Working Document 04

Working document for use with Seamless Seattle pilots

Accessibility Summary

July 2019

Seattle
Department of
Transportation

Purpose

This document summarises the accessibility components of the Seamless Seattle wayfinding system and identifies opportunities to make the system more accessible and inclusive in future roll-out.

This document should be read in conjunction with the Working Documents 01 Asset Selection Criteria, 02 Sign Content Rationale, 03 Sign Placement & Clutter Reduction as well as the Visual Design Standards that set out the final design of the pilot elements.

applied_ wayfinding

alta PLANNING + DESIGN

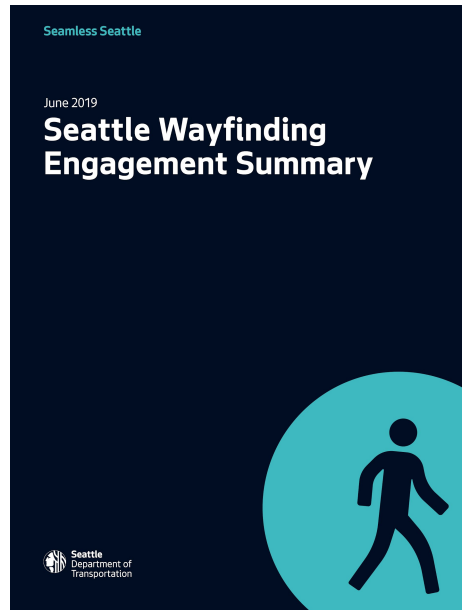3 SQUARE BLOCKS

1.0 Introduction

Introduction

The wayfinding strategy identified Design for All as a cornerstone of a system that supports all users.

During the development and implementation of the system in two pilot areas, Design for All has been addressed in a number of ways, including:

- Map content
- Clarity of map design
- Inclusion of tactile and Braille
- Supporting accessible routes on-street

These aspects of the system are explained in more detail in this document.

Seamless Seattle

June 2019

Seattle Wayfinding Engagement Summary

Seattle Department of Transportation

Seamless Seattle

June 2019

Seattle Wayfinding Digital Strategy

Seattle Department of Transportation

Consultation

To help delivery of the strategic objective of supporting all users, consultation has taken place with various users. This includes; consultation with the Product Design, Visual Design, Accessibility Interagency Working Group and Creative Inclusion. Please refer to the Seattle Wayfinding Consultation Summary for more information.
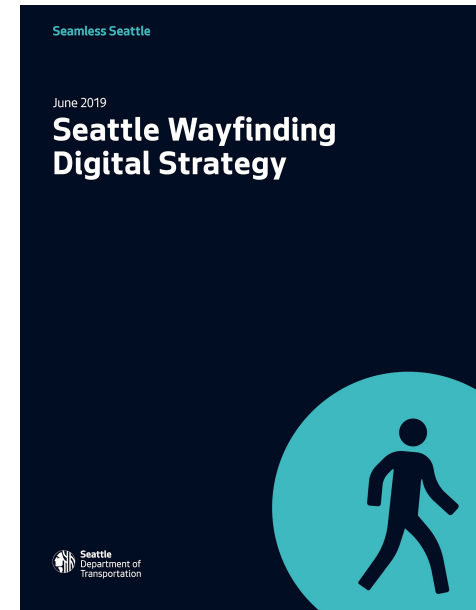
Digital Strategy

A Digital Strategy has also been developed with a focus using digital tools to deliver, manage and maintain the system beyond the pilot phase. A number of the digital recommendations relate to accessibility and this document should be review in conjunction with this Accessibility Summary.

2.0 Sign Content

Map Content

The inclusion of content such as accessible through routes and slope information help give users an understanding of the routes most suited to their needs.

