Overview

KEY GOALS:

01
Eliminate sign clutter.
Too many signs creates visual clutter, causes confusion and makes it difficult for passengers to find the information they need. Clutter does not create a favorable first impression.

02
Simplify messages.
Listing every possible destination on the wayfinding signs can cause confusion. Simple, consistent messages to primary destinations will be more effective in getting passengers from point A to point B.

03
Be consistent.
The signs need to be straightforward and consistent, displaying the same messaging and symbols.

Denver International Airport is the 10th busiest airport in the world and the fifth busiest airport in the United States. With more than 50 million passengers traveling through the airport each year, DEN is one of the busiest airline hubs in the world's largest aviation market. DIA is the primary economic engine for the state of Colorado, generating more than $22 billion for the region annually.

A new adjunct Transit Center next to the existing Jeppesen terminal will house a train station, to be run by Regional Transportation District’s (RTD) FasTracks system, linking Downtown with the airport, and a 500-room hotel and conference center, to be run by Westin Hotels & Resorts. The Hotel and Transit Center is the next step in enhancing the airport’s competitive standing as a leading global airport and positioning Denver International Airport (DEN) for continued growth. Slated for completion in phases, the hotel has an opening of 2015 and rail service will begin in 2016.

With this expansion the need has been identified to create signage design guidelines that will link the new Transit Center with the existing Jeppesen terminal. The new sign design will first be implemented at the Transit Center, with signage at the existing terminal being updated in phases as funds become available. The strategy is to eliminate sign clutter and simplify the messages, give only information needed at the location and be consistent with messaging and symbols. Working with the new airport branding, the wayfinding will eventually become integrated throughout the airport.
Why this Guide is Important

People don't tend to notice a good wayfinding system, they simply use it.

Our goal is to help people understand the need for this new wayfinding strategy, the importance of a consistent program and the impacts of effective wayfinding on passenger satisfaction and airport performance.

The purpose of any airport is to get passengers to and from their destinations as quickly and effectively as possible. One key way of doing this is through wayfinding and the focused planning and decision making that meets the needs of passengers.

This manual has been carefully developed, reviewed and approved for use at Denver International Airport (DEN) and the Hotel and Transit Center (HTC). The purpose of developing a uniform system is to establish a cohesive look for signs at each facility. The system discourages unique and one-of-a-kind types of signs. The approach is to improve the clarity of the sign system by simplifying messages, strategically locating signs, improving the ease of changeability and maintenance, and reflecting the new branding to help create a sense of place.

Successful wayfinding systems can be measured by how travelers experience the airport environment and how the information facilitates self-navigation from Point A to Point B. The wayfinding system at DEN should create a welcoming and enjoyable environment, reassure travelers and provide answers to questions before they have to ask for assistance. The Signage and Wayfinding Guidelines will create signage templates for primary terminal and concourse signage that are consistent with other international airport guidelines with their use of color, information, context and sign types/sizes.

Everyone associated with the airport must be making decisions that support these outcomes, avoiding the tunnel approach where teams only look at their part of the traveler experience. It is important to consult the DEN Sign Program Manager when starting the process of all new airport signage, adding signage, and/or replacing signage.
Program Management

The effectiveness of this sign program depends directly on airport staff adopting and embracing the sign strategy and standards.

Please note: All proposed new signage must follow the guidelines represented in these standards.

The Signage Program Manager will have the final approval on all new or updated signage.

Program management will be the responsibility of those managers assigned to coordinate the sign program at Denver International Airport. These managers will be responsible for the review, signing process and planning at the airport. The Sign Program Manager will serve as the lead resource and final approval for all airport signage. The Sign Program Manager will also provide oversight of all sign program activities, including requests for new or replacement signs.

Current Sign Program Manager:

Jerry Olson, RA, NCARB
Manager of Special Programs – Facility Services
Denver International Airport
Airport Infrastructure Management
Airport Office Building, 7th Floor
8500 Peña Boulevard
Denver, CO 80249-6340
303.342.2650
jerry.olson@flydenver.com
Contents

Section 01
Wayfinding Strategy

Wayfinding Strategy 7-11
Color 12-13
Arrows 14
Typography 15-17
Symbols 18-22

Section 02
Typical Sign Types

Lighting 24
Sign Type Details 23-47

Section 03
Typical Sign Location Strategy

Placement Strategy 52
Nomenclature Strategy 53
Sign Mounting Strategy 54
Typical Sign Locations 55-61
Wayfinding Strategy
What is Good Wayfinding?

Wayfinding is much more than installing a few signs at various locations within a space or building. It is a process involving interpretations of space, anticipated traffic (pedestrian or otherwise), movement within that space, the destinations and overall purpose.

**Good wayfinding:**
- Provides logical paths of travel to a first time user.
- Highlights important services and facilities.
- Reinforces change of direction or key points in the customer journey.
- Has the right amount of information at the right time.
- Considers passenger needs.

**Good wayfinding is NOT:**
- Too many signs - a sign is not always the answer.
- Inconsistent - a uniform system (colors, messaging, font etc) helps passengers find their way.

Good wayfinding is a seamless and almost unconscious experience. Intuitive wayfinding is the ability of your passengers to find their way without consciously questioning which way to go. Therefore, the key to good wayfinding outcomes is a focus on the passenger experience of the airport during the design and planning of all new works.
Wayfinding Approach

Improve the clarity of the sign system by simplifying messages, strategically locating signs and improve the ease of changeability and maintenance.

