Prioritize wayfinding elements here.

Spatial zoning guidelines apply to the following elements:

Wayfinding
e.g. directional signage and identification signage

Information
e.g. FIDs, GIDs, BIDs, TIDs; airport indexes and maps; information kiosks; Welcome Centers

Instructions, Rules & Regulations
e.g. instructions on steps of a process; security and enforcement messaging (e.g. TSA, CBP)

Art & Events
e.g. exhibitions and installations, immersive experiences, performances, and landmarks

Branded Media
e.g. branding and PSAs from Port Authority, the airport, AirTrain, terminals, airlines, and services (e.g. CLEAR)

Commercial Media
e.g. advertising, retail identifications and branding, and promotional displays

Sterile Corridor

Arriving and connecting passengers are likely excited about arriving in NY/NJ, but also tired after their flight, seeking restrooms, and focused on the next step.

Wayfinding and information (such as Connecting Flights FIDs, directional signs, and restroom identification) are of primary importance.

Art and branded and commercial media are allowed in the media zones to improve ambiance and provide passengers with sense of place upon arrival.

Passport Control

Passengers may be stressed or nervous as they approach Passport Control, and may be confused about the process.

To provide clarity, wayfinding, information, instructions, and rules and regulations are of primary importance.

Very limited art and branded and commercial media are allowed in the media zones, to improve ambiance and provide passengers with distraction and sense of place. Care must be taken that all art and media are subdued, so that they do not add to stress or cause information overload.

Baggage Claim

Both arriving and connecting passengers are likely glad to have made it through Passport Control, but anxious to receive the bags and continue on their way.

Wayfinding and information are of primary importance.

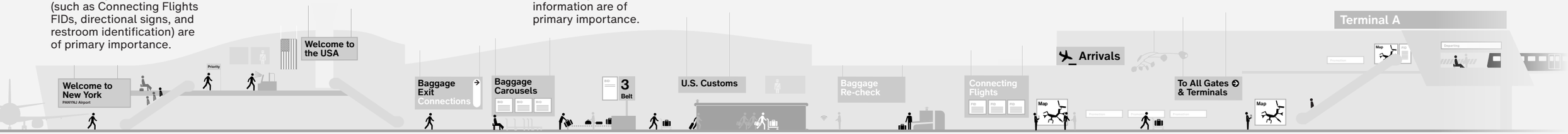
Art and branded and commercial media are allowed in the media zones to provide passengers with distraction and entertainment while they wait.

Arrivals

Meeters/Greeters are likely excited to see their family and friends soon, and want to make sure they can them easily. They are receptive to activities and entertainment while they wait.

Wayfinding and information are of primary importance.

Events, art, and branded and commercial media are encouraged in the media zones to improve ambiance and entertainment for Meeters/Greeters and provide arriving passengers with a warm, exciting, local arrival.



Inclusive Design

Inclusive design ensures the needs of all users are accounted for—especially those who may be excluded from a traditional design process.

Inclusive design is not just about making services accessible to people with disabilities. It's about making services accessible to everyone by taking a proactive, diversity-aware approach to design.

Inclusive design ensures the needs of all users are accounted for—especially those who may be excluded from a traditional design process. Users of varying needs and abilities are identified and solutions are designed to support them and make everyone feel welcome.

As airports become larger and more complex, all travelers can benefit from providing information in multiple formats and through multiple pathways. This manual provides guidelines to help design the wayfinding experience for users with a range of needs based on different levels of ability, understanding, and circumstance.

Users
It's important to understand the varying conditions and backgrounds that affect user journeys. Individual users have different needs and requirements when traveling to, from, and through the airport.

The following user groups encompass a range of profiles and needs.

Foreign

Families

Assisted

Senior

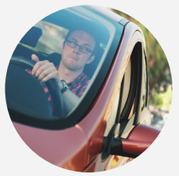
Leisure

Business

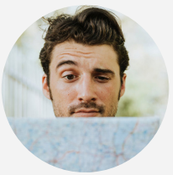
Premium

Connecting

Drivers



Visitors



Meeter/Greeters

Well Wishers

Ability
Airports are public spaces. World-class passenger experiences embrace everyone regardless of physical and cognitive abilities. It's important to consider how people perceive space and how differing abilities may impact their wayfinding experiences.

Many people experience ability impairments temporarily, while others are affected long-term. The following ability considerations give a broad overview, but are not exhaustive.

Visual
Individuals with visual impairments that cannot be corrected with corrective lenses.

Auditory
Individuals with hearing loss and impairments.

Physical/Ambulatory/Dexterity
Individuals who have challenges with walking or performing some physical tasks.

Cognitive/Stress
Individuals who have varying levels of ability to learn, remember, perceive, and problem solve.

Language
Individuals that speak foreign languages, or have low-literacy.

Information Strategy

Passengers seek different information at key steps along their journey through the airport. It is important to anticipate these needs and provide the right information at the right time.

In order to meet passengers' needs and expectations, the overarching information strategy for wayfinding in the facility must be considered holistically. Information strategy is governed by four principles: General to Specific, Direct and Confirm, Categorize Information, and Focus on Destinations.

