# **Interview of the second state of the second s**

NOVEMBER 2020 Designworkshop



# ACKNOWLEDGEMENTS

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\*SPECIAL THANKS TO THE **GENERAL PUBLIC** ATTENDEES AND THEIR VALUED INPUT IN THE PLANNING PROCESS

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# CHAPTER ONE Introduction

# **EXECUTIVE SUMMARY**

#### **Project Background**

A project with a long history, the transformation of US Highway 50 (US 50) on the south shore of Lake Tahoe is getting closer to revitalization. In December 1980, the Revised Tahoe Regional Compact was signed, calling for the relocation of US 50 to revitalize Lake Tahoe's Tourist Core and establish a Main Street corridor. In the 1990's the focus in the city was on redevelopment to transform the Stateline area into a destination location and encourage transportation choices to reduce vehicle use. Almost 38 years later, the US 50/ South Shore Community Revitalization Project's (US 50/ SSCRP) environmental documentation was approved and community and stakeholder energy is renewed to complete the redevelopment vision of destination amenity as a resident and visitor resort hub offering safe choices to access and enjoy the area by foot, bike, transit, or car.

In March of 2019, Design Workshop was hired by the Tahoe Regional Planning Agency (TRPA) to develop a Main Street Management Plan (MSMP) for the transition of the area after its conversion from a five-lane US Highway. The relocation of US 50 presents an opportunity to create a "Main Street" for the South Shore and transform the corridor into a world-class space for people, enhance the environment for those visiting surrounding properties, and provide an experience that matches the unique natural environment of Lake Tahoe.

The MSMP provides design guidance for the corridor and surrounding properties and includes a plan for a variety of transportation modes. Additionally, the MSMP defines the configuration, operation and management of what will become the US 50 corridor to achieve the goals of adopted plans and include wayfinding and performance management components as part of a comprehensive plan for the new Main Street.

#### Plan Area

This MSMP covers the bi-state South Shore corridor from which the current US Highway 50 will be located. It stretches from the intersection with Lake Parkway in Nevada to just beyond the intersection with Pioneer Trail in California. The existing corridor is the primary tourist core for South Lake Tahoe and Stateline, Nevada. The approximate 1.1 mile bi-state corridor currently exhibits two largely different streetscapes. The Nevada side consists of four hotel/casinos with traditional auto-oriented streetscape and vehicular access across pedestrian sidewalks. The California side has been largely redeveloped with a mixed-use pedestrian village containing retail, restaurants, vacation/resort style condos and a gondola. Vehicular access across pedestrian sidewalks is limited.



# **PURPOSE & OBJECTIVES**

#### TRPA Permit Condition 3.B

The US 50 South Shore Community Revitalization Project (SSCRP) permit application submitted by the Tahoe Transportation District (TTD) was approved by the Tahoe Regional Planning Agency (TRPA) Governing Board in November 2018. The permit includes 31 conditions that TTD must satisfy prior to a final permit being issued (permit acknowledgement). One of the conditions of the permit is completion of this Main Street Management Plan as described below.

#### PURPOSE OF THE MAIN STREET MANAGEMENT PLAN

• The purpose of the MSMP is to create a complete, multi-modal street environment which enhances the businesses landscape, the visitor experience and environmental sustainability. As required, it was prepared with input from a Stakeholder Working Group, the City of South Lake Tahoe and Douglas County for approval by the TRPA Governing Board. The components of the plan are summarized below. Unless noted otherwise, TRPA served as the lead organization for each component.

#### MAIN STREET VISION & PROJECT DESCRIPTION

 It is expected that through traffic will move away from the main street corridor to the rerouted state highway to facilitate multi-modal business access and create a revitalized pedestrian, bike and transit friendly activity center along the Main Street. The relocated US 50 will be used for auto and truck through traffic while the former alignment will be used by autos and trucks primarily for access to businesses and residences, creating the opportunity for transforming the Main Street into an amenity with thriving businesses, flexible access, options for how the space is used, an enhanced environment for those visiting surrounding properties, a world-class space for people, and an experience that matches the unique natural environment at Lake Tahoe.

#### MAIN STREET USES

- Main Street is intended to be utilized for both transportation and non-transportation uses. For transportation related uses, the plan addresses:
  - Pedestrians Pedestrian demand, access, and routes; changes during major events and peak periods; and how pedestrians share transportation facilities and connect with other modes of transportation.
  - Bicycles Bicycle routes and facilities along Main Street and connecting to surrounding bicycle routes, bicycle parking, and how bicyclists share transportation facilities and connect with other modes of transportation.
  - Scooters and Other Personal Mobility Devices (PMD's) Scooter/e-scooter and other PMD facilities for travel as well as organized parking/storage areas.
  - Transit Facilities and service that increase ridership including changes needed during major events and peak periods, winter versus summer seasons, and connections with other transportation modes. TTD is the lead organization for this component and will submit the most up-to-date transit plan to the TRPA Governing Board for approval regarding consistency with the SSCRP permit and this plan. This plan includes a transit circulator within the project area that operates in concert with the parking management plan. The circulator will be operational concurrent with or prior to the completion of the SSCRP.
  - Passenger and Commercial Vehicles The plan balances the demand and supply of transportation facilities for passenger and commercial vehicle travel, parking, and loading/unloading. TTD was the lead and has prepared a parking management plan which includes a parking agreement subject to review and approval by TRPA.
  - In terms of non-transportation uses, the MSMP includes existing and allowed land uses adjacent to the Main Street project area, and it identifies proposed changes in those uses.

#### WAYFINDING

• The wayfinding system in the Main Street corridor and adjacent areas informs travelers on how to reach key destinations and connect with other modes. The wayfinding system includes static, changeable message, and temporary signage as well as the potential for digital communication of wayfinding recommendations through internet and smart phone applications.

#### OWNERSHIP, MANAGEMENT, AND FUNDING

• TTD is the lead on this component which will address changes in ownership of the Main Street project former rights-of-way and ownership of facilities (e.g., sidewalks, street furniture, signage, etc.), operations and management (e.g., maintenance, security, events management, etc.), and the funding mechanism for project construction, operations and maintenance including expected expenditures and revenues. The outcome will be executed maintenance and operation agreements citing responsible parties, roles, and functions. This component is not included in this plan document and must be provided by TTD prior to commencement of construction of Highway 50.

#### MONITORING, PERFORMANCE STANDARDS, AND REFINEMENT

• The Main Street project monitoring, monitoring methods and documentation, performance standards against which the monitoring data will be evaluated, reporting protocols, and adjustment mechanisms are included. Performance metrics and standards include vehicle mile travelled within the project area; travel times by mode to key destinations; queue lengths at major intersections and at entrances to key destinations; auto, bicycle, and scooter parking availability; and collisions by mode.

#### How to Use this Document

This document captures the process and outcomes of the planning effort by Design Workshop Inc. and their subconsultants undertaken from November 2018 to September 2020. The Tahoe Regional Planning Agency contracted Design Workshop, Inc and team to develop the Main Street Management Plan. The objective is to is present the vision for the design and configuration of Main Street with the proposed rerouting of US Highway 50.

Given the unpredictably of the future resources and funding, this plan presents the recommended design and configuration in several formats so that champions of different types of projects (transportation, pedestrian realm, redevelopment) can pull from the Plan to work toward implementation of the projects most important to them. This document is intended for client use in presenting the Plan vision to public officials for approvals and in attracting the interest of investors. It will serve as the foundation for subsequent phases of the design process.

# WHAT WE HEARD

The project was rooted in extensive engagement with key stakeholders and the general public to better understand the issues facing the corridor today and community's vision for Main Street. The project team and community established four overarching goals through work sessions and public input.



*Economics* 

*"Ensure the financial feasibility of Main Street and maximize community impact."* 



**Environment** *"Enhance the environmental"* 

"Enhance the environmental integrity and resilience of the corridor".



#### Community

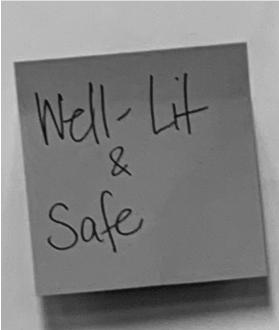
"Promote community interaction and connectivity while enhancing the identity and character of Lake Tahoe."



**Transportation** "Achieve a pedestrian, bicycle and transit-oriented corridor."

## PLACES TO HANG OUT AFETY OF Community POSITIVE PEDESTRIAN MALL PACES ikeau INVITING TO ALL FUN ш *Events* TROLLEY WALKWAY **WIDER SIDEWALKS TRAFFIC FLOW TREES NO CARS HOMELESS PLACES TO SIT** TREES







1.1 Far Left, Members of Public Providing Feedback, Credit: TRPA 1.2 Right, Word Public Comment on Goals and Vision, Credit: TRPA

# **OPPORTUNITIES & RECOMMENDATIONS**

#### Main Street for.. **Pedestrians**

# 1.3 Clearly Define Crossings Credit: Flickr Creative Commons

#### **Opportunities**

- Provide landscape buffers for pedestrians throughout the corridor
- Improve pedestrian comfort and safety with increased seating, increased width of sidewalks, and increased lighting
- Reduce the number and width of travel • lanes through the corridor
- Connect pedestrian realm improvements beyond Main Street

#### *Recommendations*

- Increase sidewalk width through the Casino Core to a minimum of 8'
- Add crosswalks throughout the corridor to decrease distance between crossing opportunities
- Improve pedestrian experience with street trees and seating opportunities
- Increase the amount of activated frontage along Main Street including outdoor dining opportunities

#### Main Street for.. **Cyclists**





#### **Opportunities**

- Make transit a priority by providing dedicated bus pull outs.
- Provide more frequent transit service that runs 24/7 to regional hubs.
- Provide transit connections to support multi-modal transportation
- Incorporate circulator or intra-zone shuttle-system

#### *Recommendations*

- Implement shared transit lane into reduce travelway with clearly marked bus loading and unloading areas that are ADA compliant
- Provide covered bus shelters for transit riders
- Implement event center circulator route during peak seasons

#### Main Street for.. Vehicles



#### **Opportunities**

- Encourage the shifting of traffic away from the corridor
- Reduce quantity and size of vehicle access points and curb cuts on Main Street.
- Encourage vehicle departures to Lake Parkway Ave. and new Highway 50
- Provide adequate access to parking via Main Street

#### **Recommendations**

- Reduce travel lanes to one in each direction with center turn lanes at key intersections
- Provide vehicle access to major destinations via Main Street, except during events
- Reduce ingress/egress point widths by 50% and direct departures to Lake Parkway and new Highway 50
- Provide access to all parking areas via Main Street and secondary routes
- Provide rideshare drop-off/pick-ups in both NV and CA

#### Connect to regional bike systems -Kahle, Van Sickle Bi-State Park, shared-

• Utilize landscape materials to buffer cycle facilities where possible

safer street for cyclists

use path to Ski Run

Establish consistent and designated

bike lanes throughout the Main Street

Consider speed differentials to create a

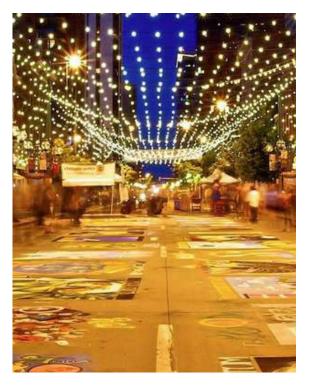
• Solve conflict with PMD's, cyclists, and pedestrians

#### *Recommendations*

**Opportunities** 

corridor

- Implement one-way conventional bike lanes within the travelway in each direction
- Implement shared-use path within pedestrian realm on the lake side of Main Street for shared-use by cyclists, PMD's and pedestrians.
- Increase the quantity and quality of provisions for active transportation



#### **Opportunities**

- Establish anchors to enhance the sense of arrival
- Promote connectivity to surrounding • destinations
- Draw visitors along the street by • encouraging outdoor dining and activated street frontage throughout the corridor

#### *Recommendations*

- Establish open space or potential redevelopment anchors at gateways into the corridor to enhance the sense of arrival
- Activate ground levels throughout the corridor and provide flexible event space
- Increase the amount of gathering space and opportunities for interaction along the corridor
- Extend Main Street design to secondary routes that provide connection to key destinations



# Vision & Project Description

# VISION

#### **Permit** Condition Requirements

The purpose of the Plan is to create a complete, multi-modal street environment that enhances the businesses environment, the visitor experience and environmental sustainability. The Plan will define the configuration of the newly converted Main Street corridor segment that will achieve the goals of adopted plans. It is expected that through traffic will move away from the Main Street corridor to the rerouted state highway to facilitate multi-modal business access and create a revitalized pedestrian, bike, and transit friendly activity center along the Main Street. Relocated US 50will be used for auto and truck through traffic while the former alignment will be used by autos and trucks primarily for access to businesses and residences. Managing access will create the opportunity for transforming Main Street into an amenity with thriving businesses, flexible access, options for how the space is used and an enhanced environment for those visiting surrounding properties. The street will become a world-class space for people, and an experience that matches the unique natural environment at Lake Tahoe.

