







**CHAPTER FOUR**  
*Wayfinding*

VISION

The wayfinding system will play a vital role in communicating the Main Street’s values and personality through the delivery of highly tailored and place-specific design solutions that will reveal and integrate Main Street and make it welcoming, easy to understand and navigate.

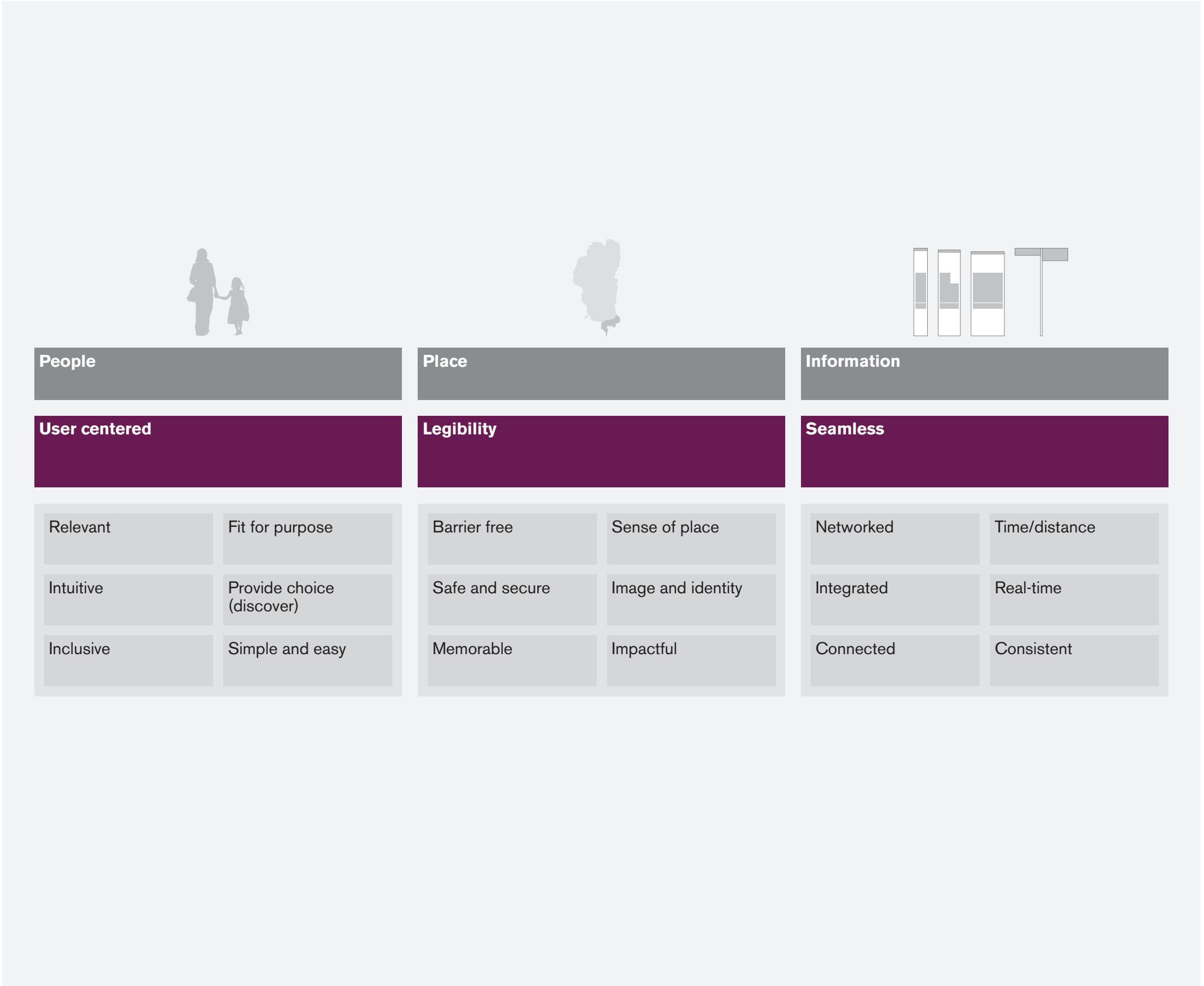
This wayfinding strategy considers how all elements of the public realm and its varying streets, spaces and their composition can serve to help reinforce a user’s understanding of the Main Street and surrounding areas and guide their navigation to, from and within it.

SYSTEM GOALS

The project’s aim is to develop a user-centred information system which addresses all user needs, modes and journey stages. In order to achieve this the system will unify Main Street’s information, improve accessibility, reduce both on-street and printed clutter, and encourage exploration through sustainable transport modes.

The benefits of developing an information system for Main Street – based on the approach above – include increased footfall, improved sustainability as well as social and economic interests, such as:

- Promoting walking, cycling and sustainable modes
- Prioritize pedestrian activity
- Encourage pedestrian movement
- Enhancing the experience of the Main Street
- Provide ease of interchange across modes
- Improve city-wide legibility and connectivity
- Expanding visitors geographic knowledge and extending stays
- A destination designed for users – the individual and the family
- Maximize repeat visits
- Reduce sign clutter
- Maximize sustainability





# WHAT IS WAYFINDING

Wayfinding tells a story of the Main Street and South Lake Tahoe area, helping give it a more memorable image and identity.

Wayfinding can be provided in solutions ranging on a scale from obvious signs, to other elements within the urban environment and its structure, such as: architecture; landmarks; public space; landscaping; public art; lighting; and street furniture. This can be described as a ‘placemaking’ approach.

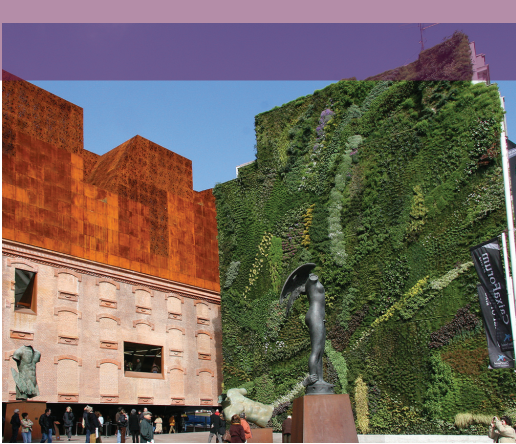
# PLACEMAKING

People’s understanding of a place is conditioned through a range of environmental ‘signals’ or ‘cues’. These visual cues individually form a series of messages and meanings that collectively inform perceptions of the place’s image and identity.

## SUBLIMINAL TO LITERAL

Wayfinding is not just about literal signs – such as maps and directions – but also about the series of elements that users rely on to navigate through the urban environment. This is provided in an obvious or subtle way through the urban environment and its structure, architecture, landmarks, public space, landscaping, public art, paving, colors, materials, lighting and street furniture.

Collectively these elements play an important role in influencing a user’s ability to read their environment. These wayfinding ‘visual cues’ can help to guide a user and provide a sense of welcome, create distinctive memory points or reinforce direction.



Subliminal signs

Literal signs



## EXISTING CONDITIONS

## METHODOLOGY

A thorough understanding of South Lake Tahoe's component parts, it's user's needs and best practices will ensure that a comprehensive, responsive and appropriate wayfinding strategy works effectively and harmoniously within South Lake Tahoe's environments and contexts.

The methodology developed to critically appraise South Lake Tahoe's current urban structure consisted of several key tasks:

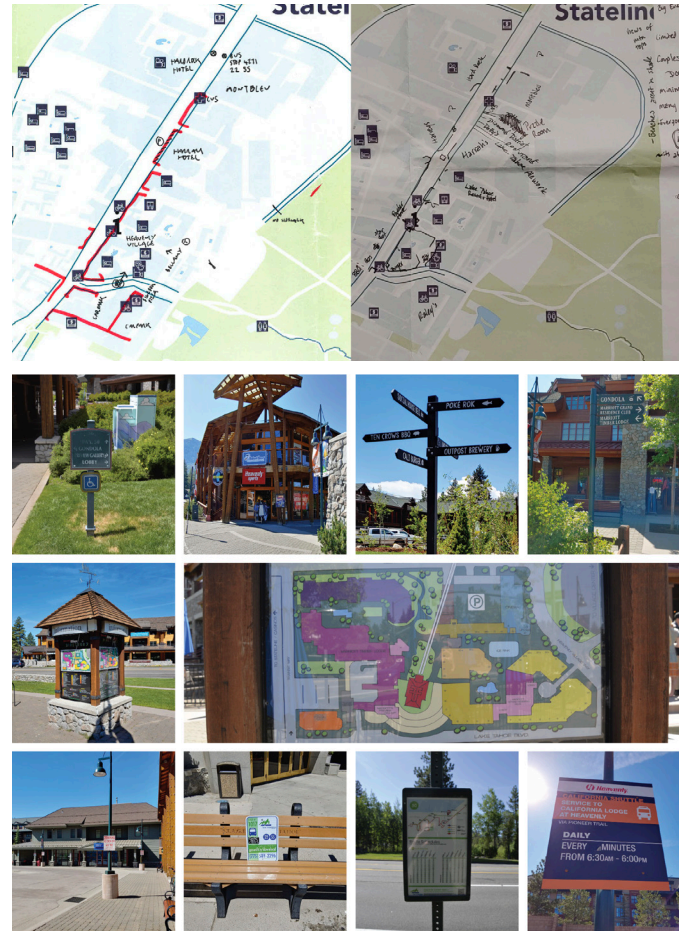
- Document review
- Physical analysis
- Benchmarking and best practice
- Stakeholder consultation

## SUMMARY FINDINGS

The contextual analysis and review provided a series of high level system considerations to be adopted by the strategy in order to address all the needs and concerns of South Lake Tahoe:

## HEADLINES

- The system should be extendable (outside of the project area) and into other geographic areas and modes; this is one destination area of many in Tahoe
- The development of multi-modal information needs to be at the center of the Wayfinding Strategy
- Improvements to the quality and consistency of information and product forms
- The Strategy must emphasize the importance of providing information in other formats such as print and digital and people services – creating a multi-channel approach
- Measures must be taken to address how the Strategy can influence the information provided by hotels, retail, restaurants and other third-parties to ensure consistent information provisions
- Create a welcoming arrival and orientation experience at key arrival points such as the Information Center and Bus Hub.
- Intelligent Transportation System and technology-based improvements are lacking and require coordination across jurisdictions and landowners.