An effective wayfinding experience means that users are able to find the information needed at any point of their journey—no more, no less. Too much information is almost as bad as too little information; all surplus information will be ignored by passengers and will add visual clutter to a sign. To ensure that the information on directional signs is complete yet as concise as possible, information should be presented with progressive disclosure, or with increasing specificity.

As passengers get further along their journey, more specific information is introduced. When passengers reach a decision point—i.e. when the route to their destination diverges from other destination flows—an additional level of detail is added to help them make the decision. Using color coding to categorize destination types, as well as directing to actual destinations (e.g. "Terminal A" or "Rental Cars"), helps passengers find the information they seek easily.

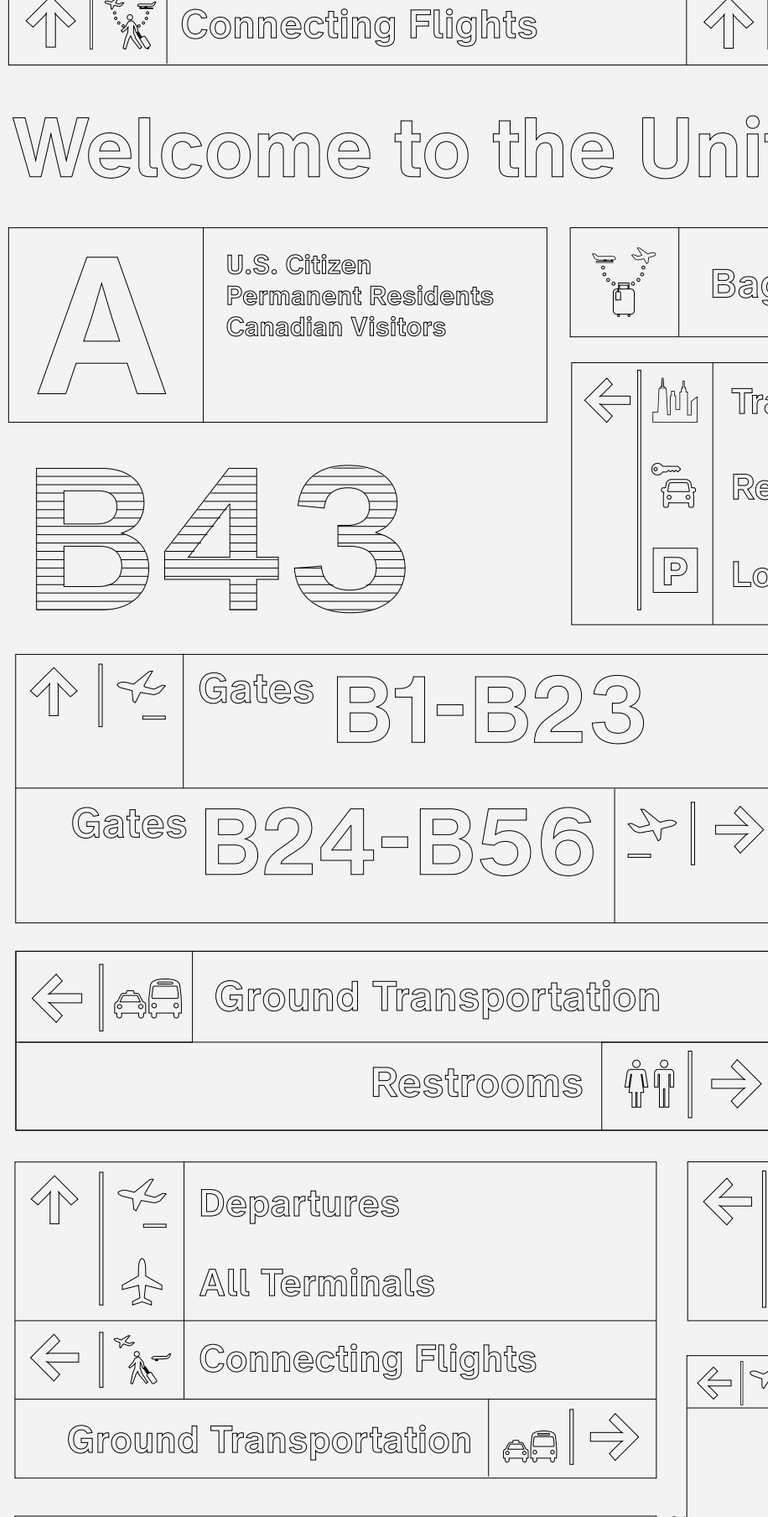
General to Specific
Passengers seek information to proceed in the correct direction for their destination. They scan directional signs for the information necessary to continue. Surplus information adds visual clutter and will be ignored by passengers. To ensure information on directional signs is complete but as concise as possible, present it progressively with increasing specificity.

Direct and Confirm
Signage and other wayfinding cues inform and direct passengers at decision points (i.e. locations where a choice between different possible directions must be made).