#### **KEY GOALS & POLICIES FROM ADOPTED PLANS**

#### Transportation

- Create a low speed Main Street, provide increased sidewalk width and frequent pedestrian crossings throughout the corridor when Highway 50 is rerouted.
- Encourage multi-modal transportation by providing efficient transit, pedestrian and bicycle infrastructure, and parking management strategies.
- Increase safety and traffic circulation by designing corridors with limited new access points and better utilizing existing access points.
- Require major commercial interests providing gaming, recreational activities, or excursion services to provide or participate in shuttle service.
- Prioritize constructing pedestrian and bicycle facilities that increase connectivity of the whole network

#### Environment

- Use native vegetation to screen parking, alleviate long strips of parking space and accommodate stormwater runoff where feasible
- Encourage landscape restoration projects that replace existing coverage

#### Economy

- Revitalize and remodel ground level areas of casinos and resorts for retail use amenities, accommodations, and hotel uses
- Prioritize redevelopment and new economic investment focusing on upgrades and raising the quality of accommodation
- Establish South Lake as a year-round, world-class destination by encouraging flexibility for year-round event and meeting space and visitor center
- Provide connectivity from the MSMP corridor to the lake and surrounding recreation

#### Equity

Improve the mobility of the elderly, handicapped, low-income, and traditionally under-represented and under-served populations, and other transit-dependent groups

"Create a complete, multi-modal street environment which enhances the businesses environment, the visitor experience and environmental sustainability circumstances."







South Shore Community Revitilization Plan (SSCRP) Ground Disturbance Area State Line

Proposed Highway 50 Realignment

--- Environmental Impact Statement Study Area

DATA SOURCE: Tabo ional Plan



# **PROJECT APPROACH**

#### **Project** Approach

In order to meet the permit conditions and achieve the goals expressed in previous planning efforts, Main Street was designed and planned as more than a simple streetscape. It required a comprehensive design approach to ensure that all voices are heard and all elements of the street were considered.

The approach for the Main Street Management Plan was multi-scaled and holistic. The first scale was high-level and considered the unifying character of the entire project to establish an overarching strategy for achieving project goals. The second scale provided a granular approach to street design that acknowledged one size does not fit all. Design Workshop studied the unique conditions and challenges created by the street's interaction with adjacent properties and land uses to create an overlay of character zones. These two scales of thinking created consistency within the corridor while providing flexibility that allowed the design to react to specific constraints or opportunities.

The project scope was structured around charrettes and open houses to develop a plan that not only addresses the permit conditions, but also creates the foundation for a world-class destination, achieves consensus, and accelerates the overall implementation process. The charrette format brought all stakeholders to the table to inform planning and design decisions that while resolving conflicts that would promote consensus. The process reflected on previously approved documents, historic development, circulation, transportation, user patterns, the needs, and dreams of stakeholders and the community, and financing decisions of the decision-makers and management entities.

#### **Project Timeline**

In order to meet the project schedule and deliver the desired outcomes while meeting the permit conditions, Design Workshop developed a work plan focusing on four main project phases that were structured around charrettes and open houses to ensure maximum consensus and buy-in. The below timeline illustrates the milestones and goals of each phase of work.

#### Collaboration & Partnerships

The MSMP was produced in partnership with the Tahoe Regional Planning Agency, Douglas County, the City of South Lake Tahoe, and the Tahoe Transportation District. A Staff Steering Committee was comprised of four lead agencies to provide guidance, technical expertise, and material review. A Stakeholder Working Group served as a forum for a collaborative decision-making process on MSMP policy, design, and implementation. A Technical Working Group provided the operational detail and input needed to bring a successful project forward for construction, operation, and long-term maintenance.

Listen

Benchmark

Project Kick-off

# **EXISTING CONDITIONS &**

# EXISTING CONDITIONS & DESIGN CRITERIA

Review past planning efforts, assess existing conditions, and develop goals/selection criteria based on community and stakeholder input.

# Phase 3

#### BEST PRACTICES & DEVELOPMENT OF ALTERNATIVES

Determine best practices and models for the project that meet the selection criteria and generate design alternatives.

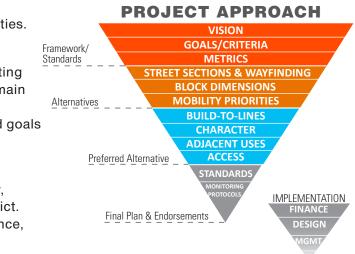
Iterate

# Refine

# *Phase 4*

#### SELECT PREFERRED ALTERNATIVE

Review and analyze design alternatives and present to stakeholders and community to facilitate the selection of a preferred design.





: Phase 5 REFINEMENT &

**APPROVALS** Further refine the preferred alternative based on technical feedback, prepare draft plans for review, and present final draft plan for approval.

# **PROJECT APPROACH**

# Public Engagement In order to create the foundation for a world-class destination,

it was critical to work closely with the community, its representatives and project partners. The project was structured around inclusive two-part charrettes that facilitated collaborative planning and design decisions while resolving conflicts impeding consensus.

#### Stakeholder Working Group

The charrettes began with an intensive work-session with the Stakeholder Working Group (SWG), which included 21 members selected to represent the interests of various community groups and serve as a forum for a collaborative decision-making process. During Charrettes, the SWG provided guidance on the vision, policy framework, design concepts, wayfinding, performance standards, and monitoring and refinement strategies. The entities represented by the SWG included:

- TRPA Governing Board
- Lake Tahoe Visitors Authority
- Heavenly Ski Resort
- South Tahoe Alliance of Resorts
- Douglas County
- Heavenly Village
- Lake Tahoe South Shore Chamber of Commerce
- League to Save Lake Tahoe
- City of South Lake Tahoe
- Caltrans
- Tahoe Transportation District
- Nevada Department of Transportation
- California Public Safety
- Nevada Public Safety
- Rocky Point Neighborhood
- South Lake Tahoe Family Resource Center
- Private Businesses

#### **Public Open House**

Each charrette concluded with a Public Open House to educate the public and allow the general community to provide critical input throughout the process. These meetings used an open house format with stations for various aspects of the plan that were being developed during each phase of work.

#### Charrette Imagery



# Listen

On May 29th, 2019, stakeholders and citizens from California and Nevada came together at the Tahoe Regional Planning Agency offices to participate in a charrette to review the existing conditions of the corridor and the development of goals. Additionally they weighed in on design criteria that will inform the future of the corridor.

Design Workshop began by reviewing the key goals and policies of past planning efforts and conducting a thorough site analysis to establish a baseline. Additionally, the team worked with the community to better understand the needs of the corridor's daily uses.

"Ensure all voices had a chance to be heard and gain a deeper understanding of what the community really wants from their corridor"



# **Benchmark**

On August 27th, 2019, the second design charrette was held for the Main Street Management Plan. The objective of the charrette was to evaluate best practices for streetscape design and engage stakeholders and the community members in an exercise to generate preliminary alternatives.

The task of benchmarking community priorities at the second charrette included a presentation of best practices, design guidance and case studies from around the world that were applicable to the study area in order to facilitate the generation of multiple alternatives that would be analyzed and evaluated in the context of the design criteria.

"Identify, develop, and evaluate best practices and models that meet design criteria to reveal potential alternatives"



# Iterate

On November 19, 2019, the third charrette was held for the Main Street Management Plan. The objectives of the charrette were to present refined concept alternatives to the Stakeholder Working Group and community members, highlight key differentiating elements of the alternatives, and select a preferred alternative.

The charrette focused on the review. analysis and iteration of alternatives in order to encourage critical community and stakeholder input on the key design elements that were contrasted between the alternatives. The key elements would then be incorporated into a revised, preferred alternative.

*"Demonstrate the aesthetics"* and function of each option"



# Refine

On September 10, 2020 the fourth charrette was held for the Main Street Management Plan. The objective of the charrette was to present the refined preferred alternative and draft MSMP to the Stakeholder Working Group in order obtain final input on the design and components.

The final charrette was held virtually due to COVID-19 impacts and included a presentation of key plan elements for discussion. The preferred alternative was then further refined based on community input and technical feedback to prepare the plan for final endorsements and approval.

*"Further refine preferred"* alternative based on technical feedback, prepare draft plans for review, and present final draft plan for approval."

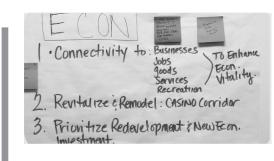
# GOALS

# Design Criteria

The priority of the first phase of work was to facilitate the development of goals that would act as guiding principles and design criteria for what the MSMP should achieve. Goals should be strategic, measurable, action-oriented, realistic and time-sensitive. Deliberate recording of a project's goals supports transparent decision-making and accountability. Due to the limits of MSMP's impact, the SWG was broken into groups to review the numerous goals from relevant adopted plans and eliminate, revise, consolidate and prioritize goals within overarching categories to ensure feasibility through implementation.

The goals developed by SWG were presented at the first Public Open House to gain input from the community on additional goals and criteria that should be considered moving forward. Citizens were asked to provide input on the goals, criteria, and categories to ensure that the overarching goals of the plan were informed by holistic feedback. The responses provided important insight into community desires and strategies to achieve them. The design team then synthesized results and responses into the goals and design criteria to be used moving forward. Reference the charrette summaries in the appendix for more detailed community input and strategies.







Ensure the financial feasibility of Main Street and maximize community impact

- Catalyze adjacent redevelopment opportunities
- Support the development of an efficient operations and management plan
- Maximize economic impact to the local community by supporting the creation of local jobs
- Select materials and systems with life cycle and maintenance costs in mind
- Encourage private improvement and investment along corridors
- Encourage the revitalization and activation at ground level along the corridor to ensure a consistent public realm and frontage
- Encourage redevelopment and new economic investment
- Provide economically viable parking and transit solutions that are coordinated to satisfy demand
- Source local materials and create local jobs
- Encourage a healthy and diverse mix of commercial and recreational offerings throughout the year

ENVIRONMENT

IMPROVE AIR QUALITY IMPPOVE WATER QUALIM REDUCE ENERLY USE / GREEN HOUSE GAS Emmis (OMPLIMENT THE NATURAL ENVIRON. (EXPERIENCE)



Enhance the environmental integrity and resilience of the corridor

- Improve air quality
- Improve stormwater management
- Improve human comfort
- Reduce greenhouse gas emissions
- Improve the urban canopy and species diversity throughout corridor
- Use native, non-invasive vegetation wherever possible
- Direct stormwater to bioinfiltration areas
- Increase permeable surfaces and Naturalize the drainage systems
- Reduce noise pollution
- Increase the size of pedestrian spaces that will provide safety and comfort to all users

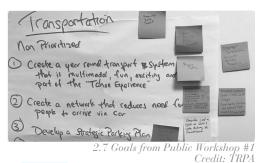




**Promote community interaction** and connectivity while enhancing the identity and character of Lake Tahoe

- Increase the amount of flexible community gathering spaces for varying uses and functions.
- Create a sense of consistency and clarity in the corridor through implementation of design standards and quidelines that celebrate the unique character of Lake Tahoe.
- Increase opportunities for public education/interpretation along the corridor
- Provide programming opportunities that will respond to the climate and seasonal change
- Provide branding opportunities that respond to the diversity of character present on the corridor
- Increase the amount of flexible community gathering spaces for varying uses and functions including pedestrian oriented activities and events
- Identify and provide connections to surrounding assets
- Establish gateways at major intersections and pedestrian nodes







#### Achieve a pedestrian, bicycle and transit-oriented corridor

- Improve conditions for pedestrians and bicyclists
- Create a year-round multimodal transportation system that is fun, exciting and enhances the "Tahoe" Experience"
- Encourage the shifting of traffic away from Main Street
- Increase sidewalk width
- Increase number of crosswalks and decrease crosswalk length
- Reduce vehicle miles traveled
- Increase bike parking and supporting facilities (pump and tool stations. covered parking)
- Provide frequent and reliable transit
- Provide support for multimodal transportation
- Incorporate infrastructure for innovative micro-transit options that address seasonality and the character of the region
- Utilize loop road for the rerouting of through traffic, parking, service, and business access.

# **Character Zones**

Preliminary character zones throughout the Main Street Corridor and surrounding area were identified to help stakeholders and the design team understand the unique characteristics present within the South Shore. Within the Main Street Corridor, there are three key areas that represent different opportunities and constraints: The Gateway Zone, The Village Zone and The Casino Core. Additionally, there are multiple areas directly adjacent to the Main Street Corridor that must be considered to understand the local context. These are shown in the local context diagram and include the Recreation Zone, the Lake Zone, the Neighborhood Zone, and the Accommodation Zone.