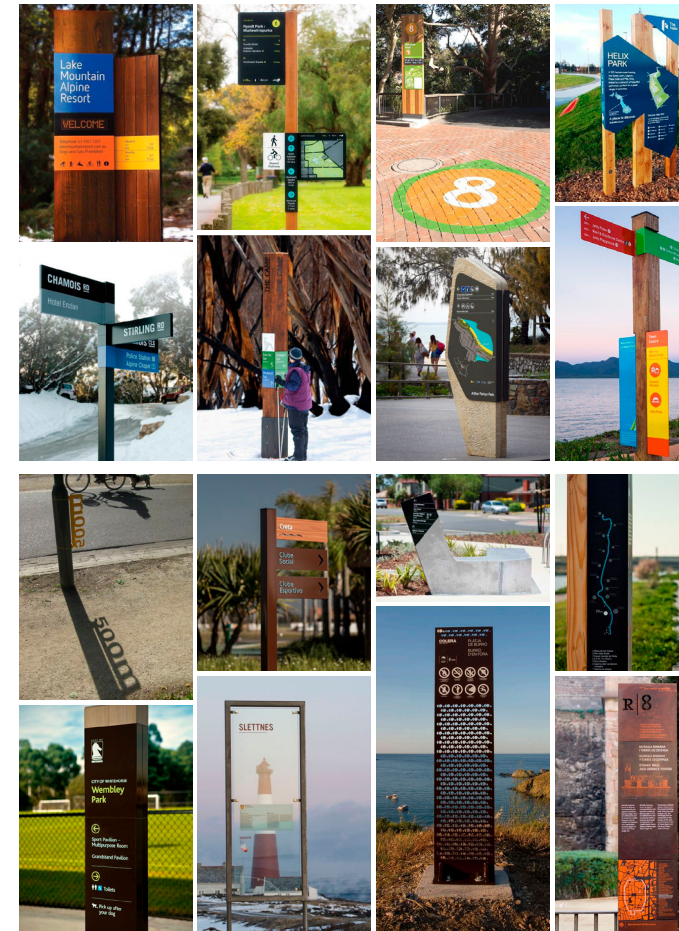


## PHYSICAL ANALYSIS

A review of South Lake Tahoe's existing research, study resources, physical analysis and existing conditions was conducted to inform preliminary definition of wayfinding route hierarchies, key gateways and nodal decision points.

On-site analysis was structured around the following aspects:

- Movement
- Streets and spaces
- Destinations and activity hotspots
- Information provision



## BENCHMARKING AND BEST PRACTICE

Benchmarking and best practice was carried out to define best practice points relevant to the development of the strategy.

The research focused upon best practice examples related to the design of the public realm, promotion of walking and delivery of regeneration projects in a range of environments, neighborhoods and cities.



## STAKEHOLDER CONSULTATION

Stakeholder engagement was undertaken to understand past, existing and known issues and concerns to be addressed through the wayfinding strategy. It also provided an important opportunity for key stakeholders to understand the scope of the wayfinding strategy in relation to how TRPA and its partners could improve its wayfinding user experience for all parties.



# USER NEEDS

## USER FIRST

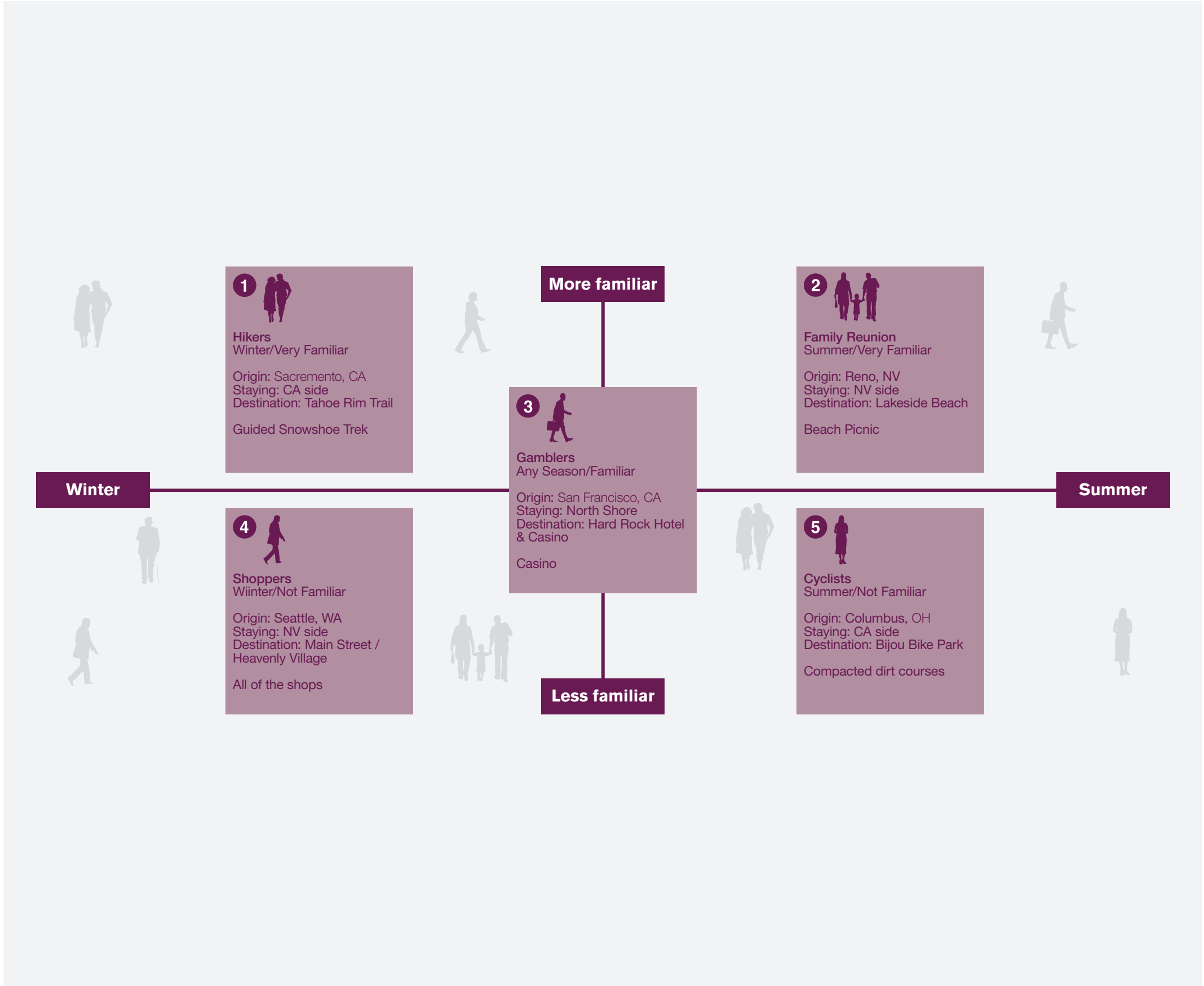
Designing with the needs of people at the forefront of the process is the foundation of good design. Such a design approach has the capacity to create an environment that mirrors the user’s understanding of place and thus resonates more deeply with the user.

Understanding the needs of the people and centering these needs within all planning and design phases will ensure the correct information is provided at each journey stage and through the most appropriate channel.

Identifying users’ expectations of a journey through persona building and scenario journey testing helps establish different routes types, product types and information requirements.

The user types featured within the opposite diagram and on the adjacent page are examples of the key user types. These key user types of the vision each have different needs that the wayfinding vision must address; the vision should improve the experience of the journeys made by both infrequent and regular users alike.

The users are plotted on the diagram with respect to their varying levels of knowledge of Main Street and whether the season is winter or summer. Each of the users type is distinguished on the adjacent page by their associated headline needs and the type of amenities they seek.





WAYFINDING PRINCIPLES

Wayfinding principles inform and shape the development of a wayfinding system. The principles shown right have been defined in response to project goals, existing conditions analysis and most importantly, user needs.