Simplify
- Messages are simplified and give information only when needed.
- Messages are consistent and do not attempt to list every possible destination.
- Signs are easy to read. Messages and symbol sizes are appropriate to the sign size and location.
- Advertising should have its own prominent space apart from wayfinding signage to ensure visual clarity.

Location
- Signs will be placed in strategic locations at major decision points.
- Fewer signs will be used to convey the passenger's path, which increases ease of travel.

Path and Decision Point
- Signs will alert passengers to various “path” and “decision point” destinations along their journey using color to signal transitions.

Placemaking
- The new sign design reflects the updated airport branding and contributes to the sense of place through architectural details, typography, symbols and color.

Changeability
- The signs are easy to update and maintain, allowing the in-house sign shop to update graphic panels on an as-needed basis.

Sustainability
- Using LED technology, the signs have a longer life and are more energy efficient, thereby contributing to the green mission of the airport and easing maintenance difficulties.
Overall Messaging Strategy

A common misconception is thinking that listing every possible destination on a sign will solve wayfinding challenges, but this is rarely the case. The more complex the wayfinding problem, the simpler the solution should be.

In analyzing the existing signage at DIA, it was determined that one way to improve the clarity of the overall system is to reduce the amount of information and messaging on the sign.

- Messages should be simplified and given only when needed.
- Messages should be consistent and should not attempt to list every possible destination. Additional information will be displayed on digital kiosks placed at strategic nodes throughout the airport.
- Signs should be easy to read. Messages and symbol sizes are appropriate to the sign size and location.
- Advertising should not be included on directional wayfinding signage with the exception of Gate ID signs (Sign Type S), Dynamic Freestanding signs (Sign Type T) and Baggage Claim Digital Signage (Sign Type U).

**Correct Messaging:** Directs only to what is needed. Messages are clear and consistent.

**Incorrect Messaging:** Variety of type sizes and alignments. Do not try to list every possible destination.
Messaging Strategy by Major Sign Type

The goal is to establish messaging that is appropriate for each location, with only the information required listed on each sign.

Departing passenger messages on wayfinding signage: direct to Gates.

Arriving passenger messages on wayfinding signage: direct to connecting gates, baggage claim, ground transportation, passenger pick-up, the Transit Center and Hotel.

Restrooms and other “secondary messages” (i.e. Tornado shelters, airline lounges, food, shops, elevators and escalators) will not appear on primary overhead directional signs. Instead, this type of information will be found on kiosks located at major nodes around the airport. Kiosks may be digital (recommended) or static. Restroom, elevator and tornado shelter signage will be highlighted using color for increased visibility.

Directional Signs
Typical sign types A, B, C, D, E, F, H and K.

Airside - Departures Messages
• Gate information

Airside - Arrivals Messages
• Baggage Claim / Terminal
• Connecting Gates / Gate Information

Landside - Departures Messages
• Curbside Airline ID
• Airline / Ticket Counters
• All Gates
• Security

Landside - Arrivals Messages
• Baggage Claim
• Ground Transportation
• Passenger Pick-Up
• Westin Hotel
• Transit Center / RTD

Information Signs and Kiosks
Typical sign types L and M (static information signs)
Sign types N, S, T and U (dynamic information)

Airside & Landside Typical Messages
• List airport and city amenities
• Can accommodate multiple languages
• Emergency messaging
• Secondary destinations (restrooms, food court, restaurants, airline lounges, retail etc.)
• Transportation options - RTD buses, shuttles

The following messaging / information is never allowed on overhead directional wayfinding signs:
• Company logos or branding
• Advertising
• Retail, Restaurant or amenity information

At this time, an English only system with symbols is preferred throughout the airport.
Messaging Alignment

Consistency of messages, symbols, arrows and placement of information on the wayfinding signs are key to maintaining a holistic and effective signage program.

Overhead / directional wayfinding signs lead passengers to their destination by using repetitive messages. The signs must display information in a clear, concise and consistent manner.

**Correct Alignment:** Equal spacing and consistent placement between all elements.

**Correct Alignment:** When appropriate, secondary messaging can be used. Secondary messaging must be approved by the Sign Program Manager.

**Incorrect Alignment:** Switching orientation positioning or size of arrows, copy and symbols between panels.

**Incorrect Alignment:** Switching orientation positioning or size of arrows, copy and symbols between panels. Do not add unnecessary messages that can be handled on another sign type.
**Color**

Color can be an effective means of communication in wayfinding. Color transcends language barriers, provides clarity of messaging and can reduce the number of signs needed to effectively communicate.

Color is being used as a support element to alert passengers when they are at a decision point. The main wayfinding color Dark Gray provides focus and clarity by not having to compete with surrounding visual elements. Blue is used to call attention to key decision locations. White is used for all copy, symbols and arrows to provide maximum contrast for readability.

Color can also work to help establish a sense of place, referencing the environment and capitalizing on the local community’s assets and inspiration. Colors here are drawn from the Denver International Airport Visual Guidelines. Always reference this document for the most up-to-date color information.

