Introduction

Background

This presentation summarizes a joint TJPA-MTC study and resulting recommendations for improving signage and wayfinding at the Salesforce Transit Center. This study was commissioned in response to ongoing feedback received from visitors and operators about the current system.

This summary report is divided into the following sections:

- 1. Introduction
- 2. Improvement strategy
- 3. Static sign concepts
- 4. Interactive wayfinding application and associated needs
- 5. Cost estimates



Problems to address

Spatial legibility

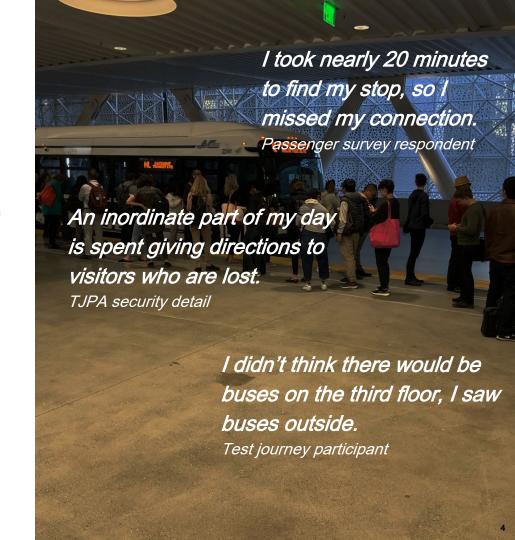
- Does not look like a transit facility from outside
- Overwhelming, intimidating scale
- Multiple street entrances without a 'front door'
- Not all vertical accesses connect to all levels

Complications of use

- Time-limited bus passengers navigating a massive area
- Split-level bus areas with multiple operators
- Unintuitive off-site bus stops (Amtrak and SamTrans)
- No ticket vending on bus deck (esp. Greyhound)

Design and execution

- Over-reliance on pictograms for directions
- Inflexible, unscalable physical products
- KC1 kiosks are not used they look like advertising
- Kiosk user interface is unintuitive and inaccessible



Improvement strategy

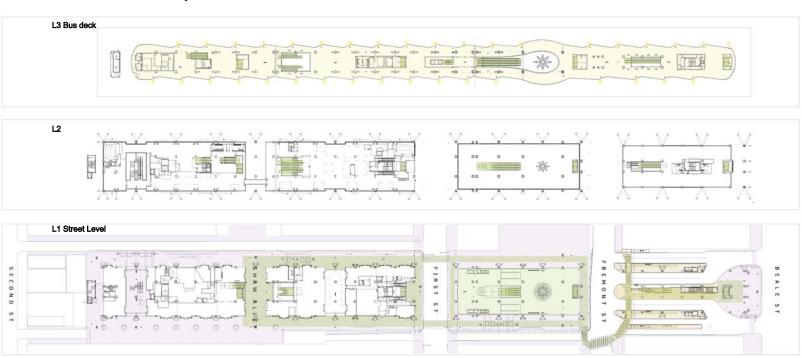
Information plan Breaking down the customer journey

The current system of signage lacks a structured plan for the role and location of different types of wayfinding and the progressive disclosure of information content along the customer journey.

This is achieved by mapping the sequence of decision points through different zones as illustrated below.

Street to Entrance to Platform to Vehicle to Stop to Exit to Entrance Stop Vehicle Stop Exit Destination