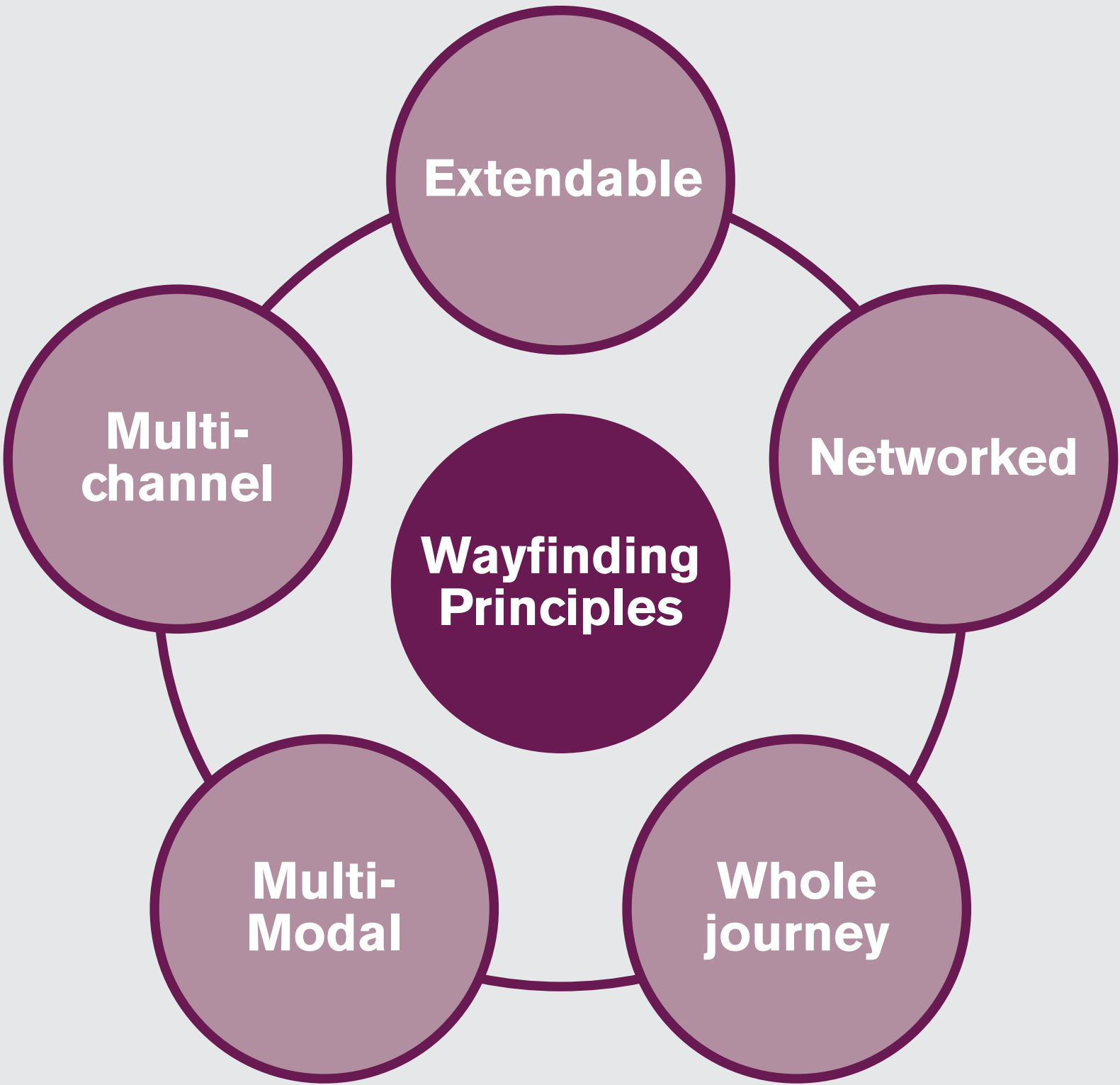
These principles – when combined – will create world-class system that considers the how information is provided across a users journey and provides that information in the most appropriate channel to a user or at a specific journey stage.

Descriptions of the principles are show on the following pages whilst the combined recommendations from those principles are shown below.

RECOMMENDATIONS

SYSTEM

- Develop a wayfinding system that is connected to the wider Tahoe Region
- Create a high quality product network which is simple to update and maintain
- Improvements to the quality and consistency of information and product forms
- All transit modes should be revealed on all mapping and information to create a truly networked system
- The Strategy must emphasize the importance of providing information in other formats such as print and digital and people services – creating a multi-channel approach
- Measures must be taken to address how the Strategy can influence the information provided by hotels, retail, restaurants and other third-parties to ensure consistent information provisions
- Main Street is a naturally legible destination. Consistently reinforce people’s mental map at all journey stages
- Improve pre-journey travel planning resources for visitors, businesses and employers





**EXTENDABLE**

Whilst the initial focus for implementation will be the Main Street project area, the range and application of components should be designed to be adaptable and extendable to harmonize journeys across the wider South Lake Tahoe area and even the entire Tahoe area.

Creating an extendable system will allow for a more seamless journey experience as visitors and residents travel across the region.

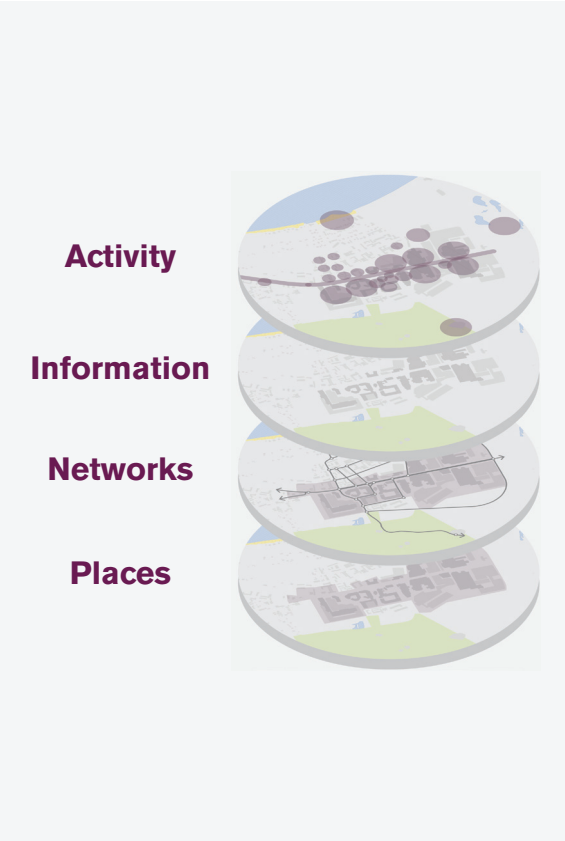
With a comprehensive system of wayfinding components that share common design features, materials and built structures, it will be possible to achieve economies of scale.



**NETWORKED**

Main Street’s urban structure can be described as a collection of ‘layers’ representing different features and functions of the area. An approach that considers the structural and functional make-up of the area in its entirety helps inform and create a comprehensive wayfinding system.

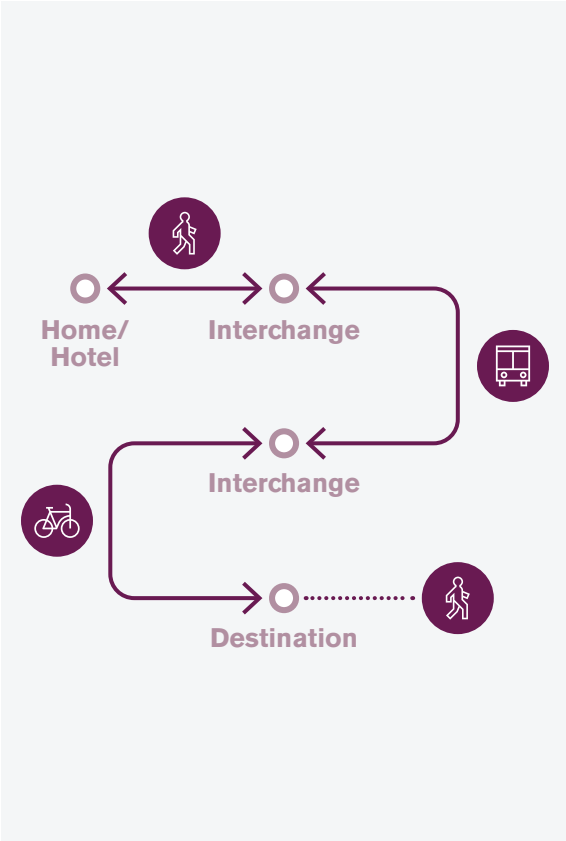
A networked approach combines places and spaces, transit and pedestrian networks, information and activity into a singular visual composite. This approach means Main Street will be revealed in a manner which allows visitors and residents to navigate, orientate and explore with ease.



**WHOLE JOURNEY**

Journeys to, from and around Main Street are experienced through a sequence of orientation and navigation points between A and B and any single journey can use a combination of modes.

Provide a consistent system of information using a unified system of parts, with a clear and intuitive visual language to create a seamless experience through all points of touch.

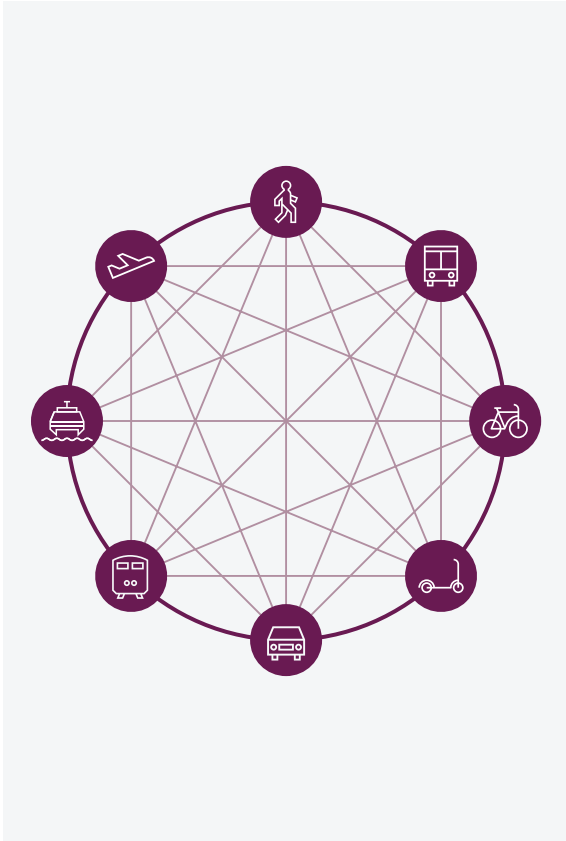


**MULTI-MODAL**

A multi-modal system focusses on improving the connections between modes and ensures a seamless transition.