### Primary Wayfinding Color Palette

- **Dark Gray**
  - Match to PMS Black C
  - Vinyl: Oracal 651 Intermediate Cal 070 Black (matte finish)

- **DEN Light Blue**
  - Match to PMS 298
  - Vinyl: Oracal 651 Intermediate Cal 056 Ice Blue (matte finish)

- **White**
  - Vinyl: 3M Scotchlite Matte White 220-20
  - Paint: Matthews paint MP05317 Chalk White

- **Yellow**
  - Match to PMS 115
  - Vinyl: 3M Envision Translucent Film Series 3730-015L

* Used for non-illuminated elements.
Secondary Accent Colors

Accent colors should only be used on a limited range of applications and never on primary wayfinding. Approved applications may include Ground Transportation signage (sign type J), static and/or digital kiosks displays (sign types N, S, T, and U), and parking garage signage.

The Sign Program Manager must approve use of secondary accent colors on signage and wayfinding.

- **DEN Light Green**
  - Match to PMS 382 C

- **DEN Fuchsia**
  - Match to PMS 439 C

- **DEN Orange**
  - Match to PMS 152 C

- **Dark Green**
  - Match to PMS 369 C

- **Red**
  - Match to PMS 485 C

- **Dark Blue**
  - Match to PMS 661 C
**Arrows**

An arrow turns a place into a passage, divides space into controlled flows, and urges the traveler to ‘move on’.

**Incorrect Arrow Usage:** Arrows are altered, made bolder or elongated.

The arrows used here were designed for maximum legibility under various viewing conditions. Arrows are used to indicate the route towards the destination of the message. Sizes of arrow should not vary on the same sign.

**Correct Arrow Usage:** Consistent size, weight and placement on a sign.

**Typical Arrow Layouts**

**The use of this arrow is discouraged** but in certain instances it may be necessary to provide direction other than what is shown above. The Sign Program Manager must approve use of this arrow.
Typography

Airport typography needs to communicate quickly and effectively. Lettering must fit the architectural and brand context.

The typeface to be used throughout the sign system is Alright Sans. This typeface is a contemporary sans-serif chosen for its simple, unique, clean and professional quality. This is the only typeface that should be used to ensure brand consistency.

Alright Sans is a licensed font. To purchase the font for proper use, please visit okaytype.com (https://okaytype.com/buy/alright-sans.html) or contact DIA Global Communications and Marketing.

**Alright Sans Regular - Used for Primary Messaging**

Aa

ABCDEFGHIJKLMNOPQRSTUVWXYZ
abcdefghijklmnopqrstuvwxyz
0123456789

**Alright Sans Medium - Allowed on sign type S and digital sign content**

ABCDEFGHIJKLMNOPQRSTUVWXYZ
abcdefghijklmnopqrstuvwxyz
0123456789

**Correct Number Usage:** From the glyphs palette, select numbers that sit on the same baseline.

0123456789

**Incorrect Number Usage:** Numbers fall above and below the baseline.

0123456789
Typography Spacing

Wayfinding signage needs a wide spacing between characters to improve readability from long distances.

Distance Legibility Chart

<table>
<thead>
<tr>
<th>Letter Height</th>
<th>Readable Distance for Max. Impact</th>
</tr>
</thead>
<tbody>
<tr>
<td>3”</td>
<td>30’-0”</td>
</tr>
<tr>
<td>4”</td>
<td>40’-0”</td>
</tr>
<tr>
<td>6”</td>
<td>60’-0”</td>
</tr>
<tr>
<td>8”</td>
<td>80’-0”</td>
</tr>
</tbody>
</table>

* Source: APCO distance legibility chart

The top of the chart shows that from as far away as 30’ you can “read” a 3” tall letter. This does not mean that this is the best size choice for readability, it only means that under the best situations you could read the letter. For example, at 30’ you get the best readability with at least a 3” letter. A rule of thumb is a distance of 10 feet for each inch in letter height,

Many factors influence the choice of type size used for signs. The key considerations include the distance the sign will be read from, the speed at which the viewer will be reading the sign, the position of the sign and the typeface used.

**Correct Spacing** - equal, wide spacing. The two-dimensional blank spaces between each pair of characters should all have a visually similar area.

**Incorrect Spacing** - letterforms are too close together.

**Incorrect Spacing** - letterforms are not evenly spaced.
Letter Heights

It has been proven that signs using upper and lowercase fonts are more easily recognized at increased distances.

Letter height is based on uppercase letters (Cap height), such as E, T, R, B etc. Some letters, like k, and all rounded letters and numbers like 3 and 5, will slightly exceed the guidelines.

Example of recommended letter height for signs:

**Typical Overhead Airside Sign:**
5” copy

**Typical Overhead Landside Sign:**
4” copy
Symbol Usage

Signage symbols can be found virtually anywhere in public spaces and built environments. Millions around the globe rely on symbols for information and direction.

The symbols should always be enclosed in a thin circular line to achieve the best hierarchy and visibility of messages and symbols. Always strengthen the symbol with written text.

The symbols used here are derived from the 50 symbol signs that were designed and produced through a collaboration between AIGA and the U.S. Department of Transportation (DOT). Intended for use in airports and other transportation hubs and at large international events, these symbols transcend language barriers and communicate on another level. Please refer to page 20 for the full set of symbols.

Correct Symbol Usage:
Typical landside signs - symbols within a thin circular line. Typical symbol size is 6” circle with enclosed symbol.