#### **Gateway Zone**

The Gateway Zone includes the intersection of the Main Street Corridor with residential neighborhoods and the proposed highway realignment. The zone is limited in the amount of space that can be allocated to the pedestrian realm and cycle facilities due to lane requirements and existing businesses. Defining characteristics include the Raley's Shopping Center, local hotels and businesses, and the possibility of a future replacement housing project associated with the rerouting of Highway 50. Engineering studies have indicated that the current five-lane configuration could be reduced to three lanes while handling traffic volumes and providing adequate multi-modal Level of Service.

#### VILLAGE CORE

The Village Core features successful ground floor activation with consistent landscape character, street trees, and pedestrian lighting. One of the plan's objectives is to extend the distinct alpine resort mountain town character displayed in the Village Core to the surrounding areas. Challenges in the Village Core include understanding elevation and right of way variation.

#### CASINO CORE

The Casino Core is defined by its unique character that is overwhelmed with pedestrian traffic during the evenings. Adjacent uses along the 80' right of way vary and lack ground floor activation, which provides opportunity in the future to capitalize on this space. Challenges in this section include a lack of urban canopy and green space, inconsistent pedestrian lighting, unpleasant fencing, and an absence of safe pedestrian crossings and bike facilities.



# Local Context

As part of Design Workshop's multi-scaled approach, the local context and surrounding destinations were studied to provide a holistic understanding of the corridor's unifying character.

## **Recreation Zone**

Access to year-round recreational facilities and activities near Main Street or within close proximity includes beach recreation, boating, golfing, skiing, snowmobiling, hiking, and biking. Defining characteristics of the Recreation Zone include Heavenly Resort, Van Sickle Bi-State Park, and Edgewood Golf Course. Van-Sickle public state park offers hiking, mountain biking, equestrian trails, connections to the Tahoe Rim Trail and fantastic views of Lake Tahoe. Due to its free access and proximity to the Village and Casino Cores, Van Sickle Park has become increasingly popular with residents and visitors looking for fresh mountain air. Edgewood, a privately-owned golf course on the shore of Lake Tahoe, provides world class golfing within a short distance of Main Street. Access to winter and summer sport activities is provided from the Gondola on Main Street.

#### Rocky Point Neighborhood

Van-Sicle Bi-State

Park

Rocky Point, the neighborhood directly adjacent to Main Street, provides about 500 residential units to residents, many of whom are employed within the Main Street Core. Challenges with this zone include maintaining safe access to Main Street with the rerouting of Highway 50. Additional plans for Rocky Point will be detailed in the Rocky Point Amenities Plan.

## Accommodation Zone

There are an estimated 1,400 tourist accommodation units between Main Street and the lake, an area this document will refer to as the Accommodation Zone. Compared with an estimated 60 residential units, this zone is primarily frequented by nonresidents. These units are a mix of old and new and all are within walking distance to Lakeside Beach and Marina. L La

an is hc ac th pr fe

Casino Core

Edgewood Golf Course

Heavenly

Village

### Lake Tahoe

City of South Lake Tahoe

Lake Tahoe is the main draw for residents and visitors of the South Shore. Lake Tahoe is located just ½ mile from Main Street, however, to get to a beach with free public access requires travelling over a mile from the corridor. Lakeside Beach and Marina provides access to the public, but requires a fee. Opportunities to facilitate connections from Main Street to the lake will be included in the plan.

> Lakeside Beach &

Marina

**DESIGN**WORKSHOP 13

# What We Heard

To understand the opportunities and constraints that already exist on the corridor, it was imperative to gather input from the people and businesses that use it on a daily basis. Participants at the first public open house were presented with a map of the existing corridor and asked to highlight strengths, weaknesses, challenges, opportunities, and constraints that should be considered. Participants recorded comments on green sticky notes to show areas that are working well, and red sticky notes for areas that need improvement.

Patterns along the corridor began to emerge that focused around mobility, environment and connectivity. Respondents overwhelmingly wanted to see improved circulation with cycle lanes, safe pedestrian crossings, and better transit connections throughout. Native vegetation and smart water features emerged as environmental priorities along with feedback about locations to promote connectivity to the lake and under-utilized bike routes. Public comment also highlighted the desire for public art and event space.





- 1 "I like the design, it protects the neighborhood"
- 2 "I want to be reassured that traffic will be encouraged to proceed out of town via Hwy. 50 NOT Pioneer Trail...we do not want increased traffic on Pioneer Trail"
- 3 "Bike racks"
- "Native plants demonstration gardens.. Botanical 4 gardens and lounging area"
- "Continue pedestrian path and landscaping road buffer (separated from road)" 5
- "Bike/ped bridge needed over new HWY 50 from Rocky Point to village area" 6
- 7 "Bike path from here to Park Ave needed"

- <sup>8</sup> "Over 1000 pedestrians use this sidewalk per day. They will now need to cross U.S. 50" 9 "Smart Water features in drought years"
- 10 "More green space, parks, mini-parks"
- 11 "Sidewalks and "Gateway to the Lake" on Park Ave"
- 12 "Eye sore"
- 13 "Bike car conflicts"
- <sup>14</sup> "Design with people of the Rocky Point neighborhood in mind. Many people in this neighborhood walk to work and have kids"

- (15) "Build housing here"
- 16 "Poor sidewalks"
- 17 "Bike path gets very narrow"
- "Bike path gets very narrow. Keep bike path 18 consistent width'
- 19 "Outdoor activities, live music"
- 20 "Crosswalks are a major congestion point. Needs raffic light or bridge
- 21 "Local businesses and restaurants"
- Time traffic lights for pedestrians. Crosswalks 22 have long wait times

- More cycling friendly roadways are great for transportation, options provided are not crowded with pedestrians'
- 24 "Good pedestrian area model for Nevada side"
- 25 "Need more convenient ski access parking"
- 26 "Don't remove the Stardust sign"
- 27 "Better, more regular transit to 'Y'"
- 28 "Active transportation/streetscape all season, all times'
- 29 "Make it safer for bikes"

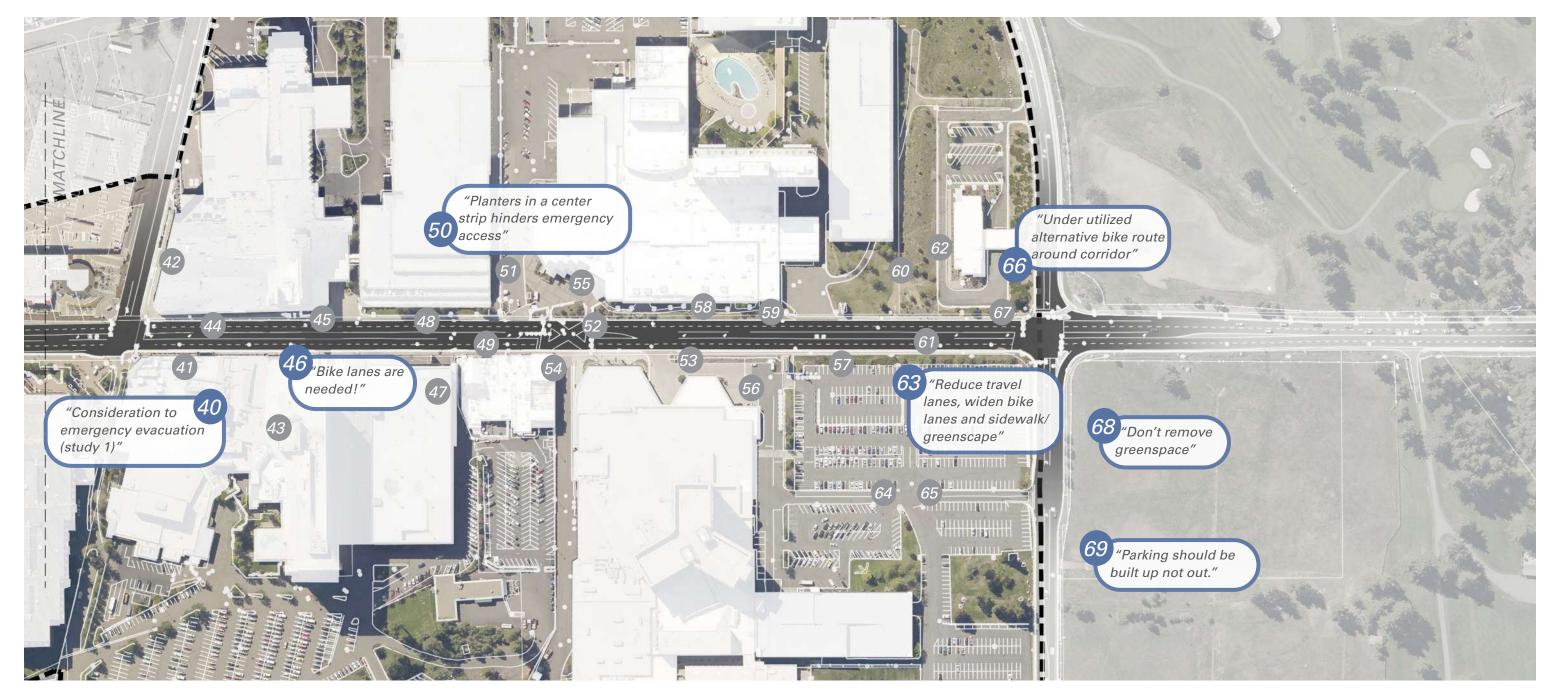


"Remove water intensive, non-native grasses and add native landscape and bio swales

- 31 "More crosswalks"
- (32) "Theatre for events year round"
- "More free parking and accessible parking for Van 33 Sickle too'
- 34 "Ability to close street for events" 35
  - "24-hour transit to bus center running every 30 mins, to reduce traffic and ease employee transit to work'



"Pedestrian bridges or some sort of better crossing along entire corridor"



#### **PUBLIC COMMENTS**

- 37 "Bike lanes for side streets on west side"
- <sup>39</sup> "Connections to mountains and lake for peds and bikes"
- 39 "Where is all the outdoor dining, etc. That was mentioned"
- 40 "Consideration to emergency evacuation (study 1)"
- 41 "Time traffic lights better"
- 42 "Sidewalks and "Gateway to the Lake" on Stateline"
- 43 "Monolithic block of casinos with no pedestrian thru-way without entering casinos"

- 44 "Emergency plans with fire in mind"
- (45) "Stripe and widen bike path for getting through casino corridor. Bikes only.. Not multi-use"
- 46 "Bike lanes are needed!"
- 47 "Also include more bike racks"
- (1) "Need outdoor seating/activity areas in casino corridor at pedestrian scale"
- (49) "Better pedestrian crossing along entire casino corridor"
- 50 "Planters in a center strip hinders access
- 51 "Sharp metal fence is scary for bikers"

- 52 "Wide bike lanes"
- "Wider sidewalks and landscaping along east side of corridor" 53
- 54 "Large parking areas hidden"
- 55 "Big all-way intersection"
- 56 "Music venues for South Lake"
- 57 "Public art structures, murals etc."
- 58 "Make road as tiny as possible
- 59 "Make all of this a ped mall with emergency access only'

- 60 "Crosswalk or ped overpass with elevator"
- 61 "Common large potholes in bike lane. Need bike lanes and surface fixes"
- 62 "Nature play and community gathering spaces"
- 63 "Reduce travel lanes, widen bike lanes and sidewalk/greenscape"
- 64 "Seas of asphalt along street"
- 65 "Two lanes are not any safer than four"
- *66* "Under-utilized alternative bike route
- "Prediction: traffic will back up on both sides 67 worse than ever before"



68 "Don't remove greenspace" 69 "Parking should be built up, not out"

**DESIGN**WORKSHOP 15

# **Opportunities & Constraints**

#### **GATEWAY ZONE** CHARACTER

 80-85' right of way featuring existing businesses intersection of the corridor, and residential neighborhoods

#### **OPPORTUNITIES**

- Extension of village core character
- Establish a gateway to the corridor

#### CONSTRAINTS

- Lane requirements may vary
- Currently inconsistent with the Main Street corridor

#### CASINO CORE

#### CHARACTER

- 80' right of way with casino character
- Heavy pedestrian traffic lacking ground level activation
- Inconsistent lighting, landscape character, urban canopy
- Dangerous crossings, and frequent jaywalking

#### **OPPORTUNITIES**

- Create space for bike and micromobility travel
- Unique character
- Create consistent landscape character
- Activate outdoor pedestrian realm

#### CONSTRAINTS

- Current vehicular arrival orientation of casinos
- Multiple wide curb cuts and varying adjacent uses
- Current pedestrian circulation located outside of right of way.