Sequencing customer decision zones in the facility

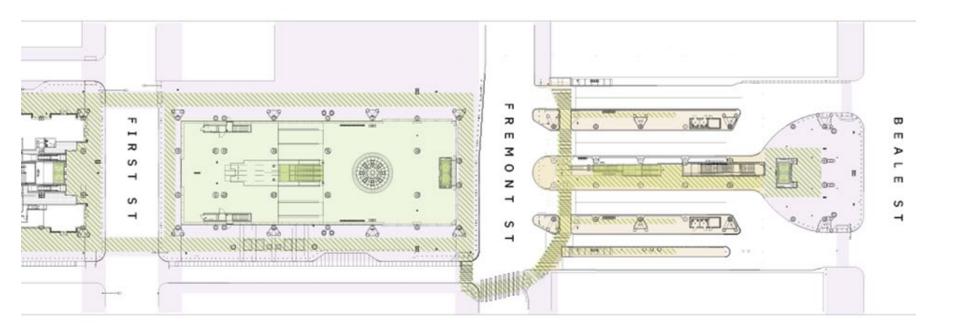


Information plan Breaking down the customer journey

Extract of decision sequencing to show example of detail

L1 Street Level Beale St to First St

Street to	Entrance to	Platform to	Vehicle to	Stop to	Exit to
Entrance	Stop	Vehicle	Stop	Exit	Destination



Information plan Directional strategy

Introduce a planned approach to directions that prioritizes customer movement, responds to the procedural nature of transit use and adopts the principles.

Street Level to Greyhound tickets, waiting area and stops

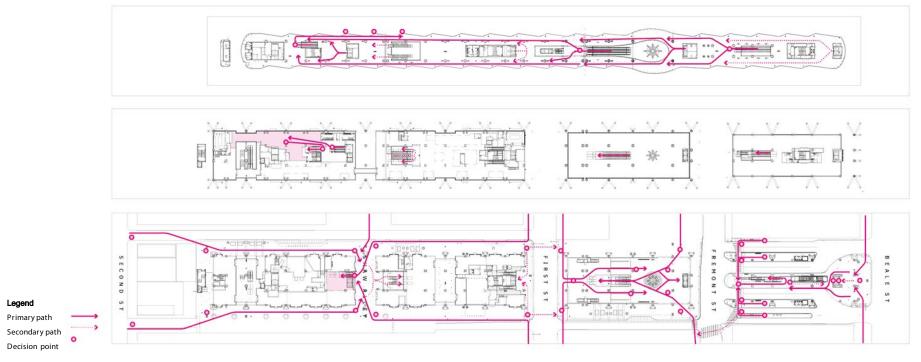
Routes

Primary

- 1.Enter at Grand Hall and use the elevator or escalator to bus deck level, pass along and descend at the elevator to Greyhound ticket office
- 2.Enter at Bus Plaza Beale St entrance and do the same
- $3. We st \ of \ First \ St, pass \ along \ the \ facility \ to \ the \ Greyhound \ entrance \ on \ Shaw \ Alley$

Secondary

- 1.Enter at the First St elevator
- 2.Use the Second entrance elevator on Shaw Alley

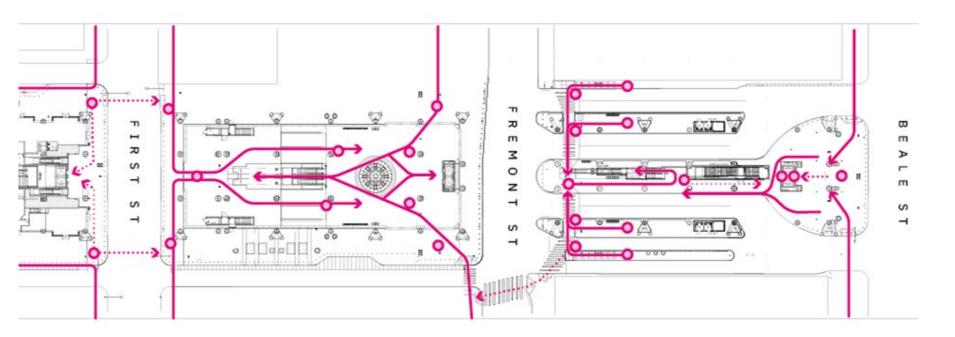


Information plan Directional strategy

Extract of desire lines and hierarchy to show example of detail

L1 Street Level Beale St to First St

Legend Primary path Secondary path Decision point



A phased approach to improvement

Significant upgrades to physical signage and digital/digital support systems are needed to address customer problems and accommodate future needs. To spread the cost of these while responding quickly to urgent issues, a phased approach is proposed:

Phase 1: Immediate(Year 1)

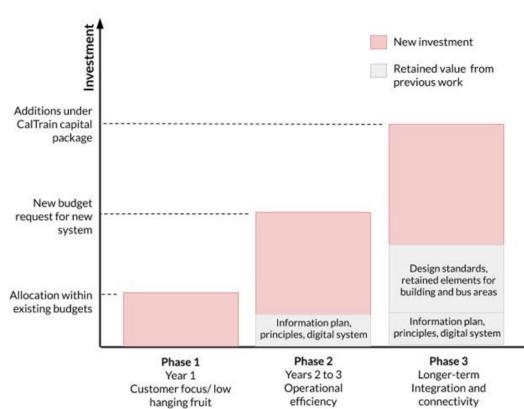
Adapting existing infrastructure, replacing the digital wayfinding application in the KC1 kiosks, and adding relatively low-cost but reliable printed Transportation Information Displays.

Phase 2: Intermediate (Years 2 to 3)

Implementing permanent adaptations and replacement of signs following MTC's regional approach while designed to be sympathetic to the architecture. Improving digital systems and screens allowing interactive map and diagram use and improved accessibility. Systematic approach allows scalability for CalTrain/CAHSR.

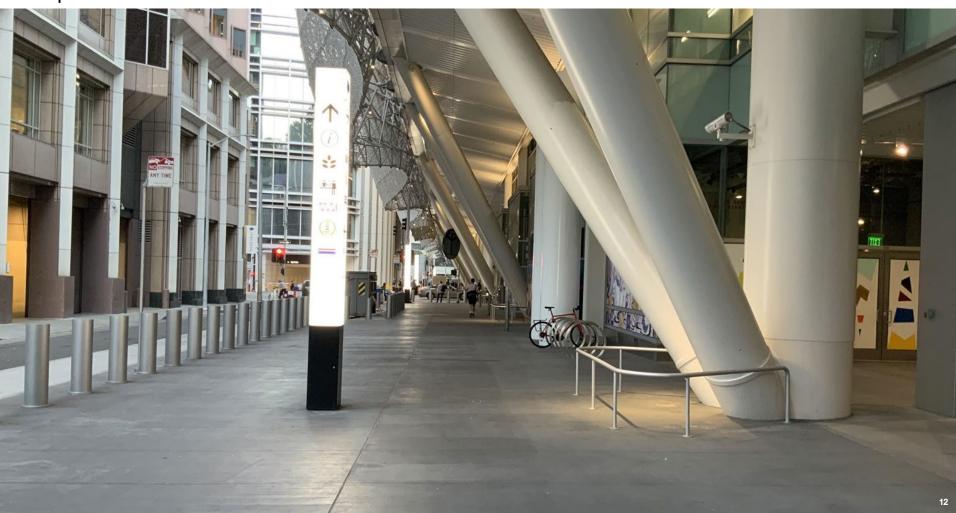
Phase 3: Long term(CalTrain/CAHSR)

Expanding the short/medium solutions to integrate new railbased services and support users of the future multi-modal hub formed at the transit center.