Correct Symbol Usage:
Typical airside signs - symbols within a thin circular line. Typical symbol size is 8” circle with enclosed symbol.
**Symbol Usage**

**Incorrect Symbols Usage:** Symbols reversed out of a white circle.

**Incorrect Symbols Usage:** Symbols on their own (i.e. no enclosure).

**Incorrect Symbols Usage:** Symbols that are smaller than the recommended size.

**Incorrect Symbols Usage:** Symbols using a shape other than a circle.
Symbol Usage

Symbols should never deviate from what is pictured here.

**Correct Usage:** When there is supporting copy, symbols should always be enclosed in a circle.

**Incorrect Symbols Usage:** Stylized symbols that deviate from the approved International symbols set.

**Incorrect Symbols Usage:** Symbols that use color or are filled in with color in any way.

Stylized, altered or symbols that appear in multiple colors are not permitted. For a complete list of approved symbols, go to http://www.aiga.org/symbol-signs/.
Symbol Guidelines

The following explains how to orient symbols correctly within the thin circular line to achieve consistency.

Correct Symbol Layouts:
- Symbol is visually centered in the circle.
- Equal space from outlined circle on all sides.
- Symbols should be equally scaled - no one symbol should be visually larger than others.
- Consistent line weight on outlined circle - scale accordingly.

Incorrect Symbol Layouts:
Symbol is not centered, line weigh varies

Typical Symbol sizes:
- Airside overhead signs - 8" circle with symbol
- Landside overhead signs - 6" circle with symbols
Approved Symbols

PUBLIC FACILITIES

Telephone  Women's Restroom  Men's Restroom  Restroom  Family Restroom  Diaper Changing Station  Elevator  Escalator  People Mover  Stairs  Do Not Enter  Cocktails

Food  Coffee Shop  Lost and Found  Duty Free  Accessible  Waste Bin  Recycle  Mail  Wireless Internet  Internet Access  Currency Exchange  ATM / Money

Information  No Smoking  Smoking Area  Hearing Assistance  Text Telephone  Volume Control  Drinking Fountain  First Aid  Hotel  Tornado Shelter

PASSENGER

All Gates  Arrivals  Departures  Immigration  Customs  Check in  Transfer  Escalator  People Mover  Baggage Claim  Baggage Services  Baggage Cart

Passenger Pick up  Meeting Point

VEHICULAR

Ground Transportation  Taxi  Bus Stop  Limo  Rental Car  Railway  Transit Center  Parking
02

Typical Sign Types
Typical Lighting for all Illuminated Signs and Graphics

LED Illumination vs. Fluorescent
Typically signage and lighting account for 50% - 60% of connected loads. An 8'-5" fluorescent module will draw 260 - 300 watts while an 8'-5" LED Edge Lit module will draw only 104 watts for a 60% savings in energy costs. LED has a five year warranty and a ten year life span while fluorescent has only a two year life span and no warranty. LED allows for a thin profile frame versus the traditional deep cabinet required for fluorescent lighting. LED illumination is required on all new illuminated signs at the Airport.

LED Performance
LED has a more uniform light source resulting in even illumination for increased visibility. The LED system should have plug and play electronics capabilities that allow for ease of maintenance if required and could be accomplished by the in-house sign shop. LED boards should contain on-board thermal management features.

Quick-Change Graphics
The symbols and copy are laser cut out of opaque film that is applied directly to an 1/8" thick white acrylic substrate. By applying the graphic to the diffuser panel, the messages are easy to replace without a whole sign redesign. It is a timely, cost effective way to update information in-house.
Airside Overhead Direction Sign - Wayfinding Concept

**AIRSIDE OVERHEAD SIGN - TYPICAL ARRIVALS MESSAGE**

Path - one direction of travel, keeps you moving forward toward your destination

- **A, C Gates**
- **Baggage Claim**
- **B15 - B44**

**FONTS AND PICTOGRAMS:**
Larger copy and symbol sizes will allow for fewer signs due to increased visibility of messages.

**MESSAGING:**
Only direct to Gates, Baggage Claim, and Connecting Gates. In general, keep messages concise, relevant and consistent.

**NOTE:** Typical Airside overhead signs have less overall height than Landside signs due to more concise messaging needs.

**AIRSIDE OVERHEAD SIGN - TYPICAL DEPARTURES MESSAGE**

Path - one direction of travel, keeps you moving forward toward your destination

- **B39 - B95**

**BLANK SIGN PANELS:**
It is imperative not to use any blank panels for advertising or other announcements. Wayfinding signs need to retain their integrity so that messages and sign visibility remain the top priority.

**COLOR:**
Airside signs are one color only (DEN Charcoal). The Charcoal color represents the concept of “Path”, meaning these signs typically direct passengers on a single path to Gates.

Based on the strategy of “path and decision points,” passengers are alerted to upcoming decisions through the use of color and strategic sign placement. Airside signs illustrate the use of the “Path” strategy.
Airside Overhead Direction Sign

The intent of these signs is to provide clear messaging to Gates, connecting Gates or Baggage Claim and Terminal only. Restrooms, restaurants and other amenities should never be listed on the overhead directional signs.

Signage Requirements
- Signs to be LED edge lit with USA manufactured and assembled LED boards. UL listed as a system.
- All LED platforms are plug and play for simplistic replacement if required
- Minimal parts for less invasive field assembly.
- LED strip / light source contained in extruded aluminum structure.
- Changeable opaque graphic film (Dark Gray) with laser cut copy applied first surface to 1/8" thick white acrylic substrate. All faces to be changeable.