Finder Map Crop
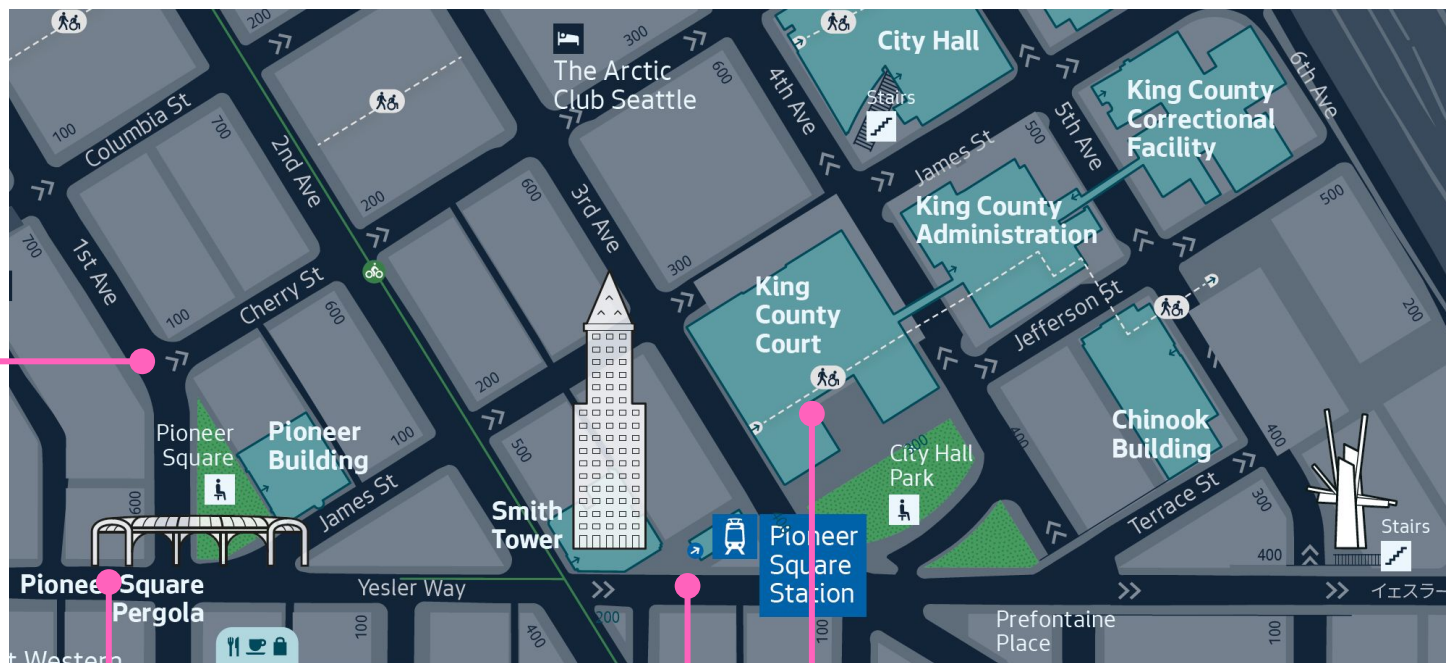
Slope information
Slopes are marked when they are greater than 5%, which does not meet ADA accessibility standards. Chevrons indicate the direction of slope to give users more context about the street environment and whether the route is suitable.

Illustrations
Illustrations of visually recognisable landmarks are used to support navigation, particularly users who find visual landmarks easier to recall than street names and addresses

Accessible through-routes
The map marks these routes, often known as 'hill-climb assists' to promote their use and ensure users know alternative routes available to them if they want to avoid stairs or steep slopes. These routes are also supported in-situ.

Accessible entrances
Accessible entrances are marked to all transit stations. Marking these entrances gives users confidence to plan their journey to a transit station knowing the entrance will be accessible.

Map Design

To maintain legibility, the way assets are shown on maps has been carefully considered, with a particular focus on ensuring the map is as accessible to as many users as possible.

Where ADA guidelines are applicable, these have been adhered to. These guidelines are more relevant to sign design and directional content than map design. In particular the placement of information at a height that is accessible to users and the size of type in directional content. Please refer to the Visual Design Standards for more information.