#### VILLAGE SECTION

#### CHARACTER

- 80-85' right of way with heavy pedestrian traffic
- Successful ground level activation
- Consistent lighting, landscape character, urban canopy

#### **OPPORTUNITIES**

- Enhance and compliment the successful urban design present within the District
- Create space for bike and micromobility travel
- Right of way distance varies through district

#### CONSTRAINTS

- Elevation differential
- Brand and identity already established







#### GATEWAY ZONE







#### VILLAGE CORE







#### CASINO CORE

2.8 Existing Conditions Imagery Credit: Google Earth

#### **ROW BREAKDOWN** GATEWAY ZONE

- 17% Pedestrian Realm
- 15% Cycle Facilities
- 57% Travel Lanes
- 11% Miscellaneous

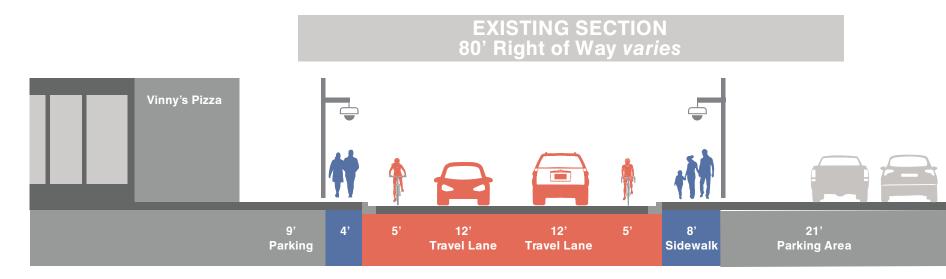
#### **ROW BREAKDOWN**

VILLAGE CORE

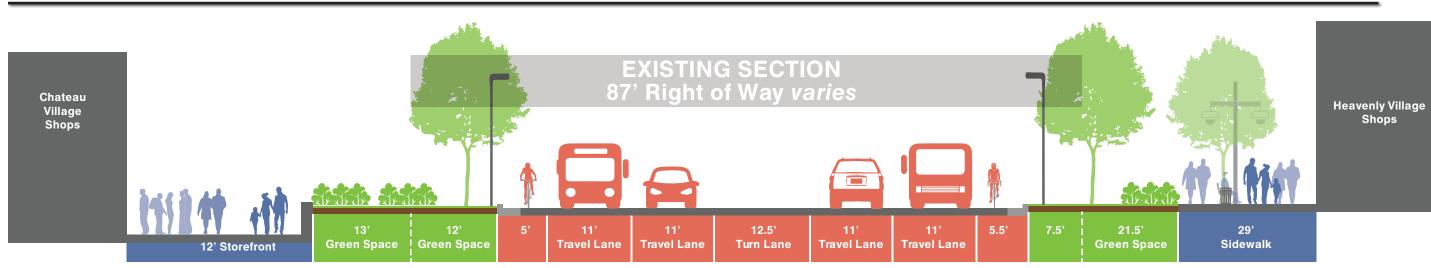
- 17% Pedestrian Realm
- 15% Cycle Facilities
- 57% Travel Lanes
- 11% Miscellaneous

#### ROW BREAKDOWN CASINO CORE

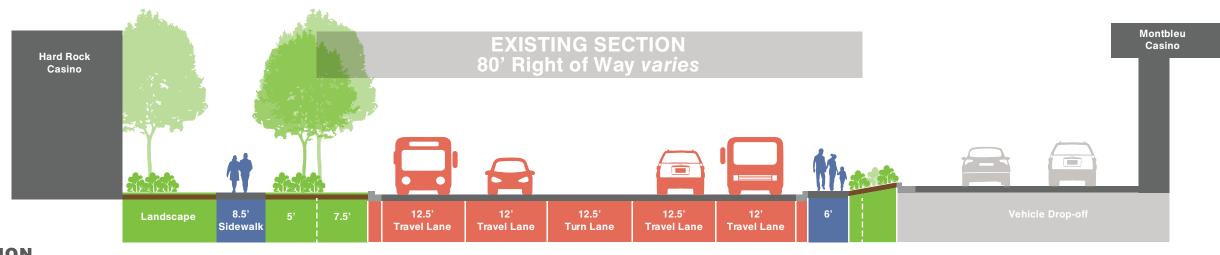
- 9% Pedestrian Realm
- 0% Cycle Facilities
- 60% Travel Lanes
- 21% Miscellaneous



#### **GATEWAY SECTION**



#### VILLAGE SECTION



#### **CASINO SECTION**



DESIGNWORKSHOP 17

# **Best Practices**

#### **OVERVIEW**

While the first charrette identified the vision, goals and design criteria of the community, the second charrette aimed to benchmark community priorities as it relates to right-of-way allocation and physical configuration. The goal was to present best practices and models from around the world that were applicable to the study area in order to facilitate the generation of section alternatives to be used as a basis for concept generation.

The design team conducted research and testing to develop best practices from around the world that met the community's design criteria and revealed potential alternatives for streetscape configuration along the corridor. Members of the SWG were given the document for reference and presented with an overview of best practices to provide design guidance on the most critical streetscape components as well as the benefits, considerations and technical details for decision making. With a large Stakeholder Working Group and several hundred potential variations of the streetscape, the design team simplified the information and variables in an effort to ensure that critical consensus could be reached and understood. Streetscape components, design guidance and modules were separated into three overall categories:

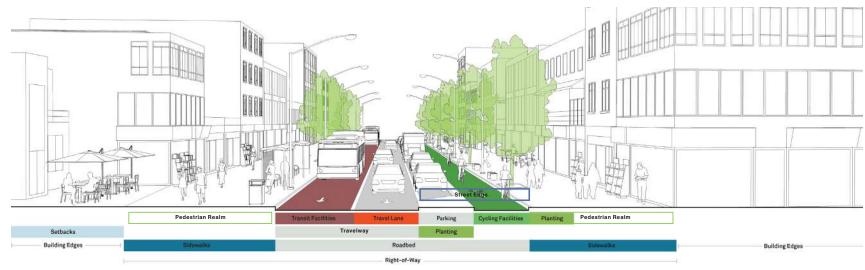
- Travelway: Vehicle and Transit Options
- Street Edge: Cycle Lanes and Parking Options
- Pedestrian Realm: Sidewalks, Street Frontage and Enhancement Zones

#### **DESIGN GUIDANCE AND KIT OF PARTS**

Each of the streetscape components was informed by design guidance which provided and overview of the decision factors, best practices and guiding principles. This section also highlighted the relevant design criteria and community goals to be considered during the exercise.

The best practices and models that met the goals developed by the stakeholders and could be implemented on Main Street were included in the document to establish a "kit of parts" for the exercise. The kit of parts are different streetscape options, such as a two-way cycle track or dedicated transit late, that provide visual representation of how the best practice options could be implemented in the built environment.

#### What is a Street?



\*Graphic provides an example of streetscape components, they do not represent the final design of main street

RIGHT OF WAY The limits of public space that can be altered in the Main Street Management Plan

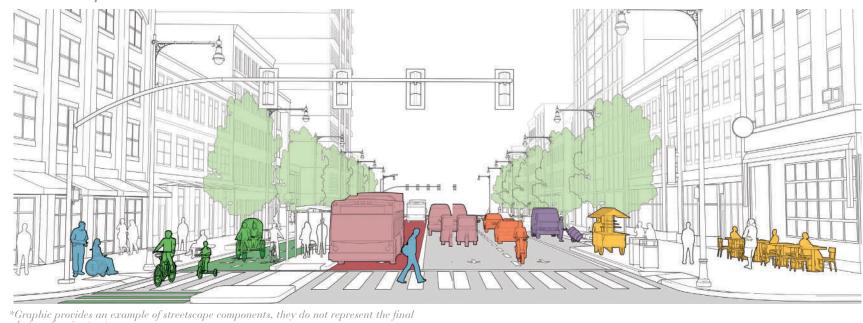
PEDESTRIAN REALM Dedicated space with clear walking paths and universal access used for a variety of activities and functions

TRANSIT The space between the FACILITIES street edges that can be Dedicated space within designed to carry various modes of transportation. types of transit to travel

TRAVELWAY

the travelway for different

#### Streetscape Users



f main street



Motorists

2.9 Streetscape design educational graphics, Credit: NACTO

#### STREET EDGE The space between the curb and the travelway that can be dedicated to stationary cars, cyclists and loading/unloading zones

#### CYCLE FACILITIES Dedicated space for cyclists to travel. This can be within or separate from the travelway

PLANTING Trees, planting beds, and green infrastructure within the sidewalk, between parking spaces, or in medians





# **Paperdoll** Exercise

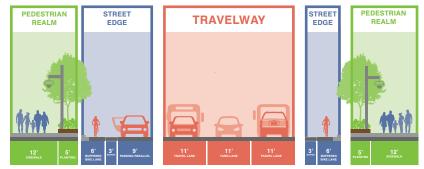
The Paperdoll exercise was developed to aid Stakeholders in developing section alternatives for the Main Street corridor that would begin to indicate the prioritization of uses. The exercise helped participants understand the existing conditions and allocate right-of-way space based on discussions of desired uses.

After discussing best practices, case studies, character zones, and existing conditions, the design team explained the rules of the exercise and decision tree for developing alternatives. The hierarchy of module placements was based on the existence of holistic components, such as cycle lanes and transit, that must have continuity throughout the corridor. Modules for the street edge and pedestrian realm could vary throughout the corridor and would be affected by previous placements and decisions. The stakeholders were then separated into three groups with a facilitator from the design team who guided the exercise and instigated relevant discussion. Three complete alternatives were developed and presented back to the Stakeholder Working Group. Each section had unique components that would be further tested and refined.

**DECISION TREE** What is your ---vision for Main Street?

Travelway Module

Sample Section







# Street Edge Module

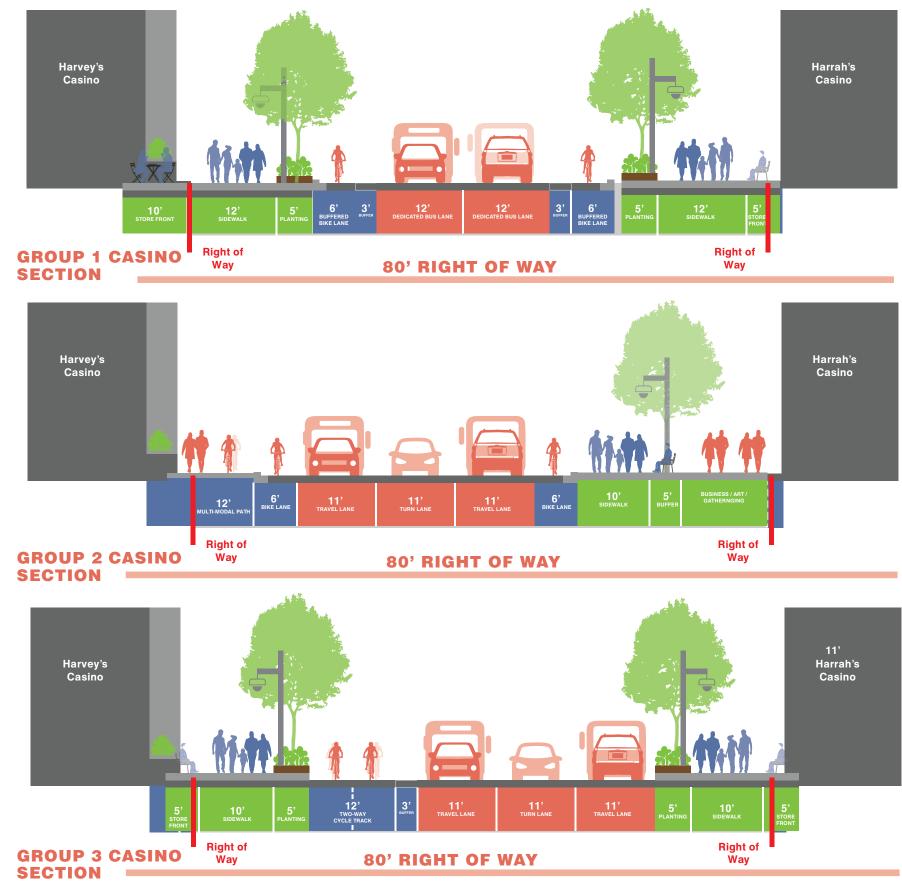
# Pedestrian Realm Module

Credit: TRPA

# Section Alternatives

Three complete alternatives were developed in the paperdoll exercise and presented back to the Stakeholder Working Group. Each section had unique components, features and considerations that began to indicate the prioritization of uses for the future Main Street.

GROUP	KEY FEATURES & CONSIDERATIONS.
Group 1	12' mixed (cars and transit) travel lane in each direction with no median and no center turn lane
	Traditional 6' buffered bike lane on both sides of the street
	Activate ground level by encouraging outdoor dining within casino core and providing for flexible pedestrian space within the Village Section
	Duplication of pedestrian zones
	Transit turn out locations with bike lanes
Group 2	11' mixed (cars and transit) travel lane in each direction with center turn lane throughout
	Multi-use path on the lake side would serve as the pedestrian sidewalk and would extend the existing bike path that currently ends at Pioneer Trail
	Traditional 6' bike lane on both sides of the street
	Focus on providing business, art and gathering spaces throughout the corridor
	Micro-transit emphasis
	Extend the "Heavenly hangout feel" throughout the corridor
	Provide a space that can be used in all seasons
	Transit turn out locations with bike lanes
	Speed differentials on multi-use path
Group 3	11' mixed (cars and transit) travel lane in each direction with center turn lane throughout
	Two-way cycle track on the lake side would extend the existing bike path that currently ends at Pioneer Trail
	Pedestrians would be routed to buffered sidewalks
	Expand sidewalks and activate ground level throughout the corridor
	Include public art
	Require scooter and personal mobility device speed restrictions within corridor and provide parking on either ends of the street



Casino Core Stakeholder Options Developed



Process imagery of public comment on SWG alternatives



# **Public Input**

To understand the feasibility and support for each alternative, it was critical to gather input from the community. During the Public Open House, participants were presented the best practices information and the aim of the paperdoll exercise. They were then presented with each alternative and asked to highlight strengths, weaknesses, challenges, opportunities, and constraints that should be considered. Public comment focused around providing additional separation between different uses (bikes, peds, vehicles), increasing sidewalk widths and activating ground floors of buildings.