Reference pages 56 and 61 for typical sign locations.
Based on the strategy of “path and decision points,” passengers are alerted to upcoming decisions through the use of color and strategic sign placement. Signs highlight typical destinations on the passenger journey and when they need to pay attention to an upcoming choice. Decision points use color contrast as a highlight element.

Landside signs are slightly larger than airside signs due to the amount of information that needs to be communicated.

**Decision Point - alert passengers to an upcoming change in direction.**

**Path - one direction of travel, keeps you moving forward toward your destination.**

**Decision Point - alert passengers to an upcoming change in direction.**

---

**INFORMATION HIERARCHY/COLOR:**
Two colors of panels will be used to convey different types of information and highlight key decision points (i.e. highlighting gates, transit center or hotel using DEN light blue). These modules are OPTIONAL depending upon the sign location. “Path”, the center panel, keeps passengers focused on typical destinations.

**ATTACHMENTS:**
The minimum number of attachments will be used to avoid clutter. The design of the attachments are intended to give architectural detail.

**MESSAGING:**
These signs direct passengers to Airlines and Airline ticket counters, All Gates, Security, Baggage Claim, Ground Transportation, Passenger Pick-up, the Hotel and Transit Center.
Incorrect Landside Directional Sign Layout:
Typically decision points go on the outside “wings” of the sign, not the center panel.

Incorrect Landside Directional Sign Layout:
Decision points should never be shown on all three panels.
B Landside Overhead Directional Sign

The Path + Decision Point strategy alerts passengers to upcoming decisions through the use of color and strategic sign placement. These signs give directional information to Ground Transportation, Passenger Pick-Up, Baggage Claim, the Transit Center and Westin Hotel.

Signage Requirements
- Signs to be LED edge lit with USA manufactured and assembled LED boards. UL listed as a system.
- All LED platforms are plug and play for simplistic replacement if required.
- Minimal parts for less invasive field assembly.
- LED strip / light source contained in extruded aluminum structure.
- Changeable opaque graphic film (Dark Gray and DEN Light Blue) with laser cut copy applied first surface to 1/8” thick white acrylic substrate. All faces to be changeable.

Reference pages 57-59 for typical sign locations.
**Soffit Mounted Sign**

Soffit mounted signs should be located in key decision point locations where ceiling heights do not allow for suspended signage or where there are low clearance heights with a soffit above.

**Signage Requirements**

- Signs to be LED edge lit with USA manufactured and assembled LED boards. UL listed as a system.
- All LED platforms are plug and play for simplistic replacement if required.
- Minimal parts for less invasive field assembly.
- LED strip / light source contained in extruded aluminum structure.
- Changeable opaque graphic film (Dark Gray) with laser cut copy applied first surface to 1/8” thick white acrylic substrate. All faces to be changeable.

![Diagram of Soffit Mounted Sign](image)

- **4” Copy, 7 1/4” Arrow, 3” - 3 1/2” Symbol, 6” Circle**
- **LED strip / light source contained in extruded aluminum structure. Structure to have removeable heat sink and closure. LEDs to be dimmable.**
- **Mount sign flush to wall**
- **Sign should be placed in path of most pedestrian traffic**

DEN | Denver International Airport

Signage & Wayfinding Guidelines | March, 2015
Small Overhead Directional Sign

These signs are to reinforce the “Path” message. This sign type may be used in areas that have limited space and can accommodate up to three messages.

Signage Requirements

- Signs to be LED edge lit with USA manufactured and assembled LED boards. UL listed as a system.
- All LED platforms are plug and play for simplistic replacement if required.
- Minimal parts for less invasive field assembly.
- LED strip / light source contained in extruded aluminum structure.
- Changeable opaque graphic film (Dark Gray) with laser cut copy applied first surface to 1/8" thick white acrylic substrate. All faces to be changeable.

Reference pages 56, 59 and 61 for typical sign locations.
E Post Mounted Overhead Directional Sign

This sign is for locations where the ceiling height does not allow for a suspended sign and does not have a soffit above the decision point. This sign type creates a gateway to the destination such as the escalators down to the train from security screening.

Signage Requirements
- Signs to be LED edge lit with USA manufactured and assembled LED boards. UL listed as a system.
- All LED platforms are plug and play for simplistic replacement if required.
- Minimal parts for less invasive field assembly.
- LED strip / light source contained in extruded aluminum structure.
- Changeable opaque graphic film (Dark Gray) with laser cut copy applied first surface to 1/8” thick white acrylic substrate. All faces to be changeable.

Reference page 60 for typical sign locations.
Overhead symbol signs may be wall or ceiling mounted. Orient mounting supports accordingly and provide backing in the wall or ceiling as needed for mounting.

Yellow background calls attention to areas such as restrooms, elevators and tornado shelters.

**Signage Requirements**
- Signs to be LED edge lit with USA manufactured and assembled LED boards. UL listed as a system.
- All LED platforms are plug and play for simplistic replacement if required.
- Minimal parts for less invasive field assembly.
- LED strip / light source contained in extruded aluminum structure.
- Changeable translucent graphic film (Yellow) with laser cut copy / symbol (Dark Gray) applied first surface to 1/8” thick white acrylic substrate. All faces to be changeable.

Reference pages 56-57 and 59-61 for typical sign locations.
Curbside Overhead Sign

This sign is used to identify airline drop-off areas. In certain cases, specific information pertaining to passenger drop-off will be listed at the bottom of the sign. Airline logos are not permitted on these signs.