Categorize Information
At main decision points, directional elements include many different destinations. To help passengers find what they're looking for, destinations are divided into four categories:

- Flights & Operations: e.g. Check-in, Gates, Baggage Claim
- Connecting Flights: journey-specific category to mark the flow for passengers arriving on International flights connecting to another flight, used only from arrival gate until Baggage Re-check
- Services & Amenities: e.g. Restrooms, Shops, Lounges
- Exit & Transportation: e.g. Exit, Parking, Ground Transportation

Focus on Destinations
Passengers focus on finding destinations rather than a particular mode or means to get there. For instance, connecting passengers will look for the gate and/or terminal of their next flight, and arriving passengers will look for cues to get to the city. Directional information referring to "Terminals" and "City" destinations will better match their expectations than signage directing only to "AirTrain" — a term not universally understood, but still included as secondary information.



Design System

The Wayfinding Manual outlines guidelines for static, digital, and dynamic signage and wayfinding elements. The guidelines also detail terminology, numbering, programming & placement, and construction specifications.

Types of Signage and Elements
- Directional
- Identification
- Informational
- Regulatory & Emergency

Graphic Elements
- Color
- Typography
- Arrows
- Pictograms

Yellow
Flights and Operations

RGB	255 225 0
HEX	#FFE100
CMYK	2 1 99 0
PMS	108C
3M	3630-15

Green
Exit and Transportation

RGB	119 173 0
HEX	#77AD00
CMYK	57 0 100 0
PMS	368C
3M	3630-106

Blue
Services and Amenities

RGB	0 102 245
HEX	#0066F5
CMYK	88 48 0 0
PMS	300C
3M	3630-97

Purple
Connecting Flights Journey

RGB	160 0 209
HEX	#A000D1
CMYK	65 94 0 0
PMS	266C
3M	3630-158

Black
Neutral Ground

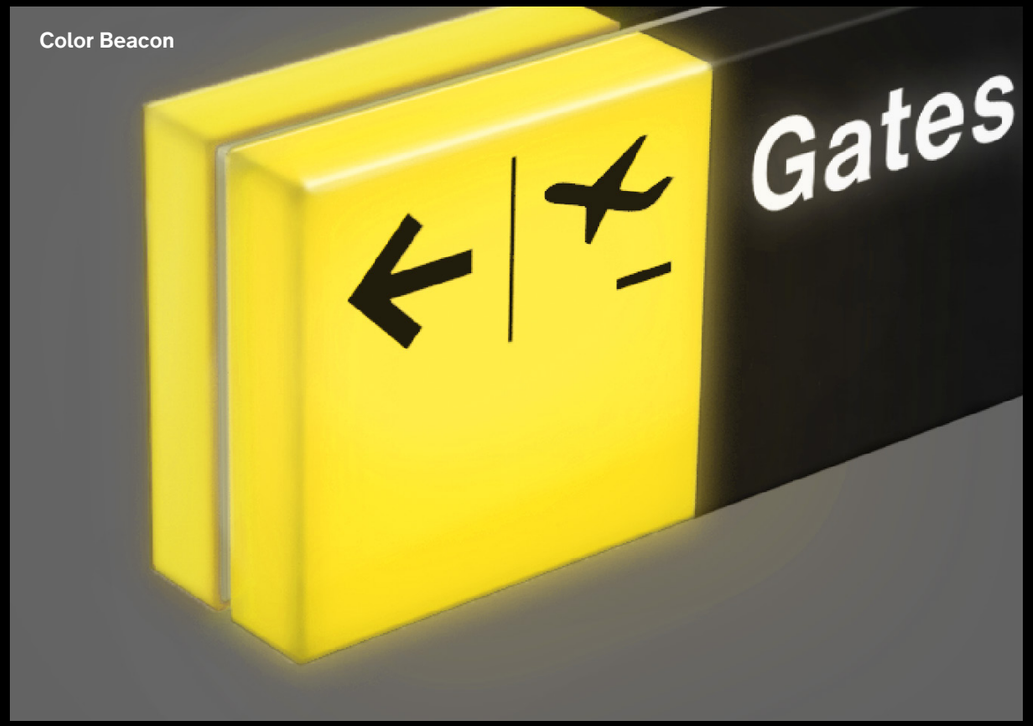
RGB	0 0 0
HEX	#000000
CMYK	0 0 0 100
PMS	Neutral Black
3M	3630-22

Port Authority uses custom-designed pictograms (left) and a custom typeface named *Helvetica Now for PANYNJ* which has optimized for legibility in wayfinding (right).