#### TAKEAWAYS

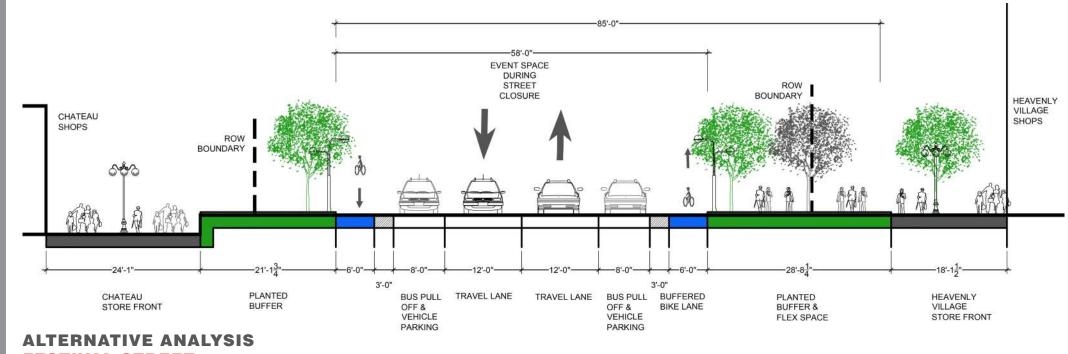
- Provide buffer between pedestrian, bike and vehicular travel lanes
- Activate ground levels along casinos and incorporate event space
- Incorporate event space
- Concerns about shared use of bicycle facilities with scooters, e-bikes and other PMD's (personal mobility devices)
- Supportive of reclaiming the pedestrian realm
- Increase tree quantity and diversity, especially around casinos
- Emphasis on using green space/green infrastructure to provide buffer and protection to pedestrians and cyclists
- Support for expanding multi-use path to • create wider through zone



# **Concept Generation**

One of the most critical tasks of the project was to generate refined conceptual alternatives for the corridor using the preliminary alternative cross-sections developed by the Stakeholder Working Group at the second charrette. Concept generation began with an in-depth analysis of the preliminary alternatives that evaluated key elements and primary differences to understand the conceptual themes and design direction revealed in the cross sections. Next, comments and feedback from the public were considered to ensure that the community's voice was heard. Lastly, technical input from consultants, the project team and the Technical Working Group was incorporated to determine the feasibility of the alternatives and eliminate certain design features deemed as unsuitable.

Feasible alternatives were then iterated and reviewed by the design team during several work sessions to develop two concept designs that embodied stakeholder preferences and community input while highlighting major design features and concepts that could be selected and/or modified as potential preferred alternatives. The Festival Street concept focused on maximizing event space flexibility and activation. The Green Street concept emphasized green infrastructure, a celebration of Lake Tahoe's natural environment and a commitment to sustainability.

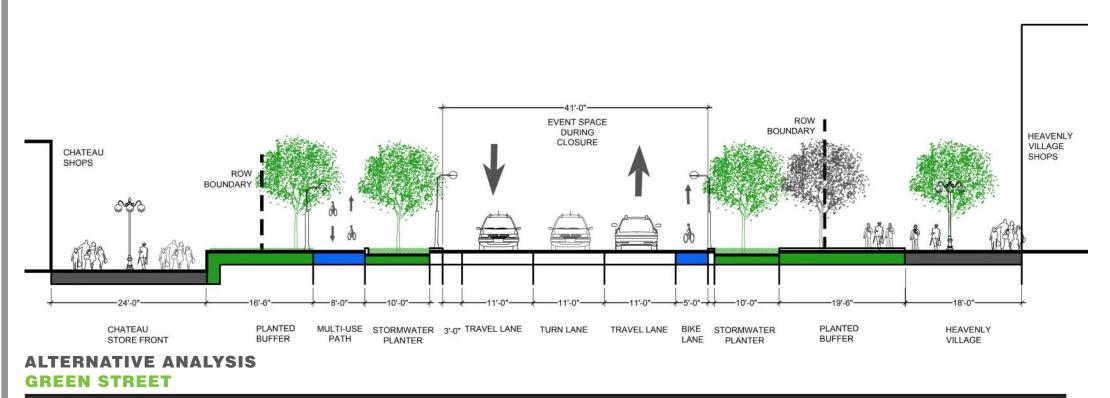




Focus on flexible space and roadway design to allow for events and closures



Vision imagery that provided conceptual guidance for the Festival Street Concept



Focus on open space, green infrastructure and using landscape as a visual guide through the corridor

#### **DESIGN FRAMEWORK**

The primary concepts of each alternative were then applied to the overall design framework to understand how the concepts could manifest themselves at the corridor scale with distinct anchors, spines and connections. The design team carried the concepts through the entire project area and included best practice associated with each to ensure that each refined alternative represented a unique theme, identity, character and function. This approach helped to provide the most contrast between the alternatives.

Connect the Mountain

Anchors

CENTRAL ORGANIZING ELEMENT, REFERENCE POINT, MAGNET FOR USERS

Carlos

Spine

MAJOR DESTINATION POINTS ALONG THE ENDS OF SPINE

Connections L'INKAGE TO MEY PLACES INCLUDING NATURAL FEATURES: MOUNTAIN, LAKE, COMMUNITY Connect the Community **Connect** the

**DESIGN**WORKSHOP 23

## **DESIGN ITERATION FESTIVAL** STREET

#### **DESIGN FRAMEWORK**

SPINE

- Pedestrian, bike and transit oriented street with retail dining, entertainment and events
- Activated corridor is the destination
- Art, culture, entertainment along spine

#### **ANCHORS**

Transit/mobility hubs on either end

#### Year-round event center

- CONNECTIONS
- Strengthen existing mountain connection
- Create opportunities for lake connection
- Regional bike and pedestrian trails
- Mountain activities and trails

#### **PRIMARY DIFFERENCES**

- One lane of mixed traffic in each direction with center turn lane at critical intersections
- One-way buffered cycle tracks
- On-street parking to maximize event space flexibility

# Key Element Feedback

The design alternatives were presented to both the Stakeholder Working Group and the community during the third charrette. Both groups provided detailed comment but were also asked to provide input on key elements that shape the design and configuration of Main Street. The intent was to understand community preferences on the most significant differences between the two concepts.

Key Element Feedback

# **ROADWAY DIET**

"Too Many Lanes!"

ACTIVATED AREA

#### **STAKEHOLDER COMMENT**

ALIFORNIA DURING EVEN

"2 Lanes with turn lane

at times, no to 5 lanes"

Width of turn lane should vary, and a continuous turn lane is not needed through the entirety of the corridor.

Coordination needed on determining lane reduction from Park Avenue to proposed Pioneer intersection.

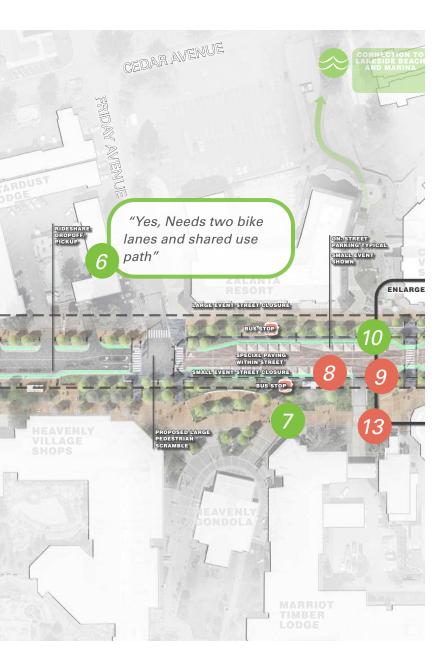
#### **PUBLIC INPUT & VOTING**

Public comment showed that the majority of the community preferred fewer travel lanes where possible with turn lanes only at key intersections.

"Better lighting and

sidewalks on Park

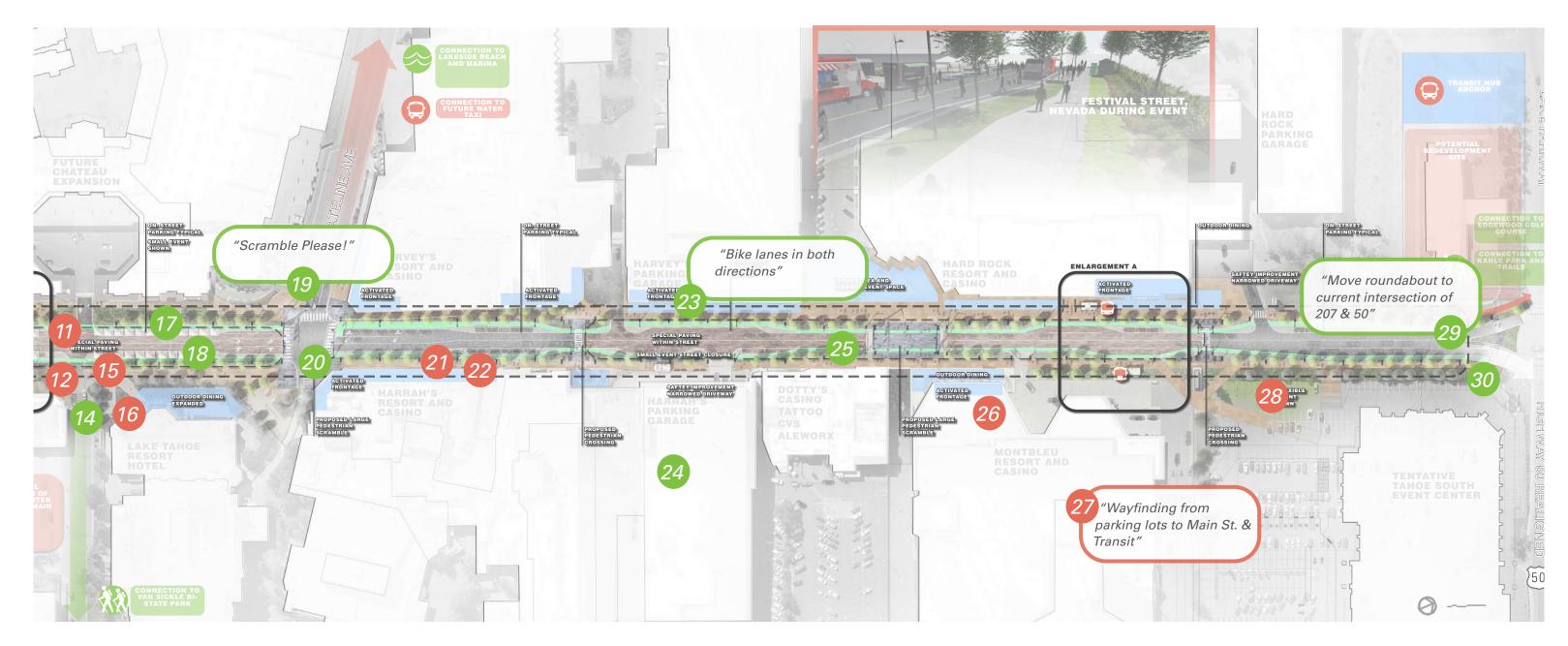
Avenue"



#### **OUTCOMES**

The revised plan will minimize the presence of the roadway where possible, only incorporating turn lanes at key intersections.

# **DESIGN ITERATION**



#### Key Element Feedback

# PARKING

#### **STAKEHOLDER COMMENT**

No additional street parking needed, pull outs for Uber/Lyft and ADA area acceptable

#### **PUBLIC INPUT**

No on-street parking. Paid parking an option, but an element of free parking to remain.

#### **PUBLIC VOTING**

Voting showed that on-street parking was very unpopular and the majority of the community agreed that there should be no on-street parking in the Main Street corridor.

#### **OUTCOMES**

The revised plan will not include any onstreet parking for visitors. While necessary considerations for rideshare pick-up/dropoff, emergency vehicles, service access and handicap access will be made, designs will not allow on-street parking and encourage the use of other parking and alternative modes of transportation.