Signage Requirements

- Signs to be LED edge lit with USA manufactured and assembled LED boards. UL listed as a system.
- All LED platforms are plug and play for simplistic replacement if required.
- Minimal parts for less invasive field assembly.
- LED strip / light source contained in extruded aluminum structure.
- Changeable opaque graphic film (Dark Gray) with laser cut copy applied first surface to 1/8" thick white acrylic substrate. All faces to be changeable.

Reference page 56 for typical sign locations.
**Dimensional Letters**

Dimensional letters are located in areas where there is a soffit and a single directional wayfinding message needed for user reassurance. In these locations, dimensional letters may be used. If more than two messages are required, it is recommended to use a soffit mounted sign (Sign Type C, page 30).

**Signage Requirements**
- Painted acrylic copy, arrow and symbol.
- Letters, arrow and symbol to be pin mounted.

Reference page 57 for typical sign locations.
Jeppessen Curbside Ground Transportation Signs

These signs should be internally illuminated to maximize visibility. For non-illuminated signs, use white reflective vinyl. Signs to be engineered for exterior conditions including weather, wind environmental factors and extreme temperatures. Accent colors to vary by island. Refer to page 13 for acceptable brand accent colors.

Signage Requirements

- Sign to have 1/2” frame enclosure.
- Changeable opaque graphic film to be applied first surface to 1/8” thick white acrylic substrate. All sign faces to be changeable.
- Extruded aluminum frame with countersunk fasteners painted to match frame. All welds to be internal.
- LED strip / light source contained in aluminum structure. Structure to have removable heat sink and closure.
- Signs that are exposed to weather conditions require exterior grade materials.

Reference pages 57-58 for typical sign locations.
These signs should be integrated into the structure of the FIDS displays found in each concourse. Sign attachment details should be discreet and in keeping with the existing structure.

**Signage Requirements**
- Internally LED illuminated single-face sign cabinet.
- Face of cabinet is aluminum painted to match Dark Gray.
- Copy is routed and backed with 1/4” white acrylic flush push through letters.
- Sign panel / cabinet should allow for changes.

Reference page 61 for typical sign locations.
Large Static Freestanding Directional

Freestanding directional sign for indoor or outdoor use.

Signage Requirements - Illuminated Sign
- Internally LED illuminated double-face sign cabinet.
- Faces of cabinet are aluminum painted to match Dark Gray.
- Copy, arrows and symbols are routed and backed with 1/4” white acrylic flush push through letters.
- Sign panel/cabinet should allow for changes.

Signage Requirements - Non-illuminated Sign
- Due to existing conditions, it may be difficult to provide power. In these cases, messages are matte white vinyl applied to the face of painted aluminum sign cabinet.

Reference page 60 for typical sign locations.
Small Static Freestanding Directional

Freestanding directional sign for indoor or outdoor use.

**Signage Requirements - Illuminated Sign**
- Internally LED illuminated double-face sign cabinet.
- Faces of cabinet are aluminum painted to match Dark Gray.
- Copy, arrows and symbols are routed and backed with 1/4” white acrylic flush push through letters.
- Sign panel/cabinet should allow for changes.

**Signage Requirements - Non-illuminated Sign**
- Due to existing conditions it may be difficult to provide power. In these cases, messages are matte white vinyl applied to the face of painted aluminum sign cabinet.

Reference page 59 for typical sign locations.
Airline ID Sign

LCD screen or static identification panel conveys airline brand.

**Signage Requirements**
- Because of the difference in airline branding, logos should scale to be visually similar.

**Signage Options**
1. LCD Commercial Grade Display (Recommended Option)
   The 46” NEC P462 professional-grade, large-screen LCD display or Airport approved equal.

2. Internally LED illuminated single-face sign cabinet with Airline branding.
   - Face of cabinet is aluminum painted to match Dark Gray.
   - Copy is routed and backed with 1/4” white acrylic flush push through letters.
   - Sign panel/cabinet should allow for changeability.

Reference page 59 for typical sign locations.
Overhead Sign Band

Signage is integrated into Alucobond panels located above entry doors in the Train Hall, entry to Terminal and at the Terminal exit to the Hotel and Plaza. This entry information is intended to help sort passengers between hotel, amenity and terminal destinations.

Signage Requirements

- Copy and symbols to be water jet cut out of Alucobond panel and backed with 1/4” thick flush push-thru white acrylic.
- Sign band is internally illuminated.

1/4" thick laser-cut white acrylic push through flush disk with applied cut vinyl symbol. Paint disk background to match Alucobond panels. Symbol and border to illuminate.

Copy and symbol disk are water jet cut out of sign face and backed with 1/4" thick white acrylic push through flush.

Center copy / symbols over entry doors - typical.

Future tenant ID

Future tenant ID
Feature numbers and symbols are used for quick identification of door numbers, passenger pick-up locations, and other services pertaining to each level.

**Signage Requirements**
- ACM panel / metal cladding to match Dark Gray.
- Cladding to cover existing columns.
- Copy and symbols are digital print on vinyl applied to cladding.

Reference pages 57-58 for typical sign locations.
T1 Roadway Signage

Feature numbers and symbols are used for quick identification of RTD and DEN bus gate locations. Signs to be engineered for exterior conditions including weather, wind environmental factors and extreme temperatures.