The overall approach to creating a successful wayfinding system for Main Street aims to achieve full integration of transport and movement services and their associated information provision. An easier system to understand and use will inevitably encourage return visits and increased transit use.

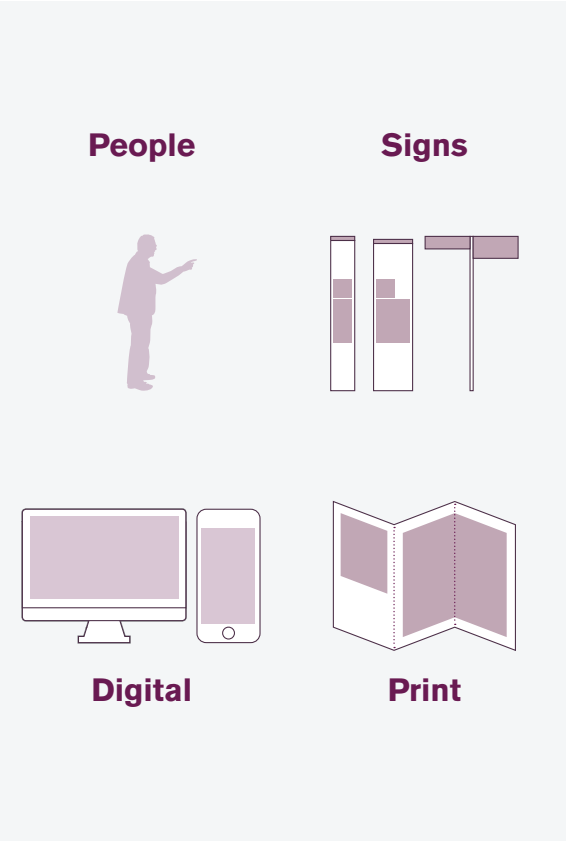
Walking is seen as the core activity in Main Street which connects all other modes of transport and types of movement.



**MULTI-CHANNEL**

It is important to develop relevant products and services that are delivered through the appropriate channel of communication – meeting the users’ needs at every stage of the journey.

People receive information – and expect to access information – through a range of communication channels that are available to them. Each user will construct their own unique journey in a way that suits their needs; accessing different products, through different channels at different moments in time. By providing information in the appropriate formats, Main Street is able to provide the required support – and improve the overall experience – as people travel to, from and around Main Street.





# KEY THEMES

Key themes act as informational concepts or considerations that will eventually be visualized and embedded into the wayfinding system. These concepts have been defined in response to the existing conditions analysis.

Descriptions of the principles are show on the following pages whilst the combined recommendations from those principles are shown below.

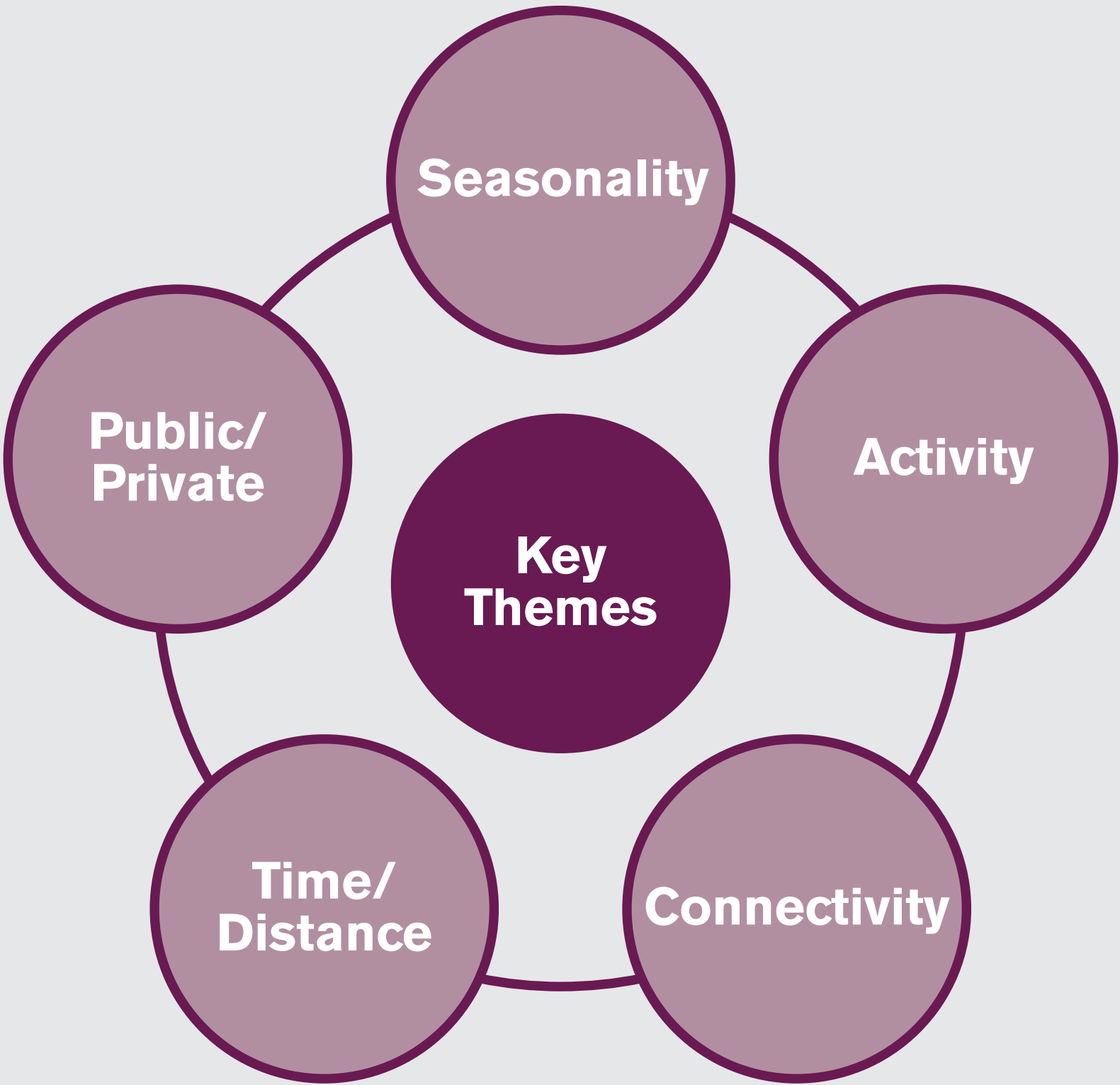
## RECOMMENDATIONS

### PRODUCT

- Wayfinding products will need to be robust enough for harsh weather conditions
- Wayfinding products should incorporate digital technologies to allow for flexible and easily updateable information

### INFORMATION

- Mapping should respond to seasonal changes
- Mapping will need to be easily updated and at a low cost
- Reveal a 'calendar' of events within the on-street wayfinding products
- Mapping should reveal key activity areas such as beaches, parks casino core and event spaces
- Clearly reveal primary connecting streets between areas and destinations
- Mapping and directional information should include walk and cycle times
- Mapping should clearly indicate the difference between public and private land use
- Activity 'tabs' should be used to inform visitors of which areas are available for free and those areas that are accessible through a ticketing such as beaches and pools
- Reinforce mental map of the city for both new visitors and residents to encourage and give confidence to explore further
- Guide people by highlighting the primary and accessible routes and key landmarks





SEASONALITY

Seasonality has a great impact on how users navigate and interact with Main Street. Activity areas and their connecting routes may vary from season to season. This highlights the need to create a system that is adaptable, updateable and easily maintained.

As activities and the routes connecting them change from season to season the mapping will need to respond to these changes and show ‘season’ specific information. Season specific information will provide the appropriate knowledge and tools users will need to make informed decisions about their journeys.



Tailored mapping for events (SJ Superbowl) that highlights key areas of interest relating to various activities relating to an event. (example from Downtown SJ Superbowl print map)

ACTIVITY

Tahoe is a vibrant hotspot for activity all year round. This diverse range of activities should be elevated and expressed clearly to visitors and residents alike.

The wayfinding system should incorporate a dynamic approach to revealing headline visitor and event information. Building on the need for flexible seasonality and activity information, providing a dynamic approach will create an increased ‘sense of service’.



Activity ‘tabs’ used to highlight activity areas within mapping. This provides a richer level of detail and allows the user to identify areas for them. (example from Southampton legible City)

CONNECTIVITY

Main Street requires a system that works at the level of a ‘complete multi-modal network’ as well as linking both inwardly and outwardly to neighboring destinations and other parts of the Region.

Creating an environment that is easy to navigate requires clear gateways, seamless transitions around the edges of Main Street as well as greater sense of identity within. There should also be an emphasis on areas where people move between different transportation hubs promoting smooth integration between journey types.