Accessibility best practice has been followed during the development of map design, including the following:

- Contrast between text and background have been maximized to ensure legibility
- Optimization for all forms of color blindness
- Large type sizes
- Careful balance of content
- Simplification of complex topography
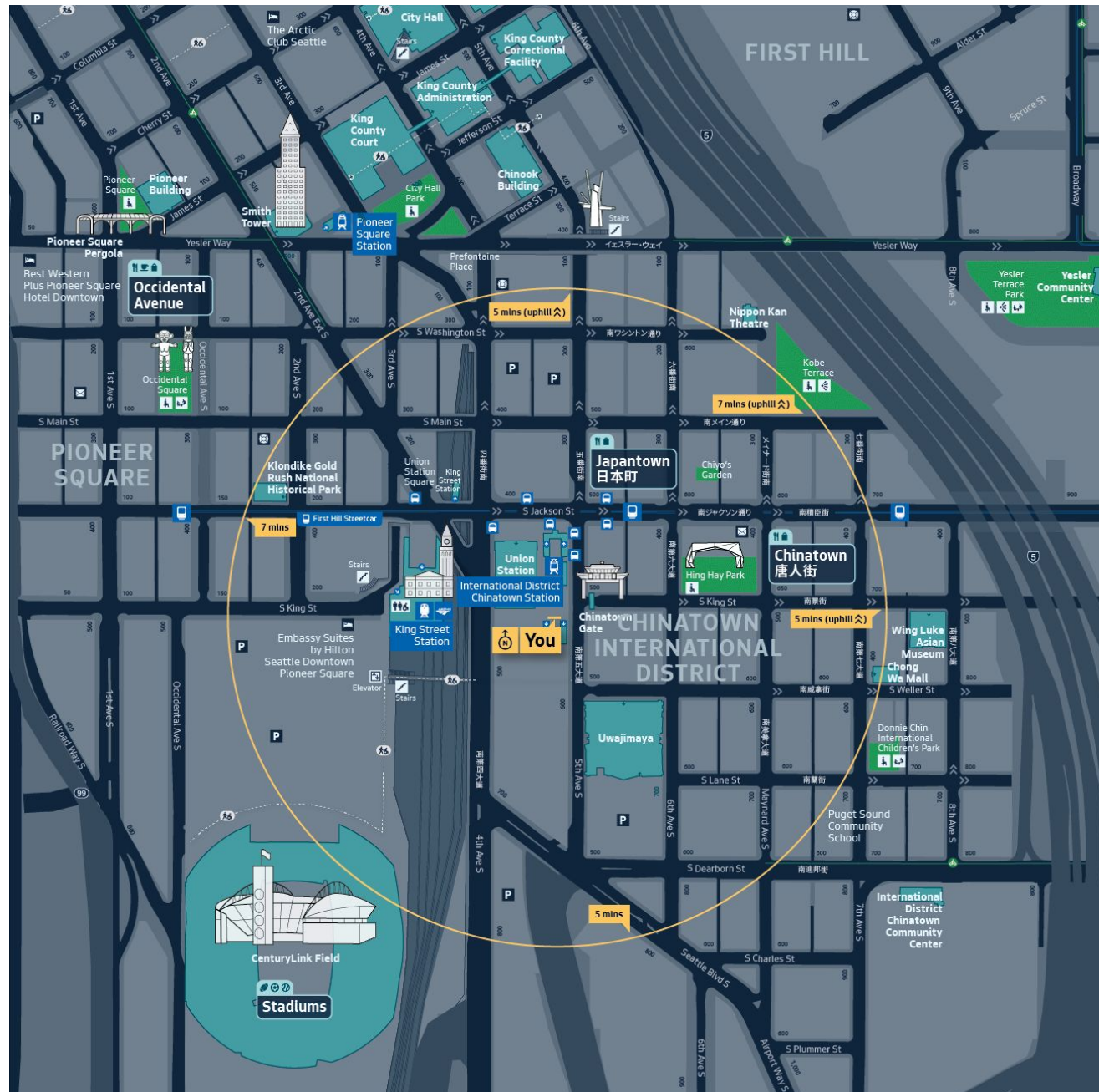
Braille & Tactile Panel

Braille and tactile content is included on nudge, area and overview signs. Content states the location address as it appears in text at the top of the sign. Both Braille and tactile content are read vertically, following the precedent set by the Sydney system, see image below. The use of vertical content allows more room for address information.

Example of Braille and tactile sign

The city of Sydney, Australia rolled out 2100 Braille and tactile signs throughout the downtown area. These are co-located with crosswalk push buttons at intersections and consistently placed at 90 degree angle with push button.