**Signage Requirements**
- Escutcheon plate to cover where support meets ceiling. Plates to match square tube finish. All hardware to be concealed.
- Signs to be LED edge lit with USA manufactured and assembled LED boards.
- UL listed as a system.
- All LED platforms are plug and play for simplistic replacement if required
- Minimal parts for less invasive field assembly.
- LED strip / light source contained in extruded aluminum structure.
- Changeable opaque graphic film applied first surface to 1/8" thick white acrylic substrate. All faces to be changeable.
- Signs that are exposed to weather conditions require exterior grade materials.
**Gate ID Sign**

Dynamic changeable message signs can be used to provide passengers with real-time information while providing flexibility to terminal operators and tenants.

**Signage Requirements**
- Gate number is static and LED illuminated.
- Access panel as required for maintenance.

**Screen / Image Requirements**
- Ensure sufficient contrast between text and background (70% minimum). The best legibility is usually achieved through the use of light colored text on a dark background.
- Use upper and lower case text.
- Images showing the airline destination may be displayed in the background. Ensure that all copy has enough contrast and is easy to read over the image. The Sign Program Manager must approve all images prior to use.
- Sign should be programmable to display emergency messaging.
- Red text on a black background should not be used (contrast is only 38%).

Reference pages 56 and 61 for typical sign locations.
Dynamic Freestanding Sign

Dynamic touch screen signage provides a place for the display of information not necessarily listed on wayfinding. Information may include visual paging and alerts, weather, flight updates and airport amenities. These dynamic signs should allow for information to be displayed in multiple languages. Signs are double-sided and placed in strategic locations throughout the airport. See Section 3 for more information on sign placement.

Signage Requirements

- NEC 46” V463-TM touch integrated large-screen LCD display or airport approved equivalent.
- Digital screens to be recessed in sign cabinet.
- Cooling fans as required to draw cool air into enclosure from below. Openings on top and bottom of sign as required.
- Internal aluminum mounting frame as required to support monitors.
- Screen bezel should not be visible within cabinet opening.
- Information symbol is 1/4” thick push-thru white acrylic with translucent vinyl graphic to match DEN Light Blue.
- Sign cabinet is fabricated painted metal to match Dark Gray.
- Access panel on side of sign cabinet as required.
- Ensure that touch screen and interactive elements comply with current ADA requirements for touch and reach.

Reference pages 56-59 and 61 for typical sign locations.
Baggage Carousel Digital Sign

Large-scale digital signage clearly display carousel numbers and bag claim information. Digital signs allow for easy updating. When carousel is not in use, advertising may be displayed.

**Signage Requirements**

- NEC 80” Large Screen E805 commercial grade display or Airport approved equivalent.
- Digital screens to be recessed in sign cabinet.
- Cooling fans as required to draw cool air into enclosure from below. Openings on top and bottom of sign as required. Access panel on side of sign cabinet as required.
- Internal aluminum mounting frame as required to support monitors.
- Screen bezel should not be visible within cabinet opening.
- Carousel numbers on side of sign cabinet to be 1/4” white push-thru acrylic.
- Sign cabinet is fabricated painted metal to match Dark Gray.

Reference page 57 for typical sign locations.
Typical ADA Signs

Non glare, anti-reflective Novacryl Photopolymer signage. Hidden locking mechanism prohibits tampering. Insert can be changed when sign is unlocked and Photopolymer panel is removed.

Signage Requirements
- Sign is Clarke Sign Systems Springframe locking sign, I-105148-W.
- Clear Grade II braille.
- In exterior conditions, use external grade material.
- Sign frame is mitered silver anodized metal with an overall depth of .35 inches.
- Tactile room numbers and symbols to be white. Second surface to be Dark Gray vinyl.
- Provide 1/8" thick matte black acrylic spacer for future maintenance (e.g. wall painting).
- Mount sign flush to wall using double-sided foam tape or mechanical fasteners as required.
Typical ADA Signs

Non glare, anti-reflective Novacryl Photopolymer signage. Hidden locking mechanism prohibits tampering. Insert can be changed when sign is unlocked and Photopolymer panel is removed.

Signage Requirements

- Sign is Clarke Sign Systems Springframe locking sign, I-105148-W.
- Clear Grade II braille.
- In exterior conditions, use external grade material.
- Sign frame is mitered silver anodized metal with an overall depth of .35 inches.
- Tactile room numbers and symbols to be white. Second surface to be Dark Gray vinyl.
- Provide 1/8” thick matte black acrylic spacer for future maintenance (e.g. wall painting).
- Mount sign flush to wall using double-sided foam tape or mechanical fasteners as required.
On March 15, 2011, the updated ADA Accessibility Guidelines took effect in construction and alterations of facilities covered by the ADA, including places of public accommodation, commercial facilities, and state and local government facilities.

Department of Justice (DOJ) regulations allow covered entities the choice of following either the updated standards or the original standards until March 15, 2012. After this period of time, use of the new standards are mandatory.

Always refer to the most current ADA Accessibility Guidelines to ensure compliance with mounting heights and locations.
Typical Mounting Details

At double doors with no available wall space, mount sign 1 ft from open swing of the right hand door.

If elevations A, B, C or E do not apply, center sign on door according, using the typical ADA mounting zone as a guide.
03

Typical Sign Location Strategy
Placement Strategy

The first step in programming is guaranteeing that passengers and visitors have access to information with ease.