# **DESIGN ITERATION**

# **GREEN STREET**

#### **DESIGN FRAMEWORK**

#### SPINE

- Pedestrian, bike and transit oriented street with retail dining, entertainment and events
- Immersion in the natural environment around Tahoe
- Education/interpretation opportunities

#### **ANCHORS**

- Parks/open space on either end
- Year-round event center

#### CONNECTIONS

- Strengthen existing mountain connection
- Create opportunities for lake connection
- Regional bike and pedestrian trails
- Mountain activities and trails •

#### **PRIMARY DIFFERENCES**

- One lane of mixed traffic in each direction with center turn lane throughout
- Two-way multi-use path on lake side with a one-way buffered cycle track on mountain side

#### No on-street parking





#### Key Element Feedback

# BICYCLE FACILITIES

26 | Vision & Project Description

#### **STAKEHOLDER COMMENT**

both sides.

sidewalks and roadway.

Multi-use path on lake side & bike lanes on

Bicycle facilities should consider shared use

with scooter and PMD's to keep them off of

#### **PUBLIC INPUT**

Multi-use path on lake side & bike lanes on both sides.

Understand cycling contextual connections. Consider use of path by scooters and PMD's.

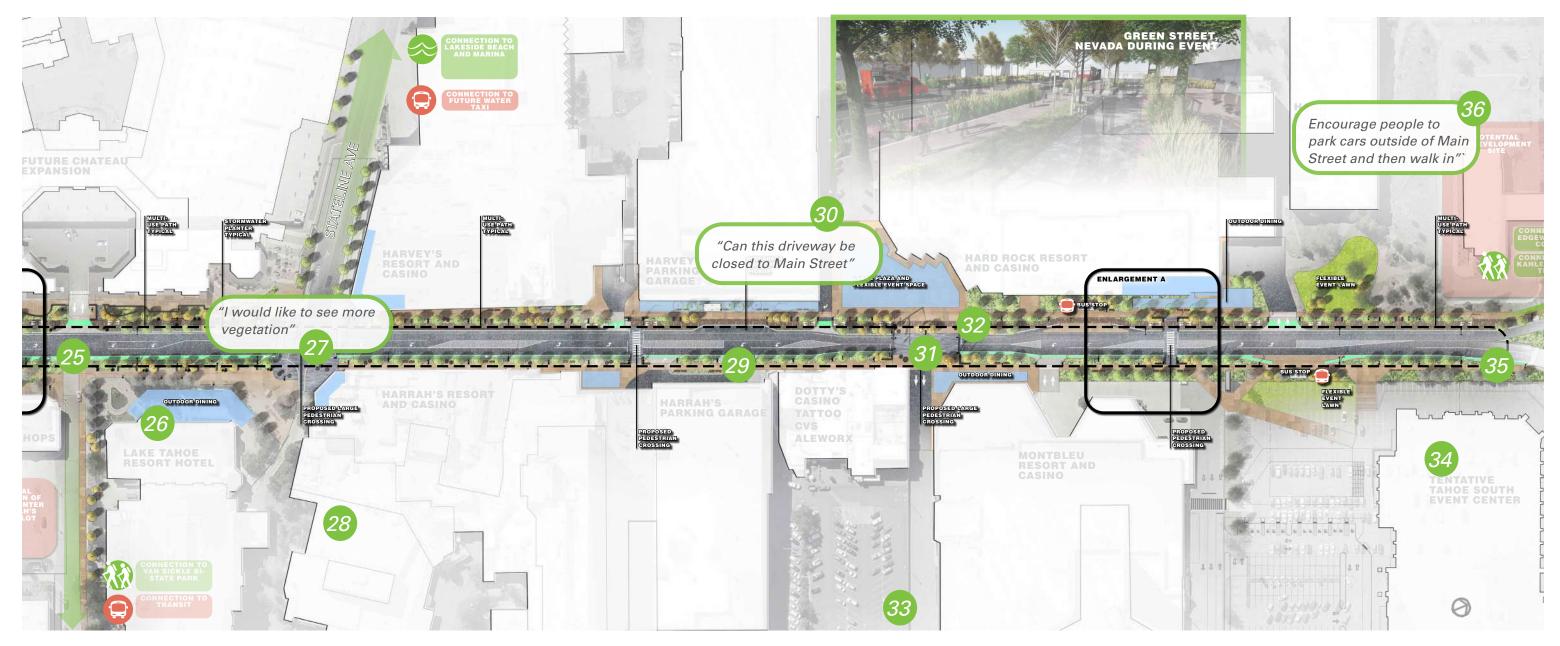
#### **PUBLIC VOTING**

Community preference was overwhelmingly in favor of having protected bicycle facilities on both sides of Main Street with a multiuse path on the lake side.

#### **OUTCOMES**

The final plan will incorporate bicycle facilities on both sides of Main Street. While physical constraints and spatial analysis will determine the final configuration of the bicycle facilities, a multi-use path on the lake side is desired with either a one-way or two-way bike path on the mountain side..

# **DESIGN ITERATION**



#### Key Element Feedback

# ALTERNATIVE PREFERENCE

#### **STAKEHOLDER COMMENT**

Green Street option more closely aligned with stakeholders Transportation & Bicycle vision, while the Festival Street elements of closure and street activation were aligned with stakeholder vision.

#### **PUBLIC INPUT**

*Elements from both plans were preferred* from public comment on the plans, similar to stakeholders' reaction.

#### **PUBLIC VOTING**

Although, the Green Street concept received more votes, the results were close and the comments support a refined alternative that incorporates aspects of both.

4.26 green street alternative plan

#### **OUTCOMES**

Stakeholder comments, public input, and voting showed support for a refined alternative that incorporates aspects of both Green Street and Festival Street alternatives.

**DESIGN**WORKSHOP 27

# **PREFERRED ALTERNATIVE**

# **Activated Green Street**

RALEY'



# DESIGN FRAMEWORK

- Pedestrian, bike and transit oriented street with retail dining, entertainment and events
- Immersion in the natural environment around Tahoe
- Education/interpretation opportunities

#### ANCHORS

- Parks/open space on either end
- Year-round event center

#### CONNECTIONS

- Strengthen existing mountain connection
- Create opportunities for lake connection
- Regional bike and pedestrian trails
- Mountain activities and trails

#### **PRIMARY DIFFERENCES**

- One lane of mixed traffic in each direction with center turn lane throughout
- Two-way multi-use path on lake side with painted cycle lanes in either direction throughout corridor