Image source: https://www.outdoordesign.com.au/news-info/tactile-signs-make-navigation-easier/4586.htm
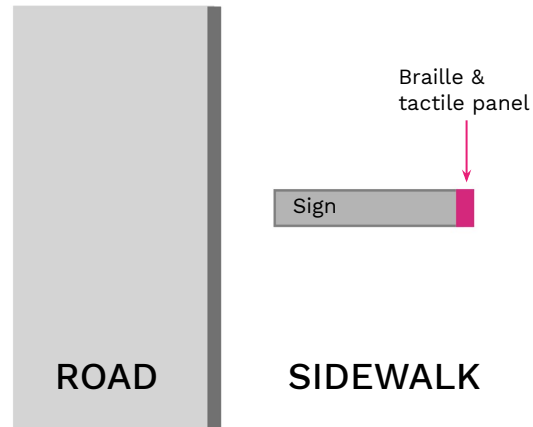
Location of Braille and tactile content on an Area sign

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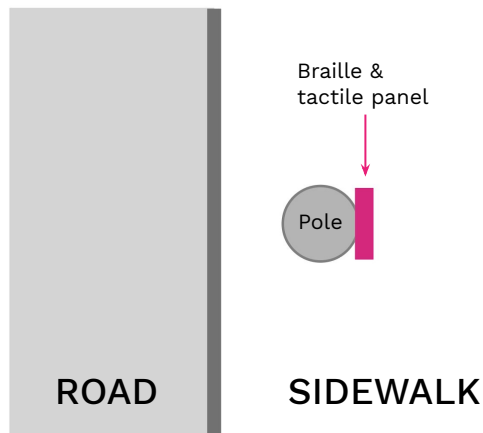5TH AVE S

3.0 Sign Types & Placement

Area, Overview and Nudge Signs

Signs are placed in the street furniture zone between the kerb and pedestrian movement, please refer to working document 03 Sign Placement & Clutter Reduction for more information about sign placement.

Braille and tactile content should always be placed on the edge of the sign facing into the pavement to ensure there is enough room for users to safely read content. This is explained in the diagram opposite.

Braille & tactile panel

ROAD   SIDEWALK

Sign

Plan view showing position of Braille and tactile content on Overview and Area signs

Braille & tactile panel

ROAD   SIDEWALK

Pole

Plan view showing position of Braille and tactile content on Nudge signs
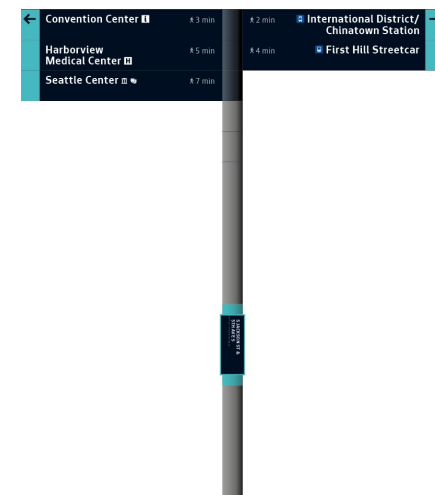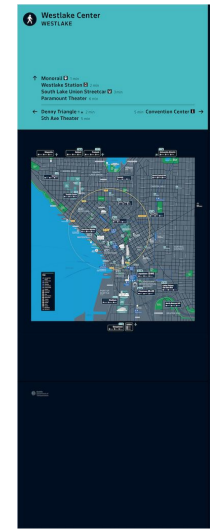
Supporting Accessible Routes

There are many publicly accessible routes through buildings in Downtown Seattle that allow users to avoid steep slopes or steps, these are often referred to as 'hill-climb assists'. In some cases these routes are difficult to locate in-situ and they rarely appear on maps. As a result, many of these these accessible routes are not well used, particularly by those who are unfamiliar with the city.

To improve accessibility and encourage exploration of Downtown, the wayfinding system will provide support in locating and using these accessible routes. Their inclusion on maps has already been discussed, in addition, two sign types will be used to mark these routes on-street. Following testing and evaluation of these sign types during the pilot, content and other changes will be incorporated. After this process, more detailed content guidelines should be established.

Promoting accessible routes
The Route Marker & Description promotes accessible routes through buildings. They are located at thresholds to accessible routes and provide information about the type of route users will encounter.