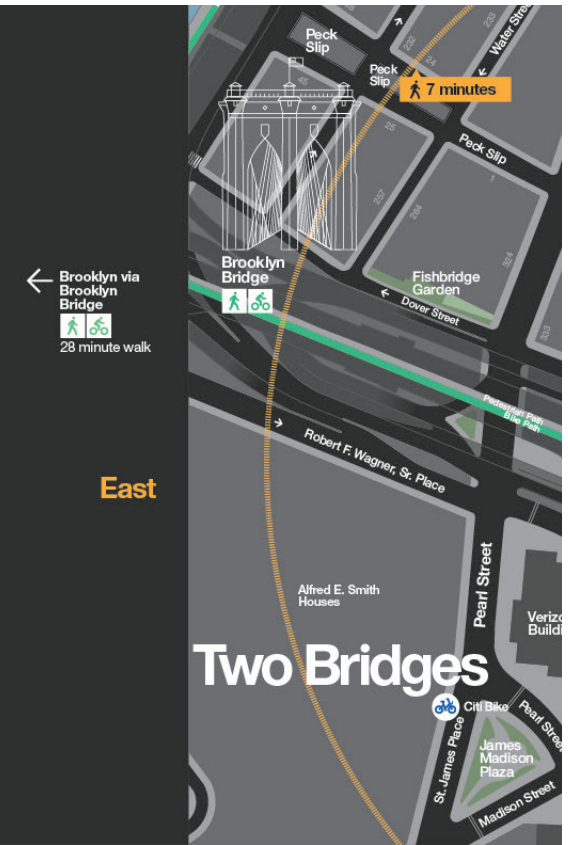


Highlighting key connecting routes (in yellow) to aid users in connecting between one area or destination to another. (example from Legible London)

TIME & DISTANCE

To support the idea of ‘connectivity’, time and distance is an important element in communicating the ease of connectivity and encouraging longer journeys.

Providing a sense of geographical context through time and distance (graphic devices such as walk circles and off-map pointers) will greatly improve a users’ understanding the scale of Main Street, South Lake Tahoe and the surrounding areas. A heightened understanding of time and distance will encourage the use of sustainable modes of transit and reduce the reliance on private cars.

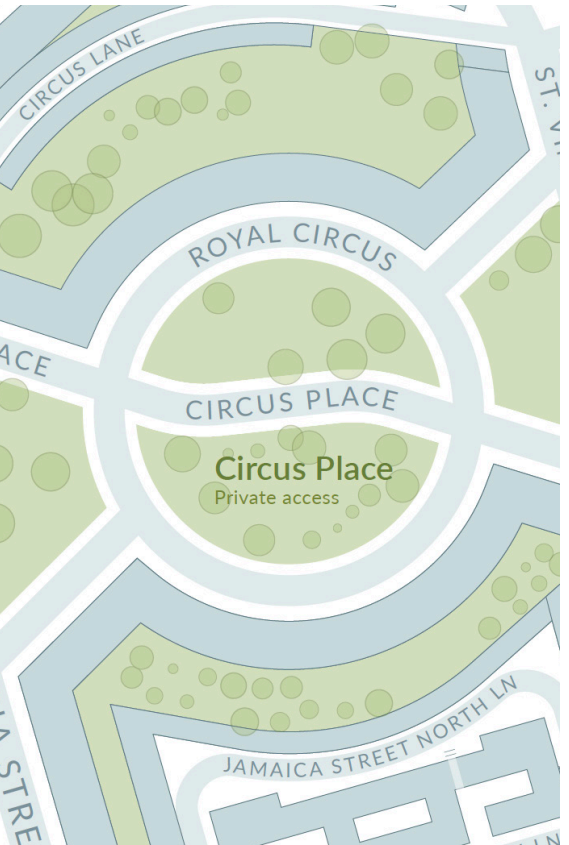


Walk circles and timing points allow users to clearly understand time and distance. Off-map points also aid in understanding what is accessible past the map cut. (example from WalkNYC)

PUBLIC & PRIVATE

Communicating public and private areas in and around Main Street will play a key role in allowing visitors to improve their understanding of what is and isn’t accessible without admission fees.

This improved understanding allows guests to plan ahead and minimize ‘surprises’ that might arise once arriving at a private beach. An open and honest approach to mapping will instill trust in the information and improve peoples perception of the wayfinding system.



Mapping can aid in illustrating which areas are accessible to visitors and residents. The example above illustrates labelling to indicate ‘private areas’, all pedestrian accessible areas are illustrated by the white areas. (example from Edinburgh)



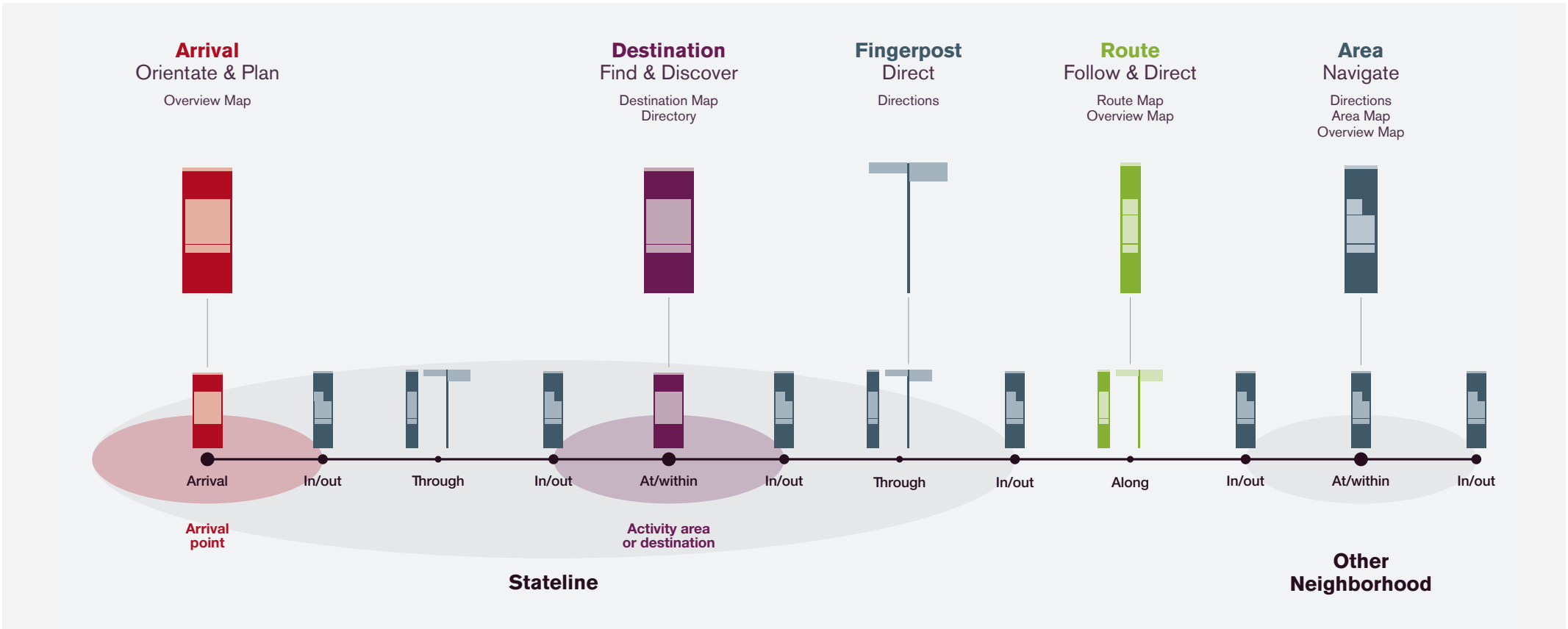
# SYSTEM ARCHITECTURE

## PRODUCT CONCEPT

Main Street requires a system of products that can adapt to the multiple activities and environment type, one size does not fit all.

As a result, a scope of conceptual product types have been identified to address the various user, activity and environmental needs across all journey stages.

A modular approach to the system allows for a single system to be applied to multiple environments and journey stages. A modular approach to the definition of the product types allows a singular system to be applied in an adaptable and curated manner – therefore each product type is appropriate to location and the information it needs to communicate to visitors.