Static sign concepts

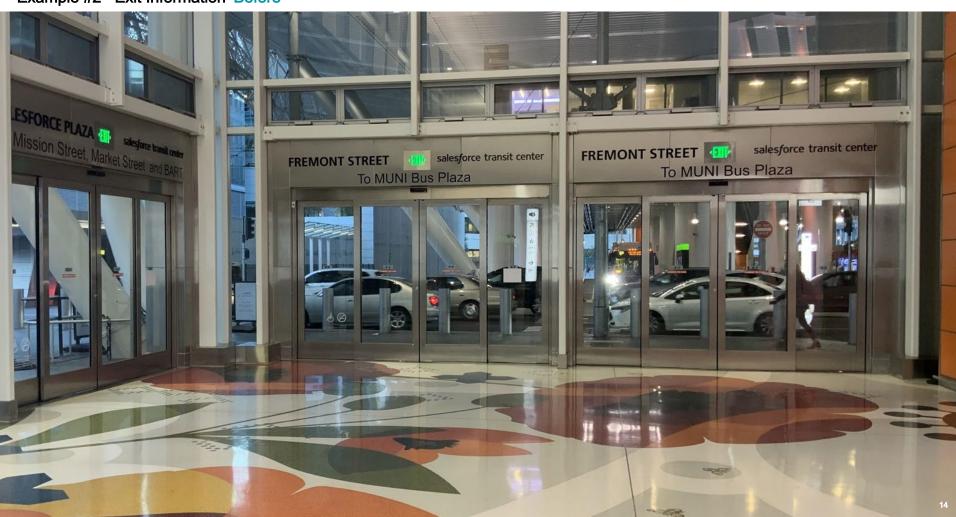
Example #1 Transit Center Identification Before



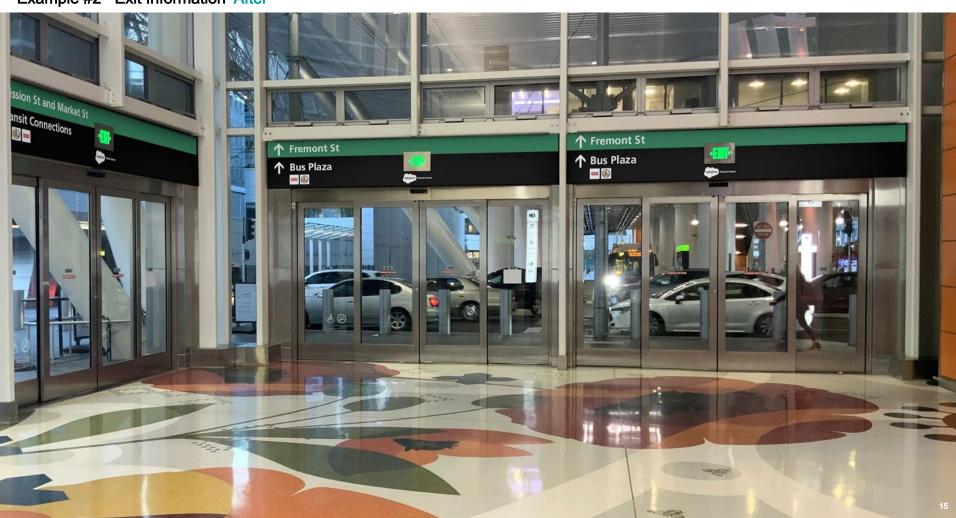
Example #1 Transit Center Identification After