# **PREFERRED ALTERNATIVE**



# **Activated Green Street Metrics**

#### PEDESTRIAN NETWORK

 $\frac{30\%}{\text{increase in sidewalk}}$ 

**BETWEEN CROSSWALKS** 

150% INCREASE IN SEATING OPPORTUNITIES

35% 384 REDUCTION IN DISTANCE STREET TREES ADDED

#### **CYCLE FACILITIES**

100% protected bicycle facilities

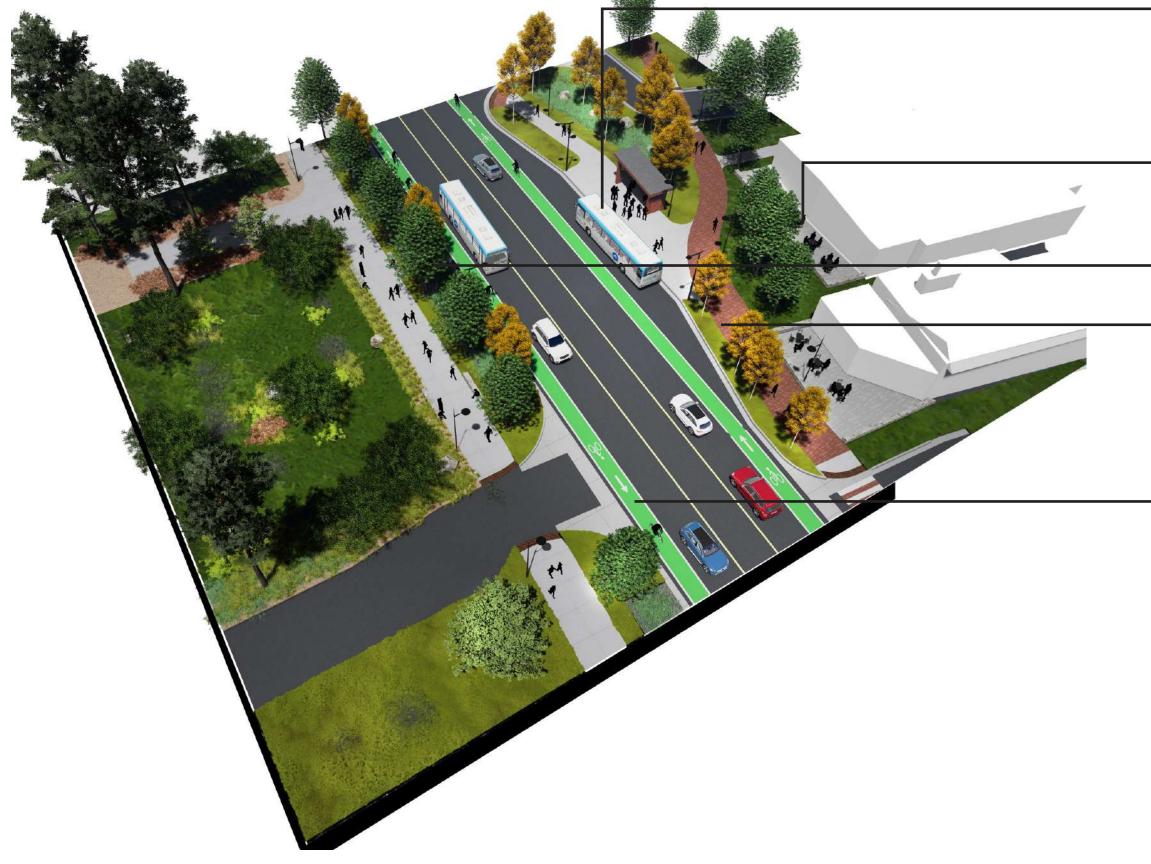
**Doubled** BIKE RACKS THROUGH CORRIDOR

#### **ACTIVATION**

10% INCREASE IN ACTIVATED FACADES

**40'** OF FLEXIBLE EVENT SPACE WITHIN THE STREET

## PREFERRED ALTERNATIVE Gateway Zone Typical day



#### IMPROVED BUS FACILITY PULL OFF

EXPANDED OUTDOOR DINING

STORMWATER Planter

#### 10' SHARED-USE PATH

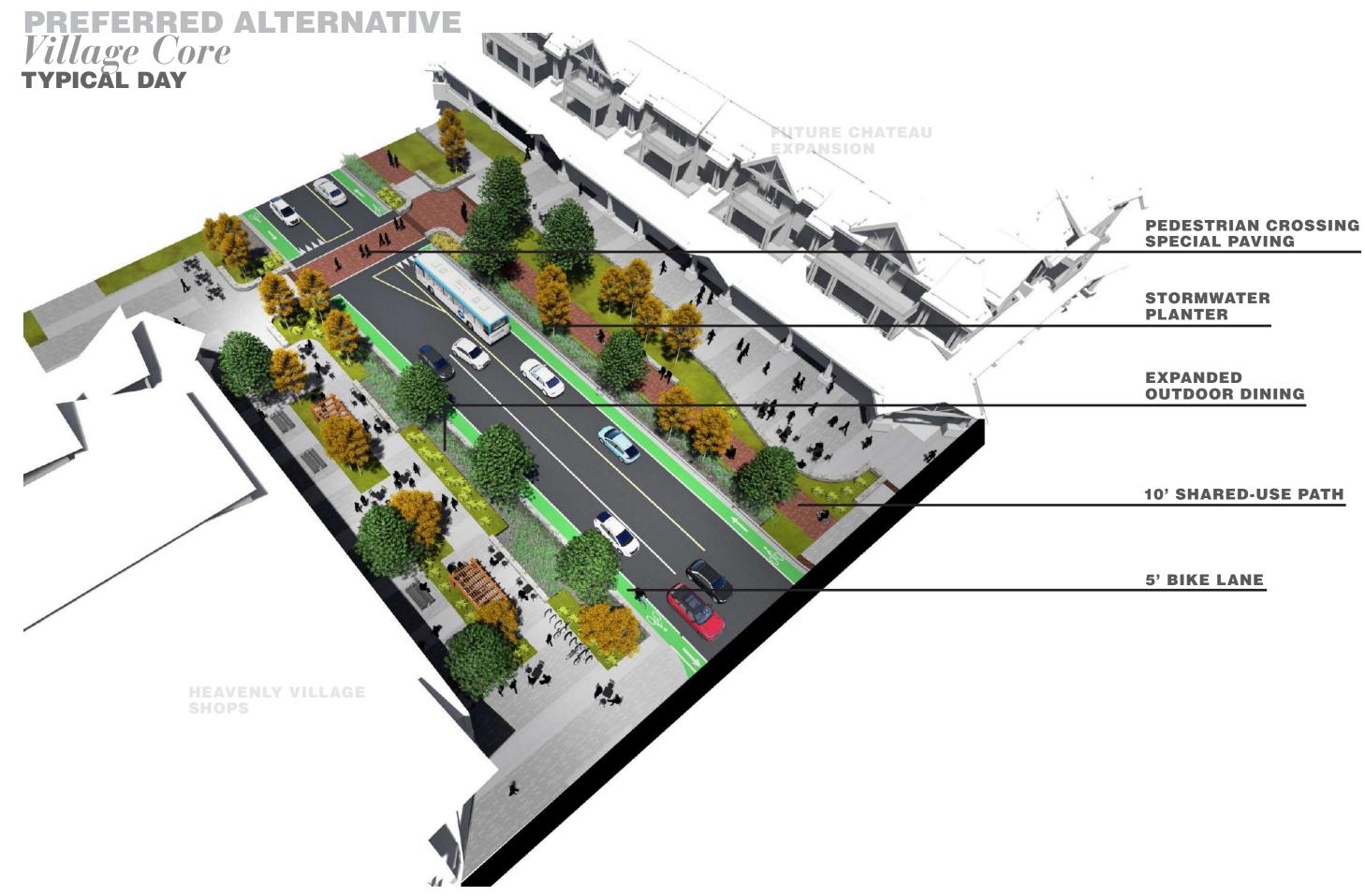
**5' BIKE LANE** 

# **PREFERRED ALTERNATIVE**

# Gateway Zone



**DESIGN**WORKSHOP 31



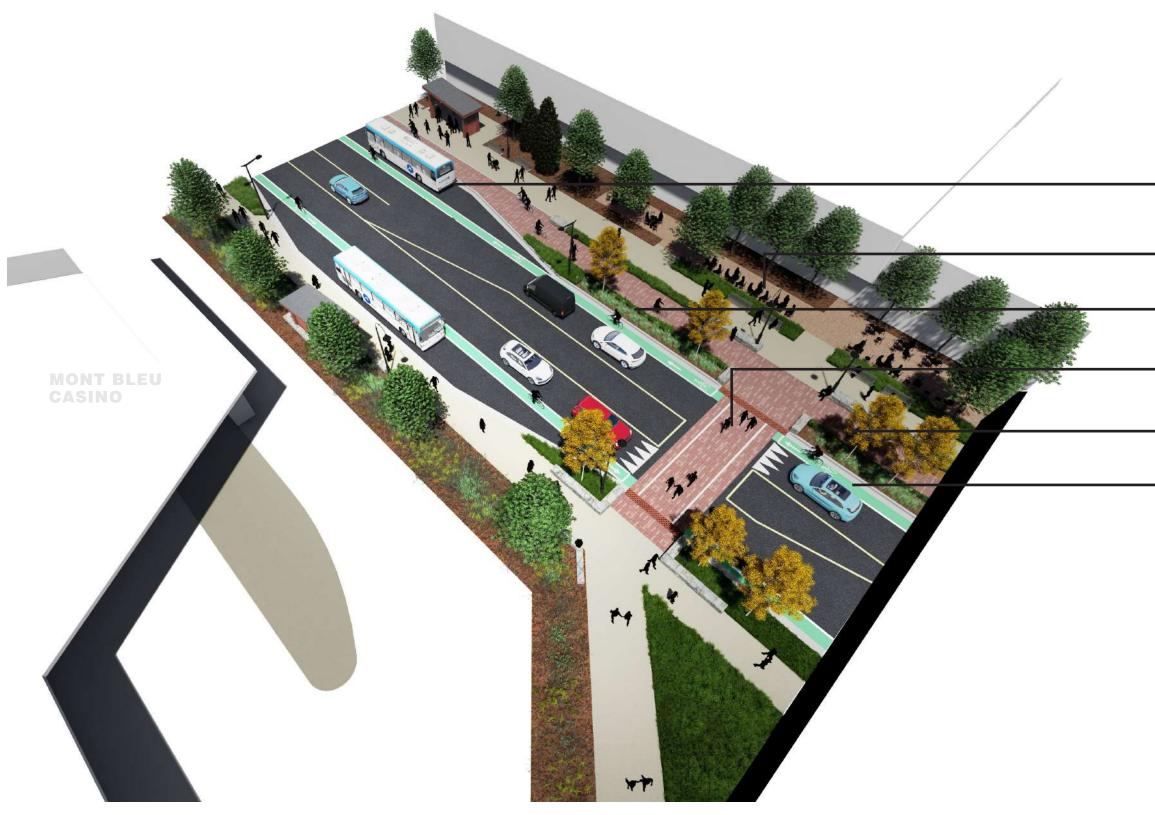
### **PREFERRED ALTERNATIVE**

# Village Core



### **PREFERRED ALTERNATIVE** *Casino Core* **Typical day**

HARD ROCK CASINO



IMPROVED BUS FACILITY PULL OFF

ACTIVATED STREET FRONTAGE & OUTDOOR DINING

STORMWATER Planter

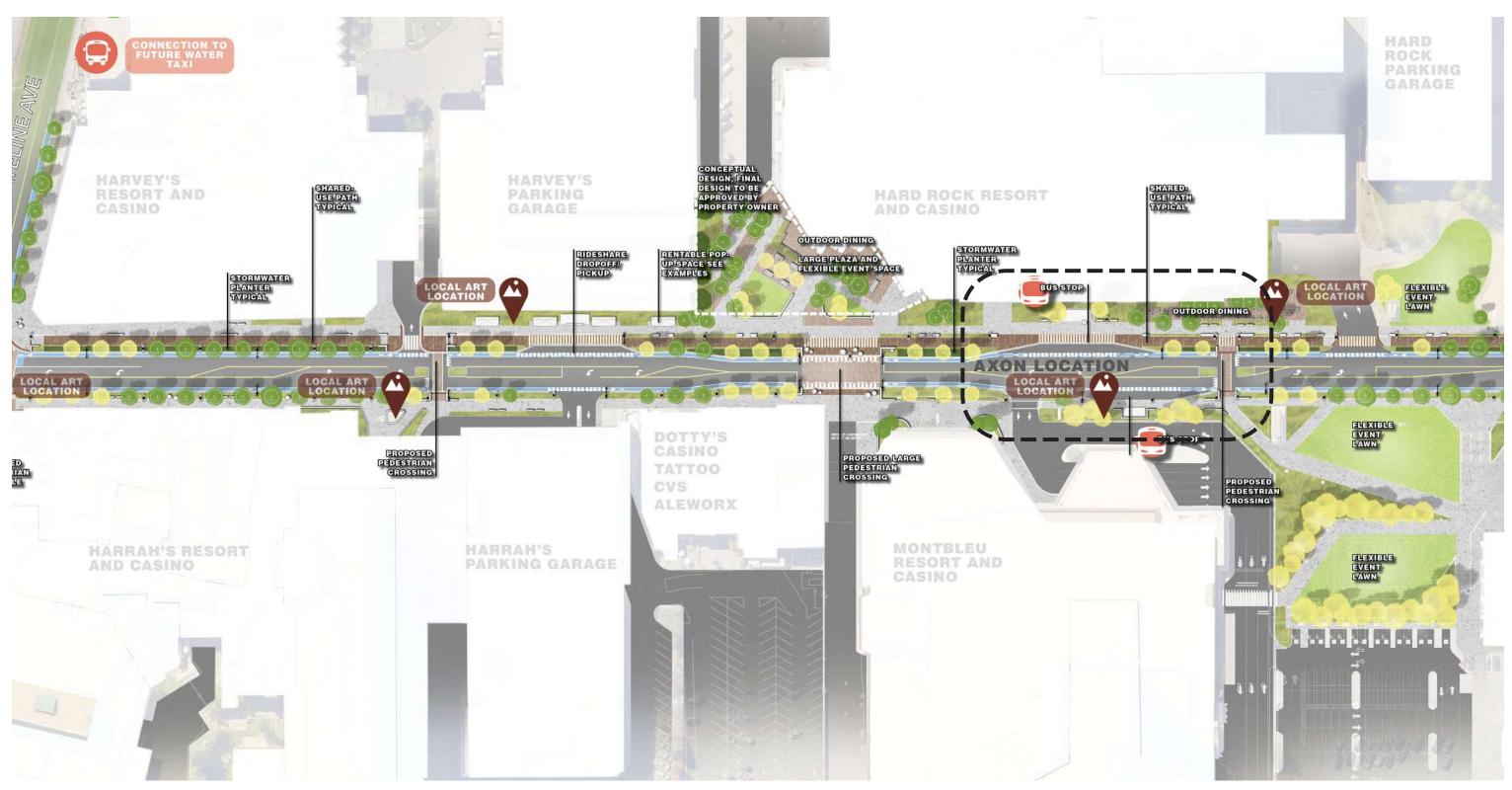
PEDESTRIAN CROSSING SPECIAL PAVING

SHARED-USE PATH

4.5' BIKE LANE

### **PREFERRED ALTERNATIVE**

## Casino Core





# **CHAPTER THREE** Main Street Uses

### **OVERVIEW**

#### Permit Condition Requirements

The permit condition requires that this section explain how Main Street is intended for both transportation and non-transportation uses in addition to identifying desired and allowed uses. The plan also needs to establish policies on the priority of uses based on stakeholder preferences consistent with applicable plans and regulations. Lastly, the plan needs to identify space allocation recommendations prioritizing those modes that most effectively utilize space for the movement of people.

#### **DESIRED AND ALLOWED USES**

Desired and allowed uses for Main Street were initially identified during the beginning phases of the project. By listening to community input and working with stakeholders, the project team understood the holistic vision for a Main Street that meets the needs of people walking, driving cycling, taking transit and doing business. Main Street was designed to balance the needs of diverse users in order to create an environment that ensures access, safety, comfort, and enjoyment for everyone.

#### **PRIORITY OF USES**

The prioritization of uses was initially established during the benchmarking phase in which stakeholders developed street section alternatives for the corridor. The alternatives had key features and considerations for the allocation of right-of-way that provided insight as to the priority of the pedestrian realm, street edge and travelway. Public comment on the section alternatives allowed the team to further refine street sections and build consensus around a configuration that represents community priorities.

#### **SPACE ALLOCATION**

The physical allocation of space that is shown in the preferred alternative was a culmination of the project process. After identifying desired uses and the prioritization of Main Street components, the team integrated technical input from best practices and analyses to begin testing the feasibility of configuration. The final design and space allocation represent the desires of the community and align with the goals of other adopted plans while providing an implementable design for the corridor.





#### PEOPLE DOING BUSINESS AND PROVIDING CITY SERVICES



#### **PEOPLE IN PERSONAL MOTORIZED VEHICLES**

3.1 Designing For the Street Credit: NACTO





### **OVERVIEW**













Pedestrian & Cycle facilities cleared for use







### Existing pedestrian network

The existing pedestrian experience differs dramatically throughout the study area when comparing the Gateway Zone, Village Core, and Casino Core conditions. Successful pedestrian realm design is represented in the streetscape surrounding Heavenly Village, Chateau Shops, and Zalanta Resort - with minimum 12' sidewalk widths, landscape, and street trees which help buffer vehicle and pedestrian uses, and ample amounts of seating opportunities for pedestrians. The Casino Core pedestrian realm has 6' sidewalk widths without buffers and fails to provide pedestrian comfort or safety with few crossings.

Crosswalks throughout the corridor are distanced from 775' -900'(double the recommended distance by NACTO), and are 68' in length making the current crossing a long and treacherous experience. Traveling from Main Street to destinations like Lake Tahoe and Van Sickle State Park lack defined sidewalks and landscape improvements.

#### WHAT WE HEARD

Based on stakeholder and public input, design strategies for improving the pedestrian experience will include:

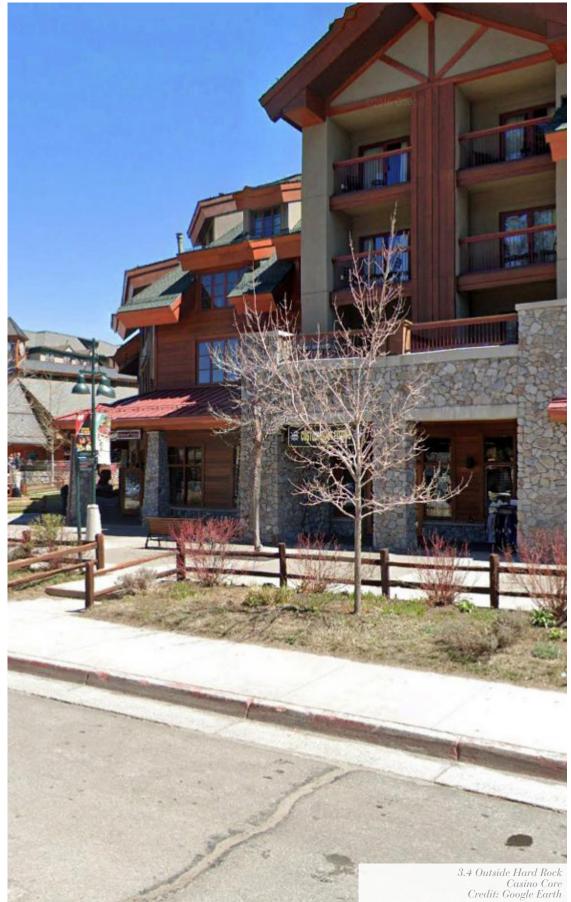
- Providing a minimum 5' landscape buffer for the pedestrian zone through the corridor
- Improving pedestrian comfort and safety with increased seating opportunities, increased width of sidewalks, and increased lighting
- Reducing the number and width of travel lanes through the corridor
- Connecting pedestrian realm improvements beyond Main Street to Stateline Ave., Friday Ave., and Park Ave.