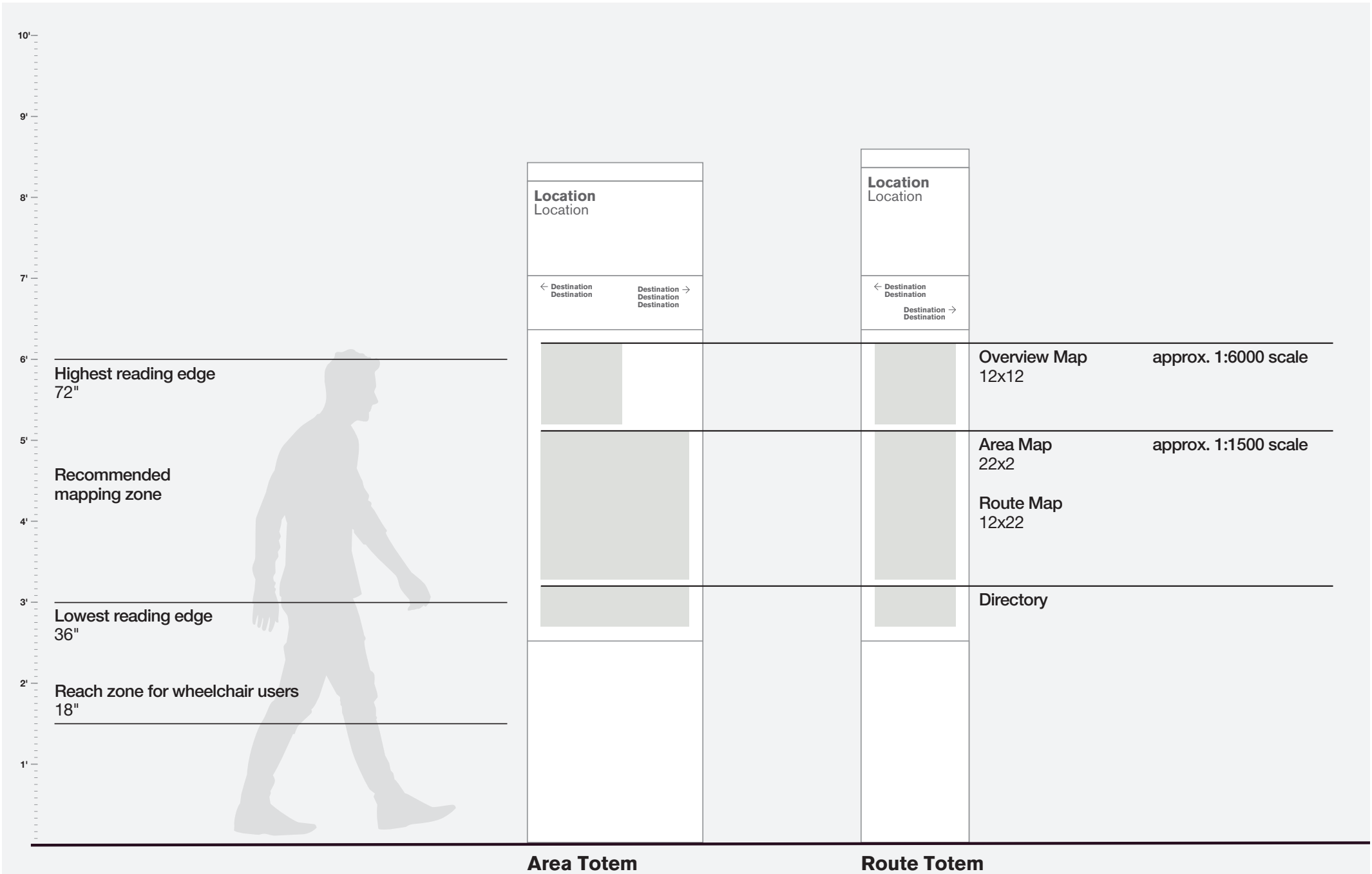


# INFORMATION CONCEPT

Ergonomics and ADA compliance are key in the development of the product and information concepts. The system must be accessible to all.

The diagram right shows the recommended reading heights for various information types. Two primary product types are shown right to communicate the which information types will be revealed in

Note: Product forms are indicative. Further information and product design development is required at a future date as the project develops.





INDICATIVE CONTENT

Indicative content has been defined for the project area and surrounding areas. This content has been divided into a hierarchy, the table below outlines the hierarchy categories and the graphical treatment.

SUPER PRIMARY

Activity Tab  
This text is draft as the actual text has either not been written or received yet.

PRIMARY

Destination  
Two Lines  
Three Lines

Destination  
Two Lines  
Three Lines

SECONDARY

Destination  
Two Lines  
Three Lines

TERTIARY

Destination  
Two Lines  
Three Lines

SUPER PRIMARY

Edgewood Tahoe	Resort & Recreation	Activity Tab
Hard Rock Casino	Hotel & Gaming	Activity Tab
Montbleu Casino	Hotel & Gaming	Activity Tab
Harveys Casino	Hotel & Gaming	Activity Tab
Harrah’s Casino	Hotel & Gaming	Activity Tab
Heavenly Village	Commercial & Residential	Activity Tab
Village Shopping Center	Commercial	Activity Tab
Van Sickle Bi-State Park	Recreation	Activity Tab
Lake Tahoe	Recreation	Activity Tab
Stateline Transit Center	Transit	Activity Tab

PRIMARY

Lake Tahoe Resort Hotel	Hotel	Text & Pictogram
Mariott Timber Lodge	Hotel	Text & Pictogram
Zalanta	Hotel	Text & Pictogram
Lakeside Beach	Recreation	Text & Pictogram
Lakeside Marina	Recreation	Text & Pictogram
Harveys Outdoor Arena	Entertainment	Text & Pictogram
Explore Tahoe Visitors Center	Visitor Information	Text & Pictogram
Tahoe Trails	Recreation	Text & Pictogram
Dotty’s Casino	Gaming	Text & Pictogram
Heavenly Gondola	Recreation	Text

SECONDARY

CVS	Pharmacy	Text & Pictogram
Chateau at the Village	Commercial	Text & Pictogram
Stateline Restaurant Brewery	Commercial	Text & Pictogram
Heavenly Cinema	Entertainment	Text & Pictogram
Raley’s	Commercial	Text & Pictogram

TERTIARY

The Landing Tahoe Resort & Spa	Hotel	Text
Basecamp Tahoe South	Hotel	Text
Beach House	Restaurant	Text

\* Tertiary content requires further analysis during the information development phase







# INDICATIVE PRODUCT SCOPE

Building on the conceptual product types the following pages outline all information and product types that have been identified as part of the Main Street product family.

The scope of products act as vehicles to deliver the wayfinding principles and key themes.

Note: Product forms are indicative. Further information and product design development is required at a future date as the project develops.

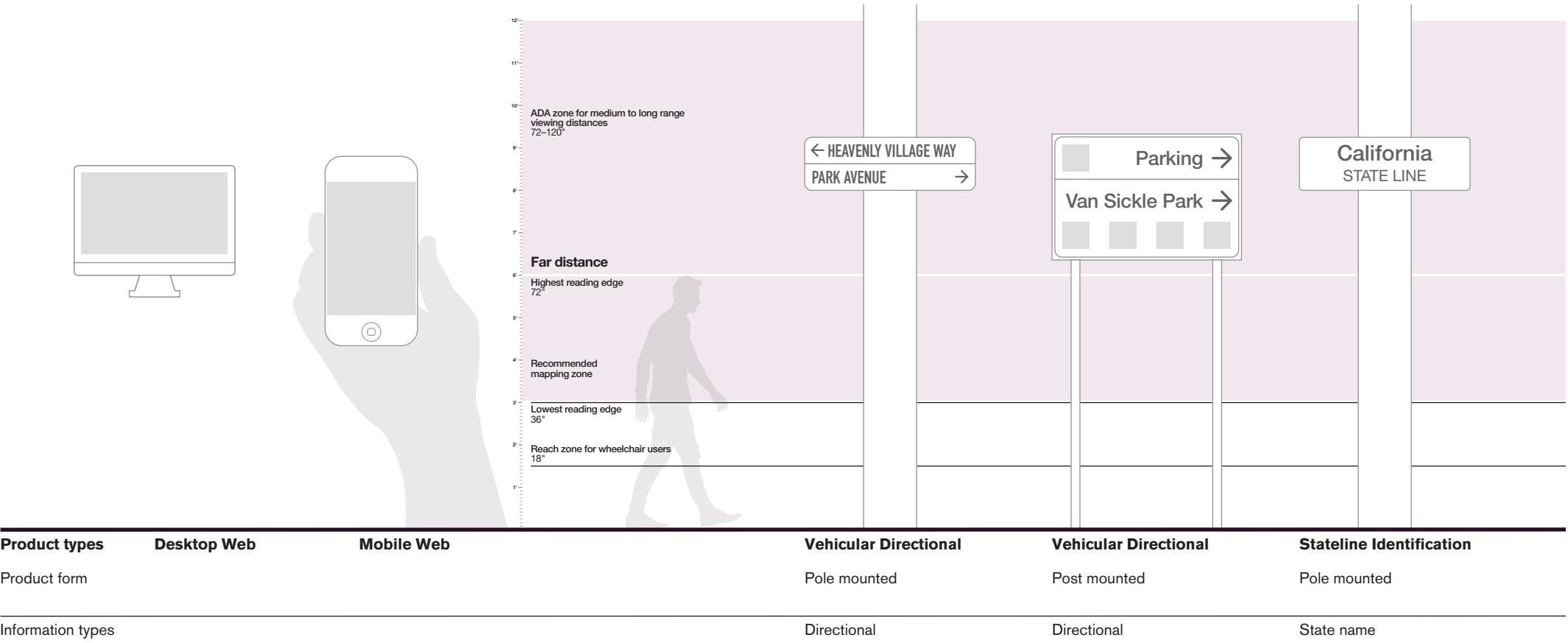
## Pre-journey

## En route – Vehicular

Wayfinding Principle

### Whole journey

The Wayfinding System will provide people with the right information at each stage of their journey, promoting a connected and consistent journey experience.