Example #2 Exit Information Before

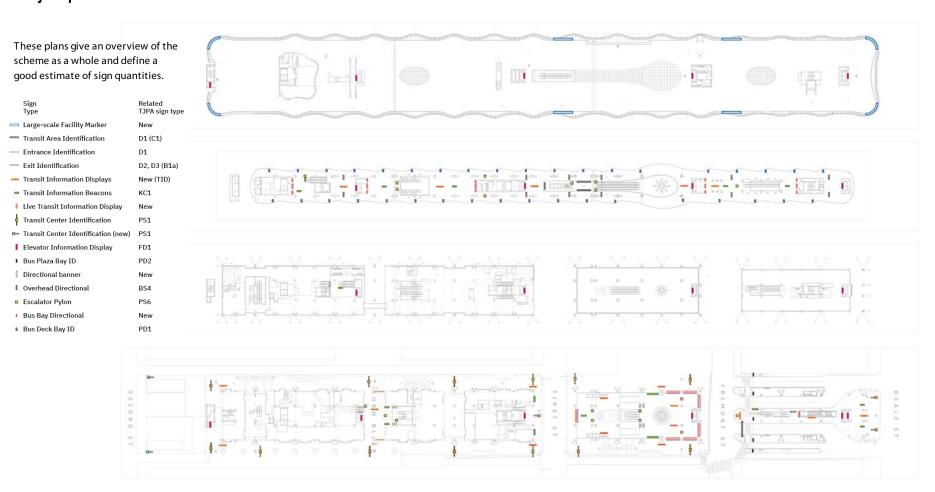


Example #2 Exit Information After



Example #3 Transit Information Display Before football fields in length Example #3 Transit Information Display After Even Bays 2 to 40 -> ← Odd Bays 1 to 39 **Bus Information** 4.5 football fields in ■ Bus Deck • You Are Here Level 3 length **Level Directory** rariata. 7 Greyhound Tickets and Waiting Area BEID 17

Project plan



Interactive wayfinding application and associated needs

Interactive wayfinding application and associated needs Overview

Interactive wayfinding application

Design and develop a completely new tool to replace the current one. Among the key user-needs based requirements are the following:

- Develop a minimalist page layout scheme
- Provide alternate journeys for different types of users
- Incorporate current transit operator data (phase 1) and map data (phase 2)
- Develop a new presentation paradigm centered around an intuitive search tool
- Develop an interactive design experience based on best-practice UX/UI standards & design principles
- Redesign the application to benefit users within the disability community

Associated needs

Findings from the Gap Analysis process as well as discussions with the transit center asset management team and transit system data integration technologists have resulted in the following list of supporting elements for consideration:

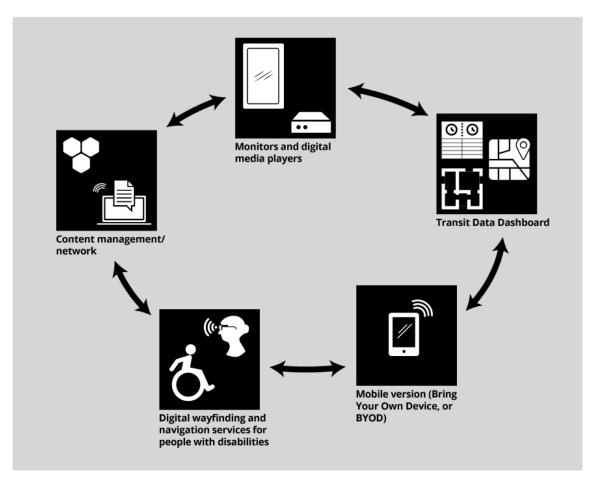
- Review and enhance content management/network system
- Recommend and purchase monitor/media player upgrades
- 3. Create a digital transit data dashboard
- Fund a comprehensive study on interactive wayfinding and navigation services for people with disabilities
- Consider developing a mobile version of the application. This move aligns with bring your own device (byod) expectations. It also points to possible future development of a mobile regional trip planner

Interactive wayfinding plan

Overview







Cost estimates

Rough Order of Magnitude Estimates

February 2020 prices

All Phases

Cost Item Summary	Phase 1 (Year 1)	Phase 2 (Years 2 to 3)	Phase 3 ^{Note 3} (CalTrain/ CAHSR)	Totals Phases 1 & 2 (Rounded)
Physical signage Improved facility identity, intuitive directions, and consistency to MTC regional standards using temporary materials (Phase 1) and permanent sign adaptations and additions in Phase 2.	\$472,000	\$2,147,000	TBD	\$2,619,000
Digital and interactive information Note 1 Kiosk-based application redesign; application front-end, back-end and CMS development; digital data dashboard design & development; research/recommendations into local network upgrade path, upgraded monitors and media players, and expanded accessibility options.	\$445,000	\$279,500	TBD	\$724,500
Fees and contingency Detailed planning, design and sign specification fees (20%) Note 2 Contingency consistent with preliminary design stage (25%)	\$94,400 \$230,000	\$429,400 \$606,600	TBD	\$523,800 \$836,000
Phase Totals(rounded)	\$1.25m	\$3.46m	TBD	\$4.71m

Notes:

¹ Digital costs exclude monitor and media player replacement plan, network upgrades, and accessibility upgrades which are dependent on Phase 1 research results.