By identifying these in-situ, accessible routes will be easily identified, encouraging their use and making the city more accessible for those who may struggle with steep slopes and stairs.

Alternative accessible routes
The sidewalk medallion is used at a decision point where a more accessible alternative route is available to users. This could be a location where one route is via a steep hill and another via an accessible or less steep route.

Clearly presenting these options to users will allow them to make an informed choice about the suitability of route.
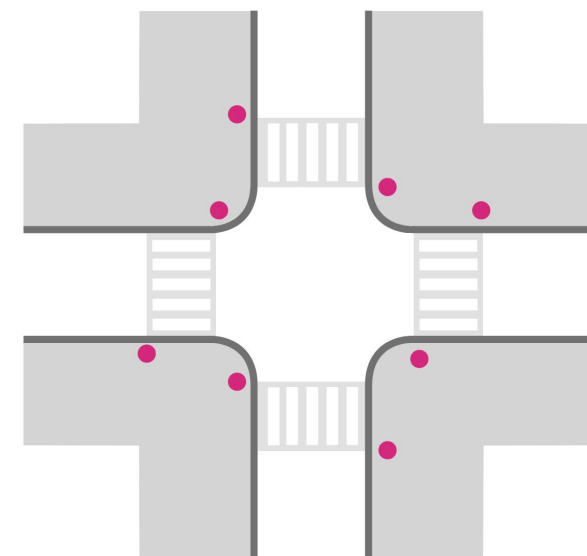
Intersection

Braille and tactile content was explained in the previous section. In addition to their inclusion on Area, Overview and Nudge signs this content is also placed at intersections. These locations are a critical point for orientation as users approach a decision point and need confirmation of the street they are on and the street they are approaching.

Braille and tactile content will include the street name and block number of both intersecting streets, listing the street the user is on first.

PINE ST 300 & 4TH AVE 1600
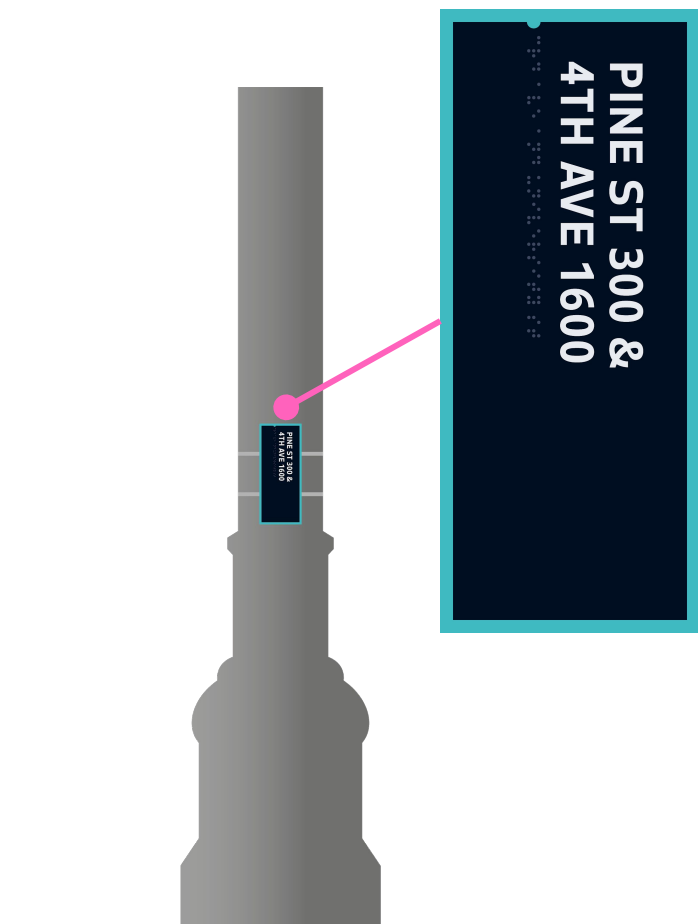
Location information for visually impaired users
Braille and tactile information at intersections is being tested at one intersection during the pilot; Pine and 4th. In this location signs will be attached to existing infrastructure to test the effectiveness of this information in the environment. In future roll out, sign placement should be less opportunistic and poles installed to display this information in the most appropriate location for users.