Do:
- Make signs highly visible / legible to reduce the number of signs needed.
- Locate signs in the main passenger flow and visual field. This can be determined by the normal cone of vision.
- Position signs in areas where they are expected, especially at a decision point.
- Even with no decision points on long paths, signs should be repeated for confirmation purposes.
- Maintain consistent messaging, symbols and colors on every sign.
- Use a pictogram with supporting text.
- Define a zone for wayfinding signage and a zone for commercial / advertising signs.

Do not:
- Advertisers should not try to duplicate color schemes or layouts similar to the wayfinding system.
- As a general rule, never position signs where paths divert or a route choice should have already been made.
- Signs should never be blocked by architectural or other elements.
- Signs that instruct passengers to make a U-turn are difficult to understand and should only be used if no other options are available.
- Do not oversign. Special consideration should be taken to avoid confusion and visual overload.

Some situations require special interpretation of the graphic standards. Architecture, operational demands, technical specifications and other restrictions can all impact the design of the signs. The Airport Signage and Wayfinding Guidelines are flexible enough to accommodate special requirements.

Any sign that deviates in any way from the Airport Signage and Wayfinding Guidelines must be approved in writing by the airport Sign Program Manager.
Nomenclature Strategy

A sign should be designed for the first-time viewer. It should be brief and easy to read to communicate the desired message.

Do:

- Use standard nomenclature listed on page 10.
- Evaluate what information is needed at a specific point and only provide what is necessary to make a decision at that particular location.
- Make sure nomenclature is easy to understand. Whenever possible, choose national or international conventional terms for facilities.
- Present messages using positive wording (ex. instead of ‘Do Not Enter’ say ‘No Entry’).
- Repeat important information
- East and West Terminals should be referred to as ‘E’ and ‘W’.

Do not:

- Restrooms should never be listed as a destination on overhead directional signs.
- Do not use the term “Concourse”. Only the term “Gates” will be used with the appropriate gate series numbers.
- Avoid airport jargon or abbreviations.

Some situations require special interpretation of the graphic standards. Architecture, operational demands, technical specifications and other restrictions can all impact the design of the signs. The Airport Signage and Wayfinding Guidelines are flexible enough to accommodate special requirements.

Any sign that deviates in any way from the Airport Signage and Wayfinding Guidelines must be approved in writing by the airport Sign Program Manager.
Sign Mounting Strategy

Signs should have a consistent overall appearance and meet any ADA regulations that apply.

- All overhead signs are required to have a clearance of at least 9ft from the finished floor to the bottom of the sign box.
- While the width of the signs may vary, whenever possible keep signs consistent.
- Outdoor signs may need to be mounted higher than the 9ft clearance due to sightlines or obstructions. The height of the lettering and pictograms should be adjusted to compensate for a greater reading distance.
- No sign shall be installed in a location that is lower than the allowable minimum 6'-9" clearance height.
- All sign placements must meet applicable ADA regulations.

Final square tube dimension will vary based on sign location.
Typical Signage Locations

The following pages illustrate some typical locations of signage discussed in these guidelines.

The following six pages represent typical sign locations and placement around the airport. They are meant to act as a guide for future signage.

There are several considerations to take into account that have been discussed at length in these guidelines when planning for new signs, these being:

1. Eliminate Sign Clutter
   Too many signs creates visual clutter and makes it difficult for passengers to find the information they need. Clutter does not create a favorable first impression.

2. Increased Visibility of Signage
   Message have been simplified and symbol sizes are appropriate to the sign size and location. Because of this, signs have more visual clarity and will be easier for passengers to read and see, eliminating the need for oversigning.

3. Location
   Signs are to be placed in strategic locations at major decision points. Use the least amount of signs to convey the passengers path.

4. Digital Signage
   Dynamic touch screen signage provides a place for the display of information not necessarily listed on wayfinding. Information may include visual paging and alerts, weather, flight updates and airport amenities. These dynamic signs should allow for information to be displayed in multiple languages.
Typical Airport Arrival Signage - B Gates

NOTE: In keeping with the wayfinding strategy of providing concise messaging in key locations, follow this diagram for typical locations. Do not add additional wayfinding signs.
Typical Airport Arrival Signage - Level 5

NOTE: In keeping with the wayfinding strategy of providing concise messaging in key locations, follow this diagram for typical locations. **Do not add additional wayfinding signs.**
**Typical Airport Arrival Signage - at Ground Transportation (Level 5)**

**NOTE:** In keeping with the wayfinding strategy of providing concise messaging in key locations, follow this diagram for typical locations. **Do not add additional wayfinding signs.**
Typical Airport Departures Signage - Level 6

NOTE: In keeping with the wayfinding strategy of providing concise messaging in key locations, follow this diagram for typical locations. **Do not add additional wayfinding signs.**
Typical Airport Departures Signage - Level 5

NOTE: In keeping with the wayfinding strategy of providing concise messaging in key locations, follow this diagram for typical locations. Do not add additional wayfinding signs.
Typical Airport Departures Signage - B Gates

NOTE: In keeping with the wayfinding strategy of providing concise messaging in key locations, follow this diagram for typical locations. Do not add additional wayfinding signs.

- FIDS Directional Sign
- Small Overhead Directional Sign
- Dynamic Freestanding Sign
- Overhead Symbol Sign
- Airside Overhead Directional Sign
- Gate ID Sign

Indicates path of travel