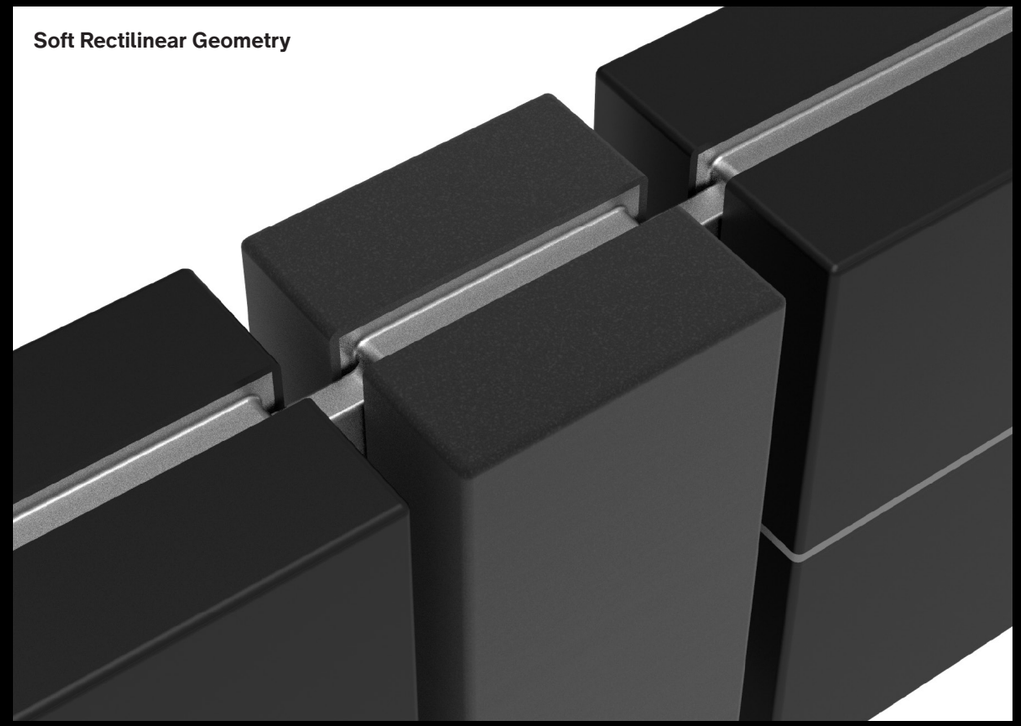
ABC
Helvetica Now
for PANYNJ
ABCDEFGHIJ
KLMNOPQRST
UVWXYZ
abcdefghijklm
nopqrstuvwxyz
0123456789

The design language of the signage system features unique elements and forms.

Color Beacon



Soft Rectilinear Geometry



Compelling Materials

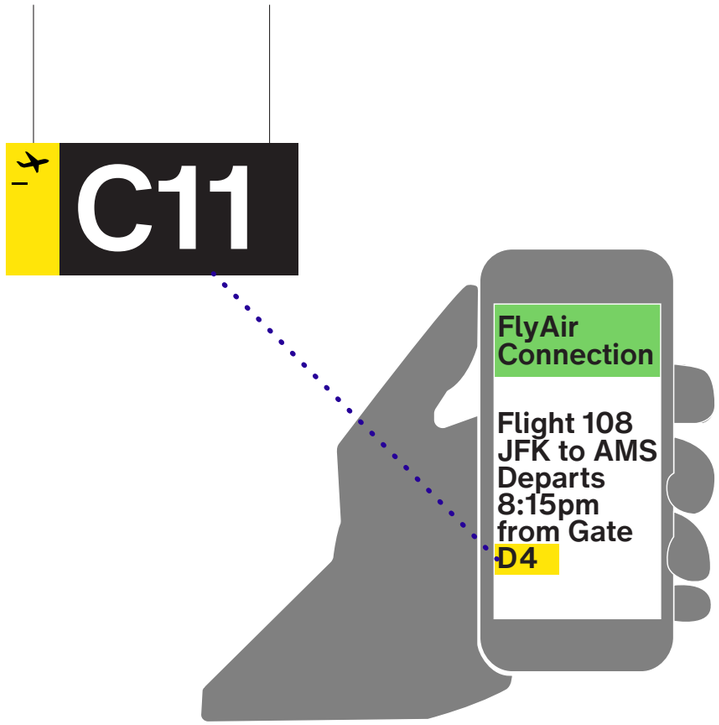
Reveal

Naming & Numbering

Naming and numbering play an important role in wayfinding throughout the passenger journey. Passengers encounter many names and numbers throughout their journey, so it is important to make each piece of information as logical, simple, and concise as possible.

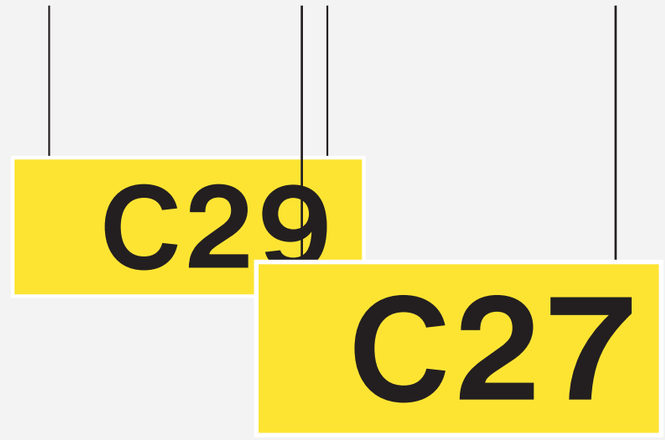
A harmonized, airport-wide numbering system serves as a positioning tool for all users—especially connecting passengers—to understand and navigate the entire airport campus. Terminals and gates must follow a logical, sequential numbering strategy.