Plan of typical sign placement at intersection
Information should be consistently placed to ensure users are able to locate it. This diagram shows information consistently placed on the left side of a pedestrian crossing. Effectiveness of sign placement will be reviewed during pilot evaluation.
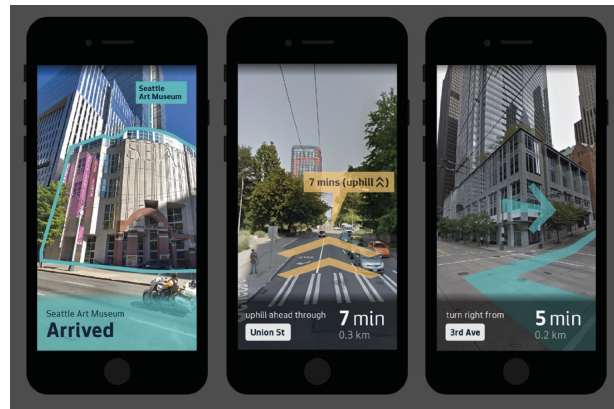
4.0 Future Opportunities

Future Opportunities

Future roll-out of the wayfinding system will provide opportunities to build upon initial implementation through the development of signs types, content and placement, amongst other things.

In particular, there will be an opportunity to develop the system from an accessibility perspective. This could include linking the on-street signs to digital tools via QR code and web address, bluetooth beacons or other similar technology.

Augmented reality (AR) could also be considered, to allow users to overlay information tailored to their needs onto physical signs. This could include language changes, route plotting, on-route support, interpretive information (with the possibility of including videos).
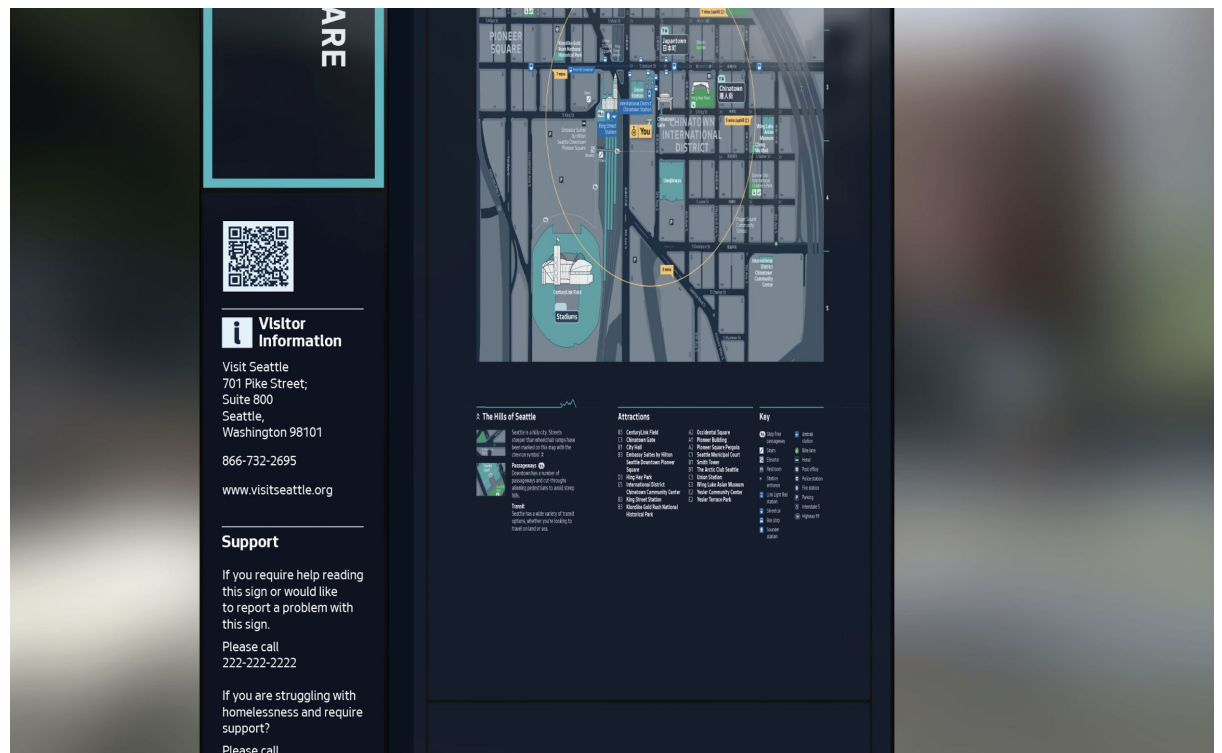
Further efforts can also be made to include more detailed information on support and adult services.