Sense of Place

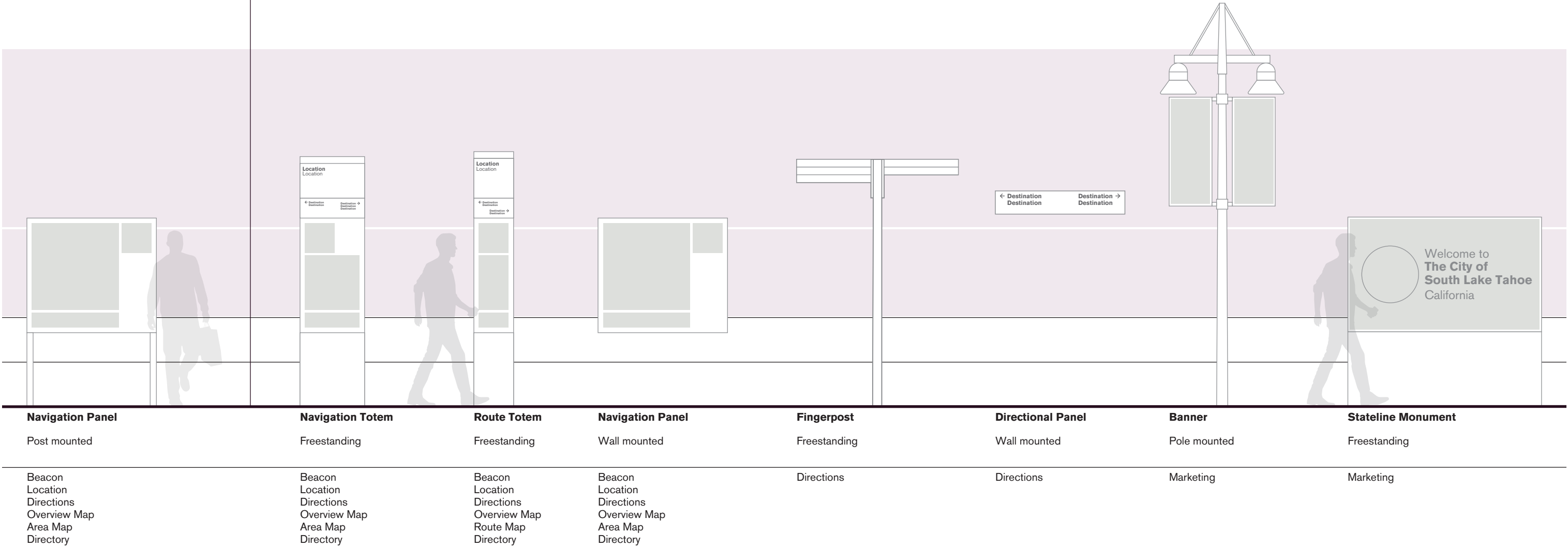
Providing the user with a stronger sense of place that can be used to reveal local landmarks and points of interest.

Key Theme  
Time/distance

Revealing time and distance will improve visitors understanding of the geographical scale of South Lake Tahoe and encourage the use of more sustainable modes of transit.

Key Theme  
Connectivity

Improving users' understanding of how to connect between areas of activity by multiple modes will encourage and increase exploration around the surrounding South Lake Tahoe.



Routes and trails

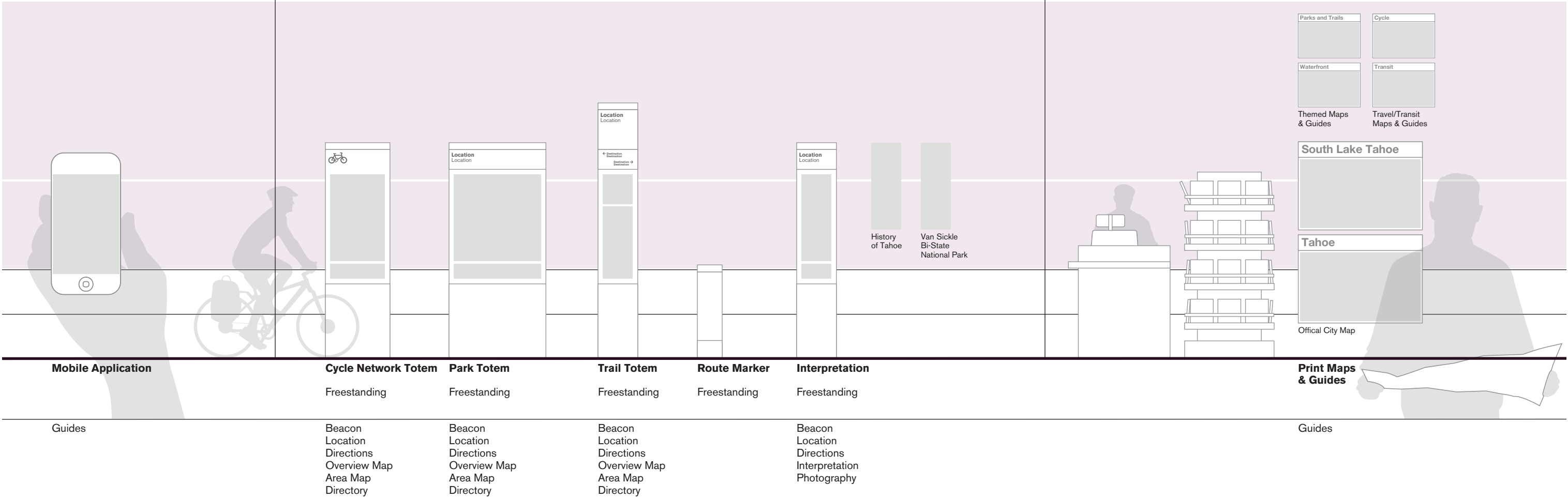
Route and trail based information will make use of distance markers and calorie counts to promote wellbeing and encourage healthy lifestyle choices.

Key Theme  
Seasonality

A system that reflects the needs of the seasonal changes will provide more considered and appropriate information that will improve the overall user experience.

Wayfinding Principle  
Multi-channel

The Information system should communicate across multiple channels which support the user with information on-street, in digital and on print formats, building towards a more connected journey experience.





Transit Center/s – Bus

At Stop – Bus



Wayfinding Principle  
Multi-modal

Integrated transit information within the Wayfinding system will contribute towards a more seamless multi-modal experience – improving legibility of the network.

Increase Transit use

Providing the user with reliable and up top date information about transit services in order to improve the perception of service and encourage the use of public Transit.

Station Signifier	Transit Hub Totem		Transit Network	Area Map	Bus Stop Totem	Bus Stop Flag	Real-time Information (RTI)	Transit Map	Area Map
Freestanding	Freestanding		Wall mounted	Wall mounted	Freestanding	Freestanding		Poster case	Poster case
Beacon Location Directions Overview Map Area Map Directory	Beacon Location Directions Transit Map Directory	Beacon Location Directions Area Map Directory	Beacon Location Directions Transit Map Schedules	Beacon Location Directions Area Map Directory	Beacon Location Bus departures (RTI) Overview Map Area Map Directory	Beacon Location Bus departures (RTI) Overview Map Area Map Directory	Bus departures (RTI)	Transit Map Directory	Area Map Directory

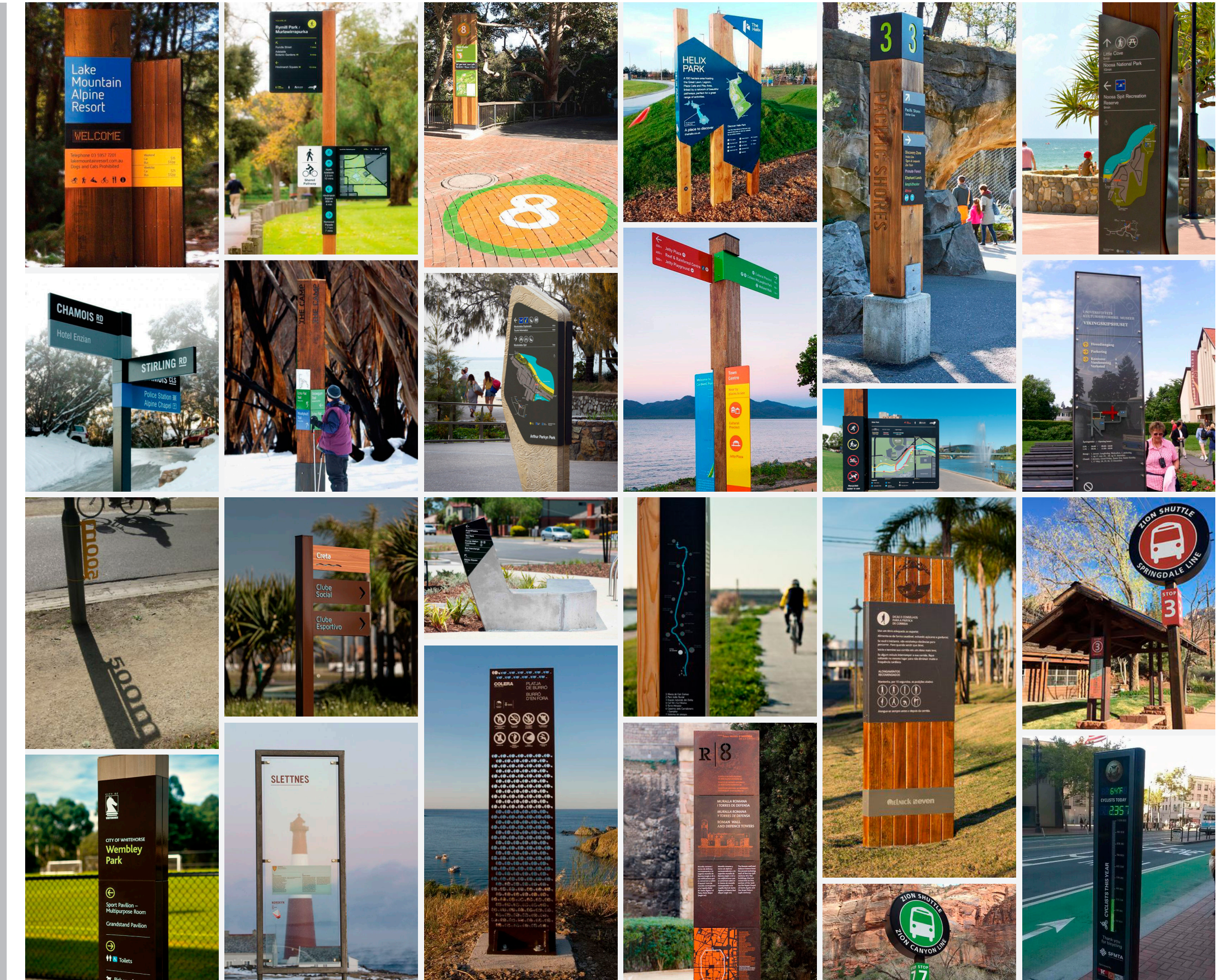
Onboard – Bus	Destination			At Stop – Ferry		Onboard – Ferry
	<p>Key Theme</p> <p><b>Activity</b></p> <p>Highlighting areas of activity and providing a rich level of detail and content will enable visitors to explore and discover and encourage return visits.</p>					
						
Route Map	Destination Totem		Alternative	Print Maps & Guides	Ferry Totem	Ferry Network Map
	Freestanding				Freestanding	
Transit Route/s Stop names	Beacon Location Directions Destination Map Directory	Beacon Location Directions Area Map Directory	Digital screen integration	Guides	Beacon Location Directions Ferry Network Map Schedules Pricing	Ferry Network Map Schedules Pricing



# MATERIALS AND FORM BENCHMARKING

The DNA of the Main Street area will need to be analyzed and ‘extracted’ during future identity and product development phases, to ensure the product speaks of the place. A series of benchmarking examples are shown right as an initial study into the most appropriate materials and product forms.