An integrated terminal-gate numbering system is the foundation. Other elements in the system (e.g. AirTrain stations, parking garages, check-in rows, baggage claims) complement the experience.



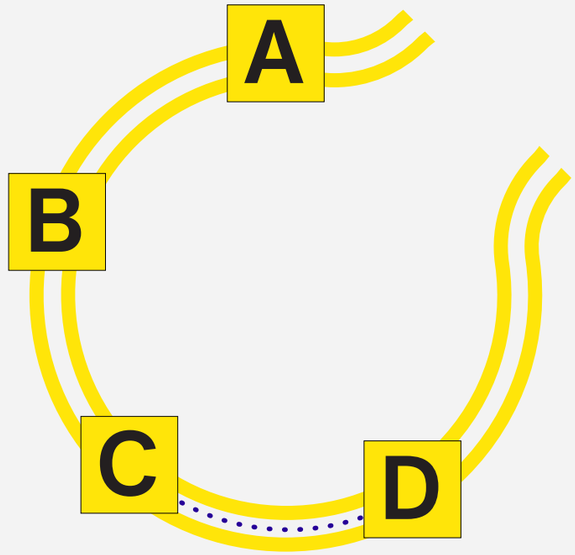
Terminal-Gate Relationship
There are numerous ways to integrate terminals into gate identification. Numeric and alphanumeric are the primary methods. The alphanumeric approach (at right) keeps each number to a manageable range.

Alphanumeric



Sequential Numbering
Numbers or letters in a sequence make it easier to perceive relative distances, compared to a series with gaps.

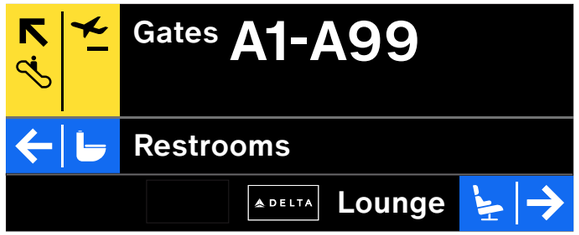
Sequential Terminal Numbering



Brands

Commercial entities—such as airlines, lounges, rental cars, hotels, and others—will have a branded presence throughout the airports. The visual manifestations of brand identities vary greatly, in terms of color, use of logo, and wordmarks.

To ensure clarity and reduce the visual clutter in the airport environment, these guidelines aim to establish where branding can be used while maintaining consistency in application.



Full Color Logo
Full-color logos are graphically complex and do not reduce well. They can be used when they are dominant on the sign and can appear at a large size. Uses for full-color logos include:

- Curbside IDs
- Check-in desks
- Baggage re-check desks

White Logo
White logos are used in directional signage and other contexts where color would distract from the primary wayfinding information, especially color coding. Uses for white logos include:

- Directional signs to lounges
- Directional signs to hotels
- Destinations via AirTrain

Tail Fin
Used as an element to convey flight information, the tail fin connects passengers with their ultimate destination: the plane. It is a consistent visual cue used in digital contexts, providing a streamlined yet flexible outlet to include airline branding. The common treatment across all digital touchpoints adapts to many screen sizes, ratios, and quantities of elements. Uses for tail fun logos include:

- Check-in directory
- FIDs
- GIDs
- BIDs

Maps

Maps are an essential tool to help passengers locate themselves in an environment and inform their decisions. Maps should only include the appropriate information that allows a user to make the required decision.