² Fees subject to final scope of work and whether procured externally or completed in house.

³ Phase 3 wayfinding and signage costs are unknown at this time but the system developed in Phase 2 would be scalable.

End

REFERENCE SLIDESSIGN FAMILY

Sign types for Key intervention 1: Strengthen entrance and exit marking



Large-scale Facility Marker NEW SIGN TYPE

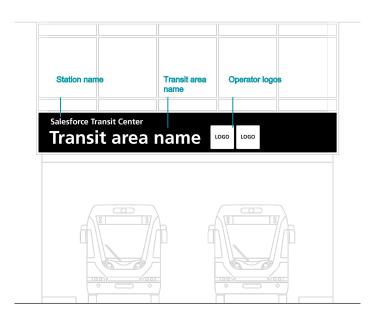
PURPOSE

Identifies facility with visibility from street at distance.

LOCATIONS

Building Facade.

QUANTITY



Transit Area Identification

NEW SIGN TYPE / SOMETIMES REPLACING D1 BUILT UP LETTERS

PURPOSE

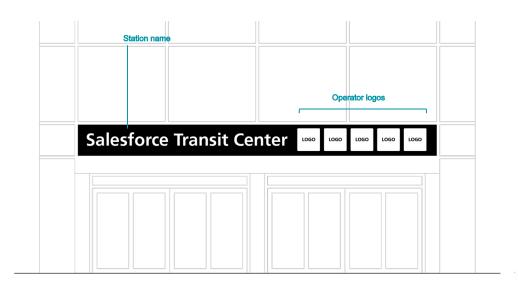
Identifies transit area and facility, showing transit service operators for the transit area.

LOCATIONS

Entrances to new transit areas (Bus Deck, Bus Plaza).

QUANTITY

Sign types for Key intervention 1: Strengthen entrance and exit marking



Entrance Identification NEW SIGN TYPE REPLACING D1 BUILT UP LETTERS

PURPOSE

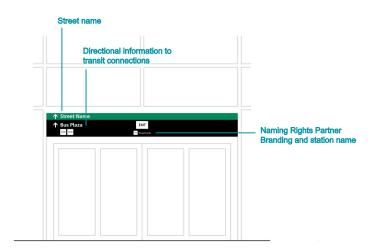
Identifies facility entrance, showing transit service operators for the facility.

It is recommended that existing D1 lettering be removed in the-SNedium term to avoid redundancies.

LOCATIONS

Entrances.

QUANTITY



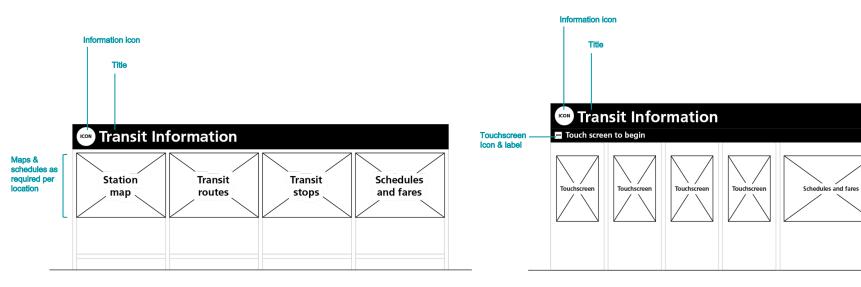
Names the street being exited onto, and nearby transit connection information.

LOCATIONS

Exits.