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Augmented Reality - Interactive Overlays

Augmented Reality - Live Route Support



QR code and contact information

Future Opportunities

Discoverability of wayfinding for visually impaired users could also be improved further by installing tactile paving across the sidewalk and around the sign.

Additionally, a further expansion of the wayfinding system could include tactile maps in strategic locations, giving all users (with a focus on the visually impaired) a better spatial understanding of the city or area they're in.
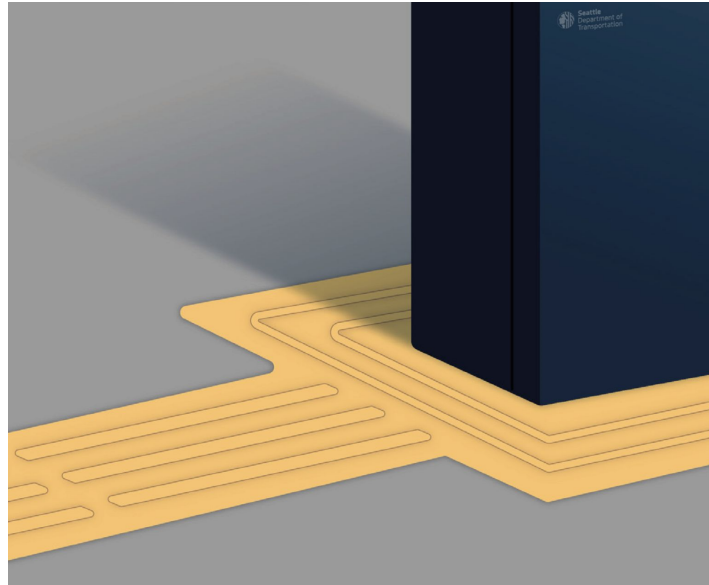
Example of a tactile strip used to help visually impaired users locate a sign
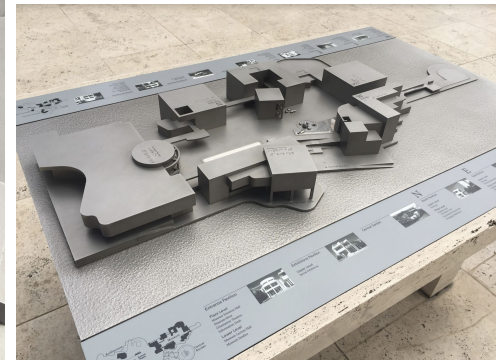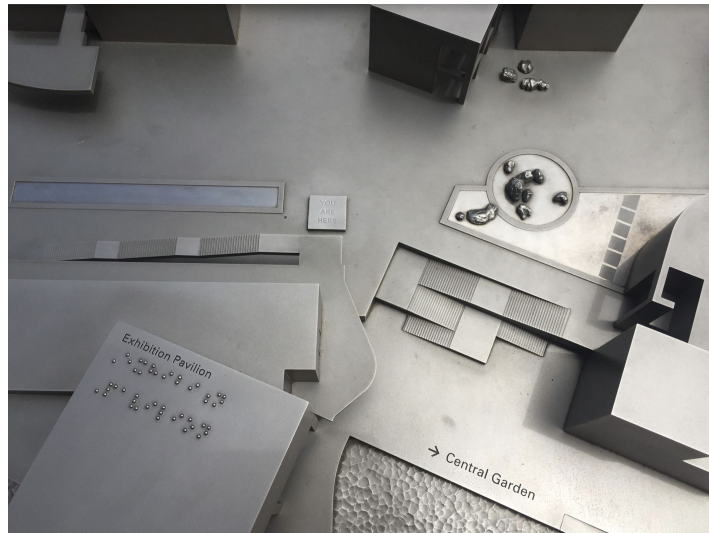
Tactile map at the Getty Museum, Los Angeles