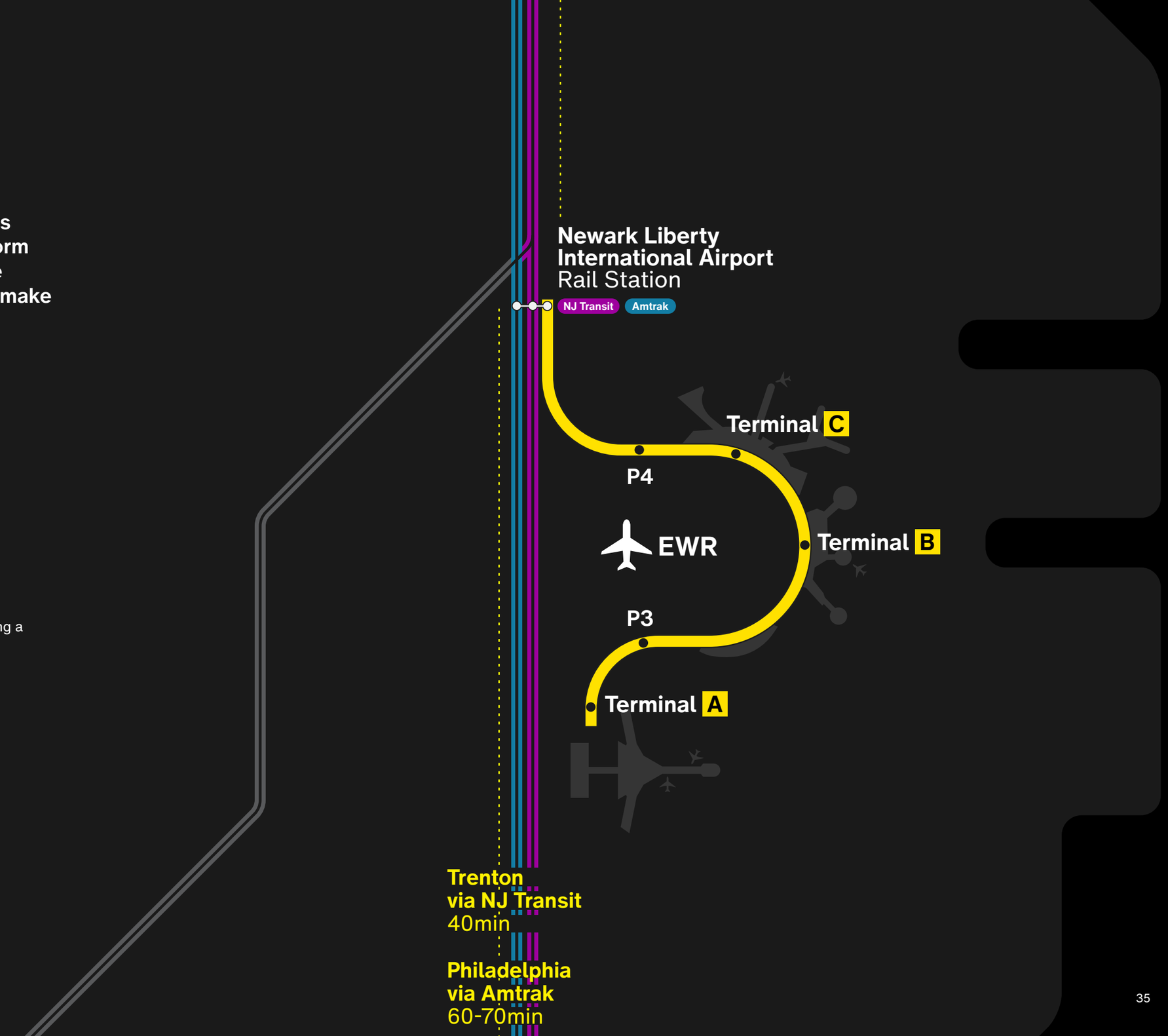
Three map scales are available:

Terminal map
- How do I reach a specific destination in the airport?
- Where can I eat/drink/etc.?
- How long will it take to get there?

Airport map
- How do I reach a specific terminal?
- How long will it take to get there?

Regional map
- How do I reach my final destination?
- What is the optimal transit route to get me there?
- How long will it take and how much will it cost?

Both maps include an overview of the airport campus map, creating a visual link between the two.



Static & Digital Signs

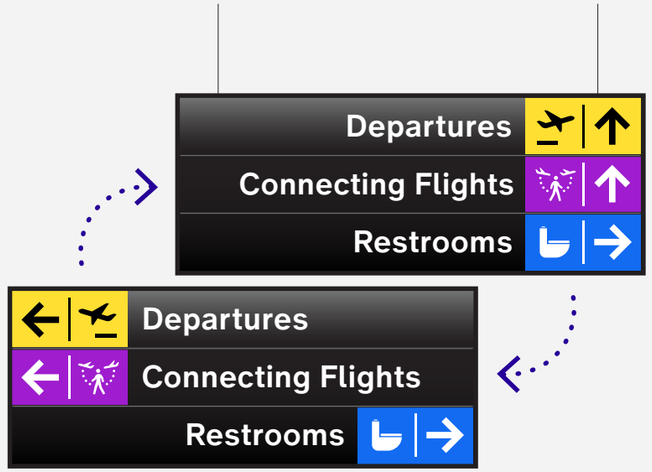
A successful wayfinding system will use a mix of static and digital signage, which must be coordinated to work as one cohesive system.

The choice between a static and digital solution hinges on the communication need. Digital signs are used when there is a need for dynamic communication. When this need is not present, static signage is the preferred solution.

Regardless of their display type, wayfinding signage should always be consistent in typeface, scale, color, and layout. Rules for producing static and digital signs differ but are tailored to their respective sign types, resulting in a unified design. This ensures that all wayfinding information is consistent across static and digital, and easily distinguishable from all other types of information.

Dynamic Communication
The ability for a sign to be dynamic is a powerful communication tool. It can improve passenger experience by providing timely, up to date information, while also giving airport personnel the ability to be regularly flexible with airport spaces and passenger flows in a way that is clear and instant.