QUANTITY

Sign types for Key intervention 2: Create information hubs



Transit Information Displays (TIDs) NEW SIGN TYPE TO MTC STANDARD

PURPOSE

Provides MTC-standard map and schedule-based information. Maps/schedules are featured as appropriate to location, from MTC-standard Station Map, Transit Routes, Transit Stops, Schedules and Fares, plus a new information type 'Transit Stop Finder' (See New information types).

LOCATIONS

As required on-street, in the Grand Hall, Bus Deck, Bus Plaza.

QUANTITY

19

Transit Information Beacons APPENDED TO EXISTING KC1 KIOSKS

PURPOSE

Identify touch screens from distance and encourage/explain use.

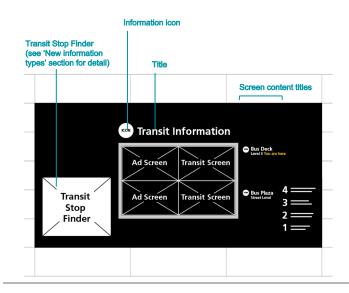
LOCATIONS

Appended to existing screen clusters.

QUANTITY

16 of varying screen cluster sizes (largest shown)

Sign types for Key intervention 2: Create information hubs



Live Transit Information Display NEW

PURPOSE

Identify the live transit information screens from distance, and explains which screens show which information. See following page for Transit Connection Finder and Level Directory information*.

LOCATIONS

Around existing screens in the Bus Deck.

QUANTITY

A NOTE ON SCREEN LOCATIONS

At the moment the screens are inconsistently placed relative to one another

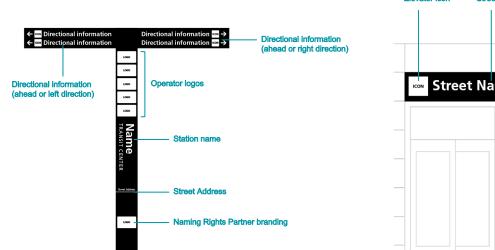
- Commercial screens are sometimes on the left, sometimes the right
- The Bus Deck is sometimes on the top screen, sometimes on the bottom

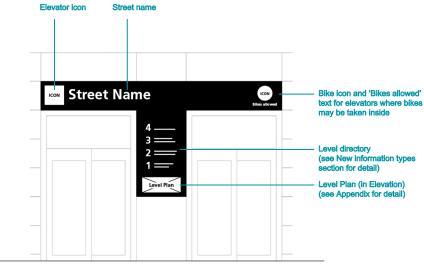
It is recommended that a fixed position is found for these elements, especially in the case of the of Bus Deck and Bus Plaza information.

Putting the Bus Deck information on the top screen and Bus Deck underneath it will help communicate the vertical layout of the facility and which services run from which level.

All information that needs close inspection to be placed at an accessible height as per ADA Standards.

Sign types for Key intervention 3: Explain the space





Transit Center Identification RESKIN + APPEND EXISTING PS1 PYLONS

PURPOSE

Identifies facility using MTC standard, and directs to major station facilities. Note that the concept design suggests a fixed 'T' shape to the sign, but this concept could be developed in detailed design so that directional information can be shown in any direction if this gives better flexibility in practice.

LOCATIONS

Street.

QUANTITY

26 Reskinned and 2 entirely new on 2nd St

Elevator Information Display **REPLACE EXISTING FD1 SIGNS**

PURPOSE

Identifies elevators, level directory, level plan showing how vertical circulation connects key places in the facility.

All interrogative information to be placed at an accessible height as per ADA Standards.

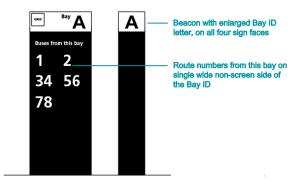
LOCATIONS

Outside elevators.