Note: Materials and product forms are for reference only, a detailed product design process is required in order to develop a cohesive scope of products.





# INDICATIVE LOCATION PLAN



## INTRODUCTION

A range of primary product types have been identified from the full product scope. These are seen as the ‘focus’ product types to be considered for a first phase of implementation.

Examples for each product type are shown right. This is an indicative location plan and an enhanced planning exercise is recommended to ensure these location are suitable based on engineering analysis and site surveys.

### STATELINE MONUMENT



### ARRIVAL TOTEM



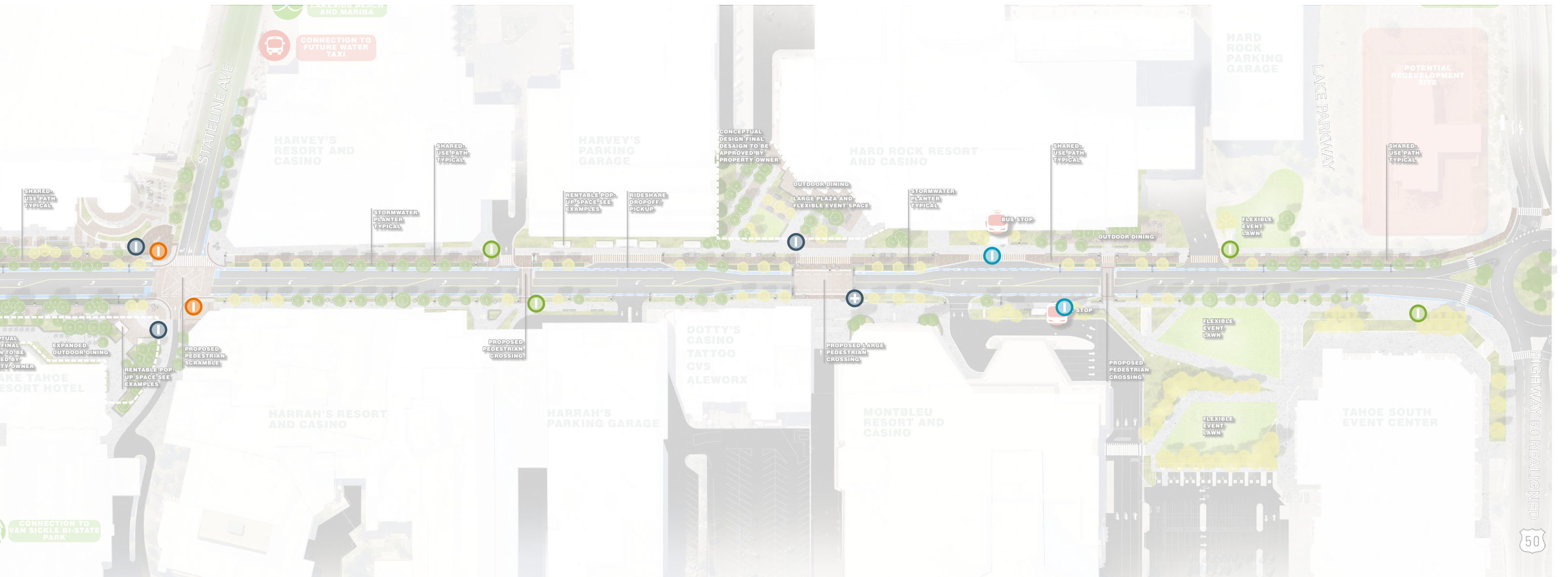
### DESTINATION TOTEM



### AREA TOTEM







**FINGERPOST**

**ROUTE TOTEM**

**TRANSIT TOTEM**

**TRANSIT FLAG**





# PROJECT RECOMMENDATIONS

## BUILDING THE WAYFINDING SYSTEM

The following section outlines the recommended list of individual projects to develop a wayfinding system for Main Street. The approach ensures that the wayfinding system is delivered ‘bottom up’, putting in the necessary foundations that will ultimately lead to economic, efficient and sustainable delivery of the wayfinding system.

### 1. ADDITIONAL STRATEGIC GUIDANCE

These include recommended studies to enable Main Street to fill gaps in strategic guidance that have been identified by the consultant through the development of this wayfinding strategy as additional studies required.

- 1.1 Pre-journey information strategy
- 1.2 Print communications strategy
- 1.3 Digital communications strategy
- 1.4 Interpretation strategy

### 2. SYSTEM DEVELOPMENT PROJECTS

These include the recommended development projects required to build system infrastructure prior to detailed design development.

- 2.1 Wayfinding system communication
- 2.2 Wayfinding information development
- 2.3 System identity development
- 2.4 Content requirement development
- 2.5 Cartographic development

### 3. DETAILED DESIGN DEVELOPMENT

These projects relate to the detailed design development of the wayfinding system products within the public realm, other products and services and pre-journey information.

- 3.1 Wayfinding product development
- 3.2 Detailed information design
- 3.3 Detailed location planning
- 3.4 Wayfinding system production
- 3.5 Wayfinding system manufacture
- 3.6 Wayfinding system installation

### 1. ADDITIONAL STRATEGIC GUIDANCE

#### 1.1 PRE JOURNEY INFORMATION STRATEGY

Develop a pre-journey information strategy to define a wayfinding information strategy as the start of a consistent whole journey wayfinding system for Main Street.

#### 1.2 PRINT COMMUNICATIONS STRATEGY

Develop a strategy for the design and delivery of print communications; to include scope of distribution and rationale for format and design for a range of print products.

#### 1.3 DIGITAL COMMUNICATIONS STRATEGY

Develop a digital communications strategy to ensure a robust rationale, products and services architecture and working processes for the delivery of coordinated city information products across marketing city vision and values, tourism, retail, wayfinding.

#### 1.4 DEVELOP AN INTELLIGENT TRANSPORTATION AND INTEROPERABLE TECHNOLOGY STRATEGY

Develop an ITS and technology strategy that is designed for traffic controls, consistent real-time traveler information, and coordination across jurisdictional boundaries and property ownership. Lack of existing regional traffic operations center and communications infrastructure should be considered.

#### 1.5 INTERPRETATION STRATEGY

Develop an interpretation strategy to enrich the user experience and reinforce a sense of place. The strategy would set a framework for a hierarchy of different types of interpretation information and how they could be revealed through different information systems to describe the unique vision and development story of Main Street. For example, it could highlight trails and themed walks that could link together common features or themes to tell the ‘Main Street story’.

### 2. SYSTEM DEVELOPMENT PROJECTS

#### 2.1 WAYFINDING SYSTEM COMMUNICATION

Planning, development and design of communication products for graphics/wayfinding to assist in advocacy, funding, procurement and partnership building. A range of communications could include visitor website, exhibition, digital and print publications.

#### 2.2 WAYFINDING INFORMATION DEVELOPMENT

Design and development of the information required for each on-street product types.

#### 2.3 SYSTEM IDENTITY DEVELOPMENT

Concept and development of a ‘system identity’ that looks to define what, where and how identity and brand is used within the wayfinding. This project will also be used to identity all the design resources required for further development such as typeface, color palette, pictograms, graphic devices, cartography styling etc.

#### 2.4 CONTENT REQUIREMENT PLANNING

Identify all content that is required for the map base/s and organized into a hierarchy.

#### 2.5 CARTOGRAPHIC DEVELOPMENT

Design and development of a defined scope of cartographic map bases, designed to be colored, populated with information and scaled for use in delivering wayfinding products.

### 3. DETAILED DESIGN DEVELOPMENT

#### 3.1 WAYFINDING PRODUCT DEVELOPMENT

Detailed product design development for all products comprising wayfinding system. Products would be developed through to general assembly drawings, detailed design specifications and tender documentation for manufacture.

#### 3.2 DETAILED INFORMATION AND IDENTITY DESIGN

Detailed information planning of information content for each sign type. Including map orientation, determining location specific map cuts and information content. Detailed design of identity elements identified within the system identity development project.

#### 3.3 DETAILED LOCATION PLANNING

Ongoing review and coordination of site construction drawings to set out sign locations through all environments. Using design guidelines carry out detailed location planning, to locate sign positions.

#### 3.4 WAYFINDING SYSTEM PRODUCTION

Production artworking of all products comprising the on-street wayfinding system.

#### 3.5 WAYFINDING SYSTEM MANUFACTURE

Manufacture of all products comprising the wayfinding system hardware. Procurement of manufacturing services and design engineering in liaison with appointed manufacturer(s).

#### 3.6 WAYFINDING SYSTEM INSTALLATION

Installation of all products comprising the wayfinding system hardware.

#### 3.7 SYSTEM MAINTENANCE

Development of a maintenance plan used to identity roles and responsibilities for updates.