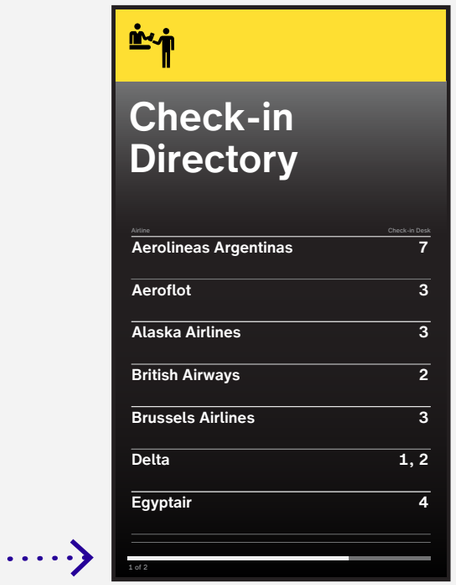
Changing Passenger Flows



Motion
The implementation of movement, rotation, and animation in sign graphics on digital signage, should be used sparingly and only be done in an effort to better communicate with users.

Page Change Indicators, like loading bars, are a great example of a motion elements used functionally to communicate page changes.

Page Change Indicators



Process & Governance

In providing these principles and guidelines to provide a clear, consistent wayfinding system that anticipates passenger needs, Port Authority Aviation facilities will ensure passengers can find their way easily. Discipline in these areas allows for a passenger experience that is both highly functional and exceptional, enabling passengers to enjoy a uniquely New York/New Jersey experience.

This manual has been written to facilitate a clear understanding of Port Authority wayfinding standards. All wayfinding signage and elements must comply with the standards.

The Port Authority Program Manager of Wayfinding and Connections Solutions is available as a resource for consultations to clarify any questions in advance of and throughout the production process. The Program Manager reviews and approves all messaging of wayfinding elements.

Tenants are ultimately responsible for compliance with the wayfinding standards as well as well as all Port Authority requirements, including but not limited to those outlined in the RPW, lease agreements, and Port Authority manuals.

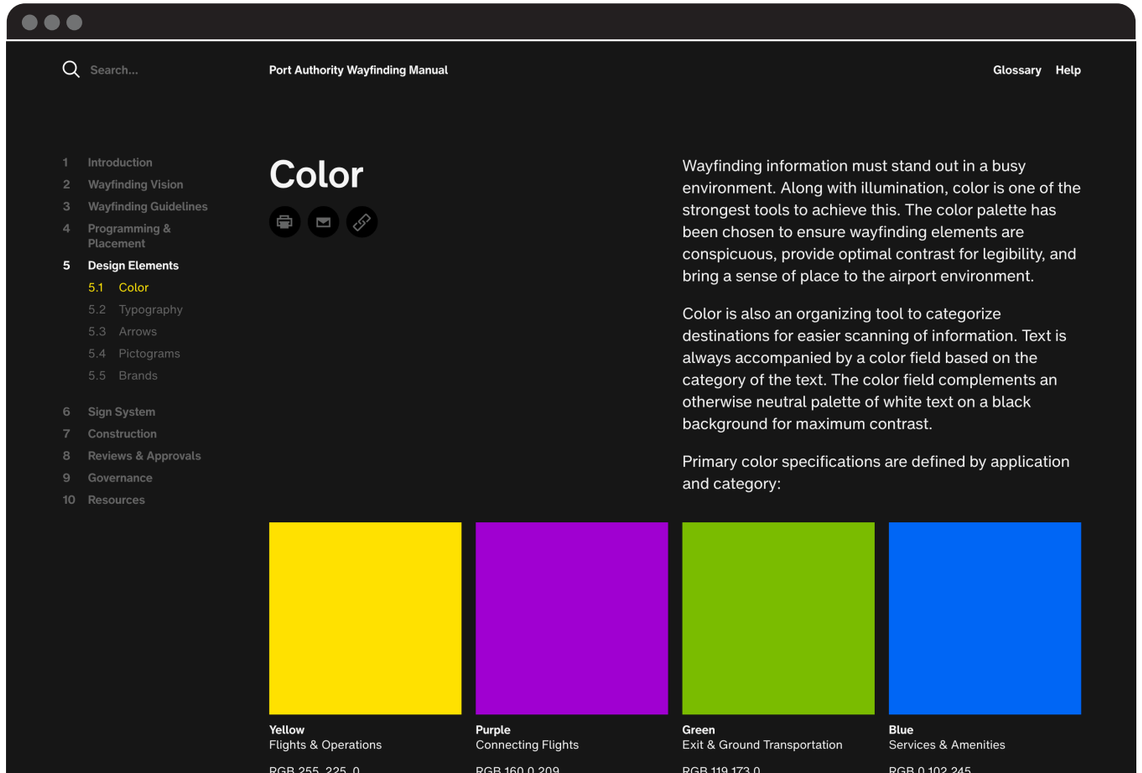
Type of project	Read Manual	Consultation with Wayfinding Program Manager	Minor Works Application (MWA)	Tenant Construction and Alteration Process (TCAP)
Simple e.g. restroom sign	●	●		
Minor requiring messaging review, e.g. sign at decision point	●	●	●	
Complex requires engineering or planning review, e.g. involves electricity	●	●	●	●

Online Manual

The topics included in this Executive Summary are expounded upon with additional context, detailed recommendations, and specific guidelines in the Wayfinding Standards Manual, which is accessible in an intuitive, user-friendly online format.