QUANTITY

19

Sign types for Key intervention 3: Explain the space



Bus Plaza Bay IDBeacon & Route numbers

APPENDAGE TO EXISTING PD2 SIGNS

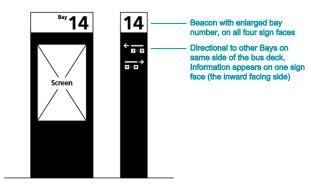
PURPOSE

Adds bus route numbers to Bus Bay IDs.

LOCATIONS

Existing Bus Plaza Bay IDs.

QUANTITY



Bus Deck Bay IDBeacon

RE-SKIN OF EXISTING PD1 SIGNS

PURPOSE

Adds enlarged Bay number to all sides of the beacon, and directional information to the side to aid bay finding on Bus Deck.

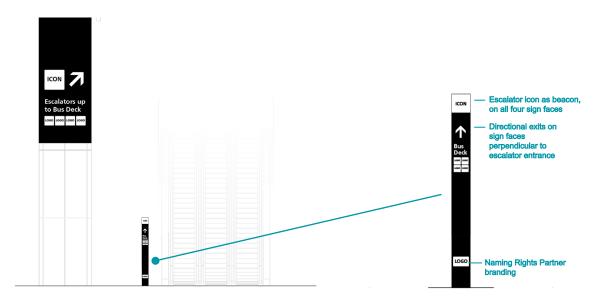
LOCATIONS

Bus Deck.

QUANTITY

37

Sign types for Key intervention 4: Make directions clear





Directional Banner NEW SIGN TYPE

PURPOSE

Identifies escalators from distance, directs to Bus Deck and explains transit service operators on level 3.

LOCATIONS

Hanging from the ceiling either side of columns in the Grand Hall.

QUANTITY

Escalator Pylon

RE-SKIN OF EXISTING PS6 PYLONS

PURPOSE

Identifies escalator entrances, and directs to major facilities.

LOCATIONS

Elevator entrances on Bus Deck and Level 1.

QUANTITY

Overhead Directional

RE-SKIN OF EXISTING BS4 SIGNS

PURPOSE

Directs to exits, greyhound tickets, restrooms.

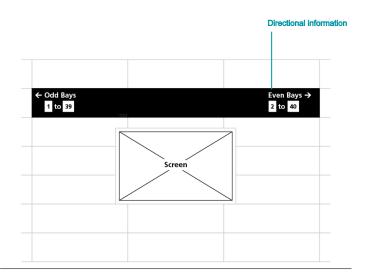
LOCATIONS

Bus Deck.

QUANTITY

12

Sign types for Key intervention 4: Make directions clear



Bus Bay Directional Wall-mounted NEW SIGN TYPE

PURPOSE

Directs to odd and even bays, explaining the split on different sides of the Bus Deck.

LOCATIONS

Bus Deck.

QUANTITY

Sign inventory

Туре	Related TJPA sign type	Estimated quantity	Notes
Large-scale Facility Marker	New	8	Use MTC standard (Fig 2.1c)
Transit Area Identification	D1 (C1)	3	Replaces built up letters D1
Entrance Identification	D1	9	Replaces built up letters D1
Exit Identification	D2, D3 (B1a)	7	Replaces built up letters D2, D3
Transit Information Displays	New	19	Use MTC standard TID (Fig 2.5a)
Transit Information Beacons	KC1	16	Added to KC1 kiosks
Live Transit Information Display	New	6	New
Transit Center Identification	PS1	26	Re-cover pylons with added directions
Transit Center Identification	PS1	2	New pylons with directions
Elevator Information Display	FD1	19	Replaces existing elevator directories FD1
Bus Plaza Bay ID	PD2	6	Added to Bus Plaza Bus ID
Directional banner	New	8	Graphic application in Grand Hall
Overhead Directional	BS4	12	Re-cover existing signs
Escalator Pylon	PS6	9	Re-cover existing signs
Bus Bay Directional	New	6	New
Bus Deck Bay ID	PD1	37	New

For MTC standards, refer to

Regional Transit Wayfinding Guidelines & Standards Version 6.0 August 1, 2019)