Providing the manual online ensures that it is accessible to different levels of readership and easily updatable for iteration and longevity.

The interactive format allows for many functionalities and features: navigation between sections is intuitive and users are in control of their own navigation through the content. The interactive experience appeals to a breadth of audiences who can choose their level of engagement, from executive level to detailed design specifications.



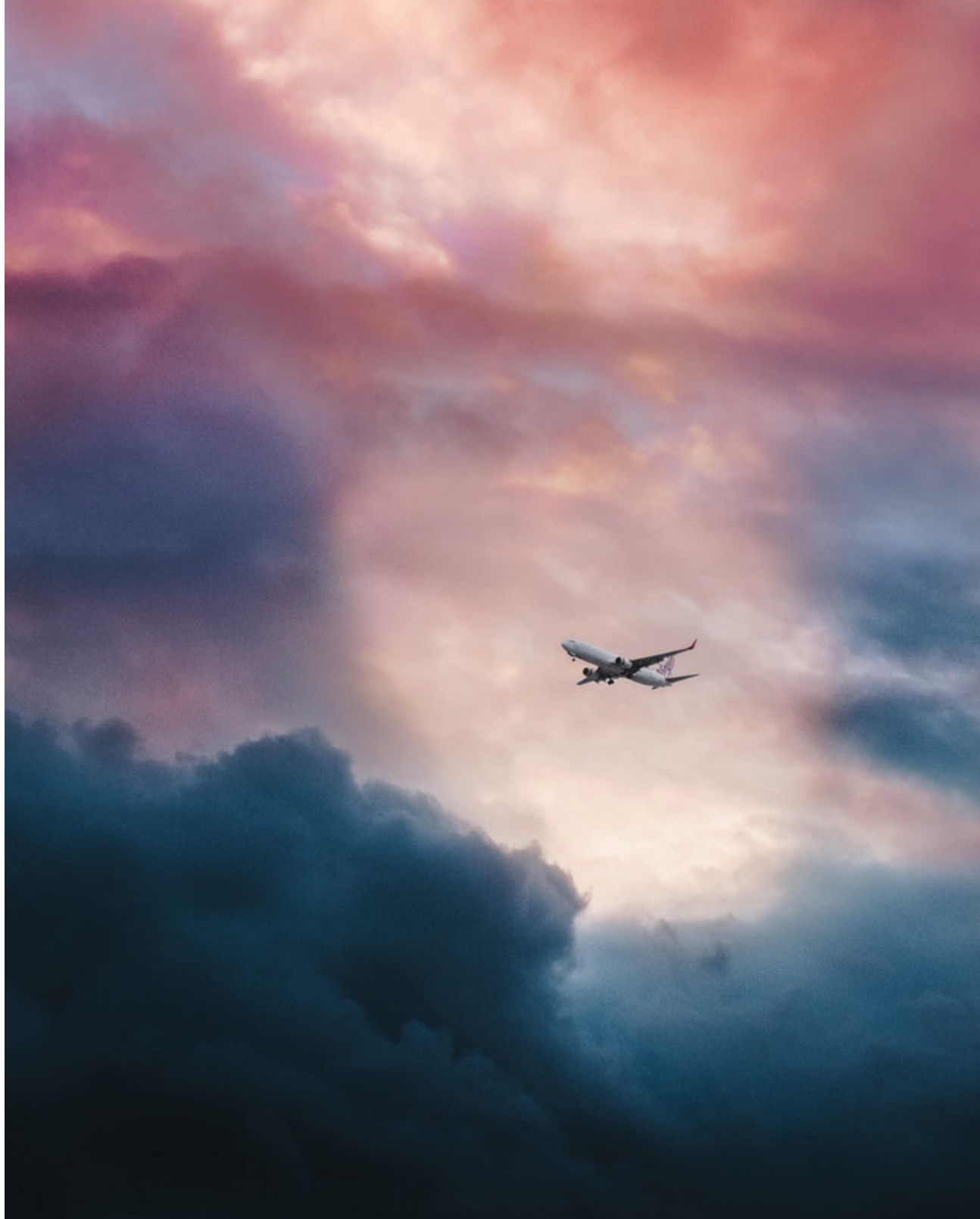
Committed to Customer Experience
We are committed to supporting the implementation and maintenance of a world-class wayfinding experience in all Port Authority airports. In addition to a more user-friendly format for the Wayfinding Standards Manual, we are available for consultations and conversations with terminal developers, operators, architects, designers, fabricators, and other partners. Together, we can deliver a customer experience never before seen at Port Authority airports.

For any questions or comments, contact:

Alex Barrett
Program Manager
Wayfinding and Connections Solutions

The Port Authority of New York and New Jersey
4 World Trade Center, 18th Floor
New York, NY 10007

Email: arbarrett@panynj.gov
Tel: (646) 565-7872



wayfinding.panynj.gov