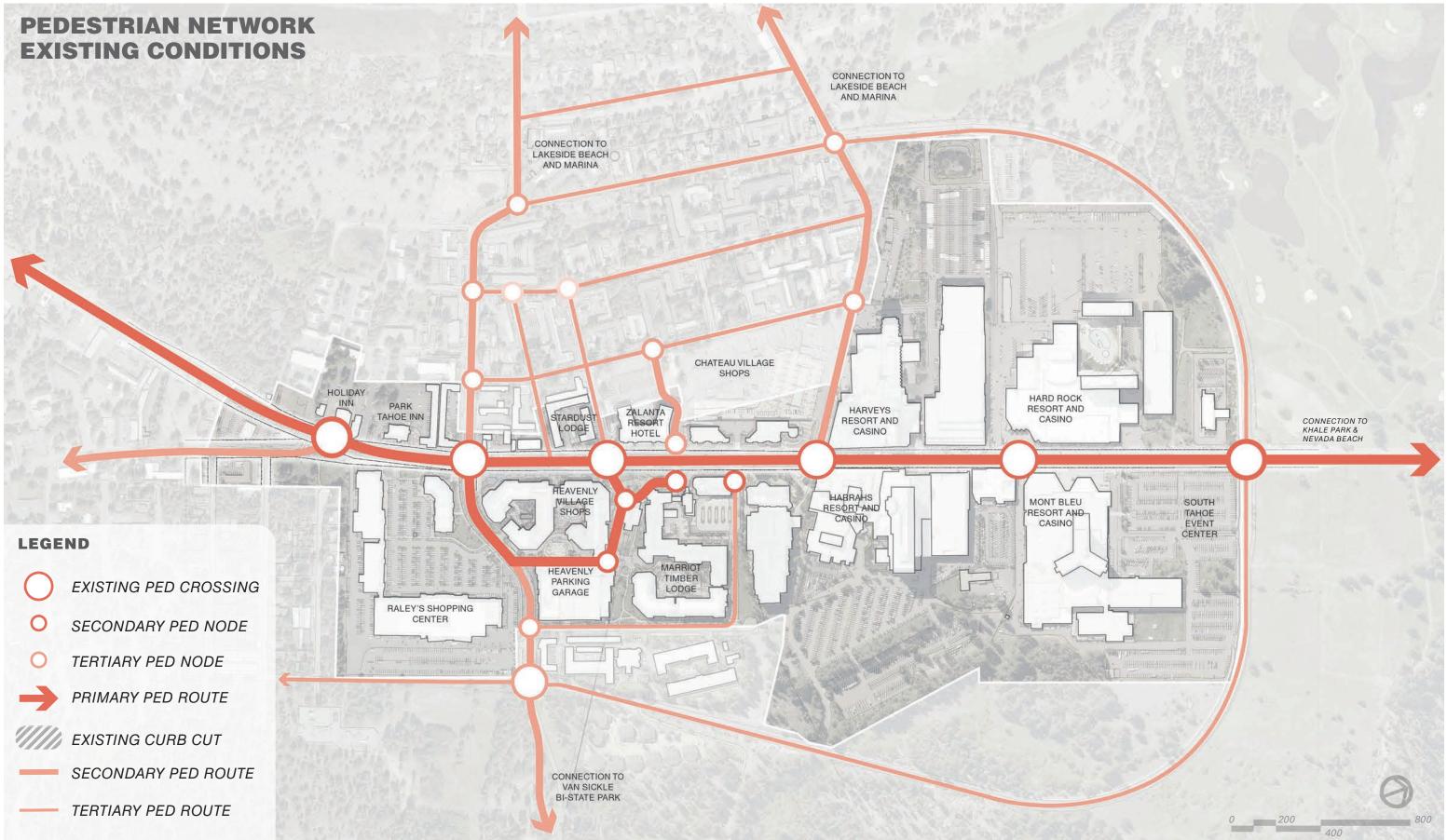
#### **Existing Metrics**

CATEGORY	METRIC	UNIT	NEVADA	CALIFORNIA
Space Allocation	Width dedicated	Ft.	12′	22′
	% Dedicated	%	9%	17%
Sidewalk	Sidewalk width	Ft.	6' - 8'	11′-29′
	Number	Oty.	3	4
Crosswalks	Length	Ft.	68′	68′
	Spacing	Ft.	900′	775′
	Seating	LF	18′	800′
Pedestrian Experience	Street Trees	Qty.	0	101









## **Proposed PEDESTRIAN NETWORK OVERVIEW**

Pedestrian network improvements follow the guidance and input provided by stakeholders and the public. The streetscape improvements create a rhythm through Main Street that improves the safety and comfort to users, while strengthening the diverse districts into a legible and cohesive streetscape. The streetscape rhythm is achieved through landscape buffering between conflicting uses, improved and consistent placement of pedestrian and street lighting, increased seating opportunities, and expanded outdoor dining opportunities.

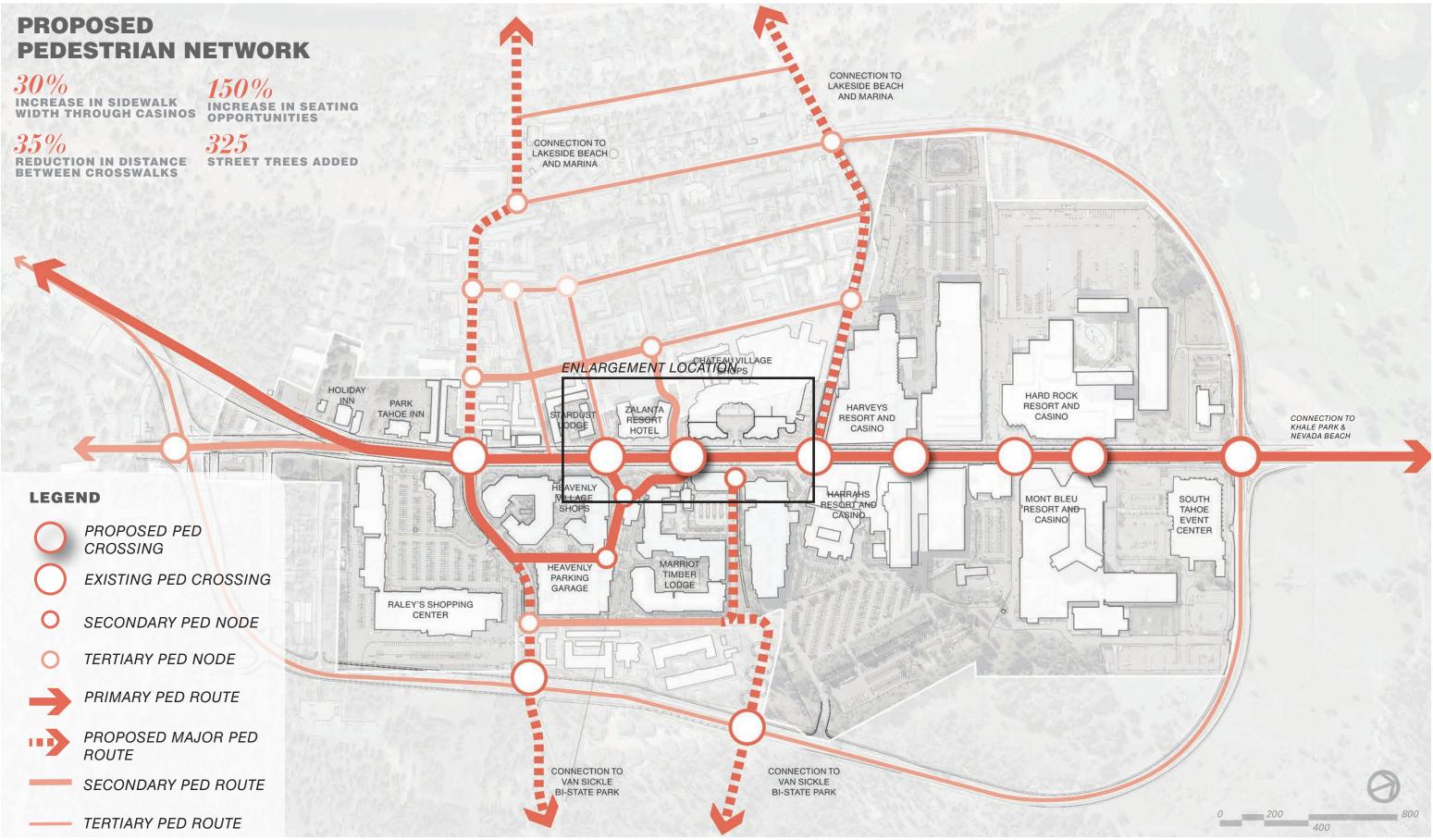
#### **OUTCOMES**

- · Width of sidewalk on through the Casino Core increased to a minimum of 8'
- (2) crosswalks added through the Casino Core, and (2) added to CA side, decreasing the distance between crossings by 35%
- Crosswalk length reduced by 20'
- Crosswalk widths increased to 10' minimum through the corridor
- Seating opportunities increased by 150%
- 325 street trees added
- Outdoor dining opportunities increased by 100% in Nevada and California

#### **Proposed Metrics**

CATEGORY	METRIC	UNIT	NEVADA	CALIFORNIA
Space Allocation	Width dedicated	Ft.	16′	30′
Allocation	% Dedicated	%	20%	34%
Sidewalk	Sidewalk width	Ft.	8′-10′	10′ - 45′
	Number	Qty.	5	5
	Length	Ft.	45′	47′
Crosswalks	Spacing	Ft.	475′	500′
Pedestrian	Seating Opportunities	LF	660′	1,400′
Experience	Street Trees	Qty.	73	371





# Existing cycle and pmd network

#### THE EXPERIENCE

Currently, many cyclists deliberately avoid the Main Street corridor due to the lack of adequate facilities present. The largest ROW allocation to cycle facilities at 5' are present through the Gateway zone. Within the Heavenly Village Core bicycle lanes are present but designed inadequately (3') and provide no comfort for cycle users through the corridor. Through the Casino Core, there are no cycle lanes and vehicle lanes are adjacent to the curb edge. The lack of on-street facilities leads to cyclists and PMD's riding on sidewalks exacerbating conflicts between users.

Existing cycle parking is inadequate and improvements to capacity should be made to upgrade Main Street to meet demand. Cycle share opportunities do not exist within the South Lake region, but future planning and design suggestions should consider the placement of these facilities through Main Street.

#### WHAT WE HEARD

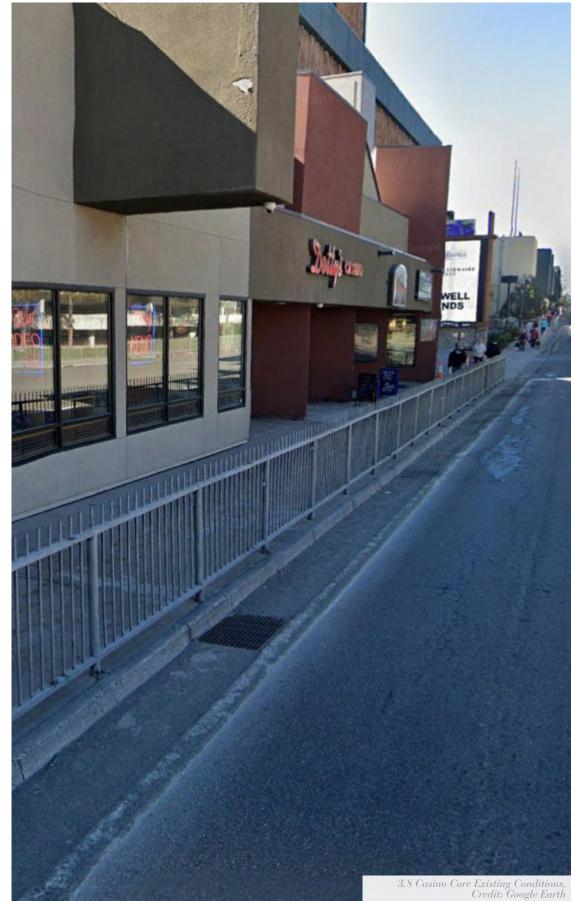
- Establish consistent and designated bike lanes throughout the Main Street corridor
- Consider speed differentials to create a safer street for cyclists
- Connect to regional bike systems Kahle, Van Sickle Bi-State Park, shared-use path to Ski Run
- Utilize landscape materials to buffer cycle facilities where possible
- Solve conflict with PMD's, cyclists, and pedestrians

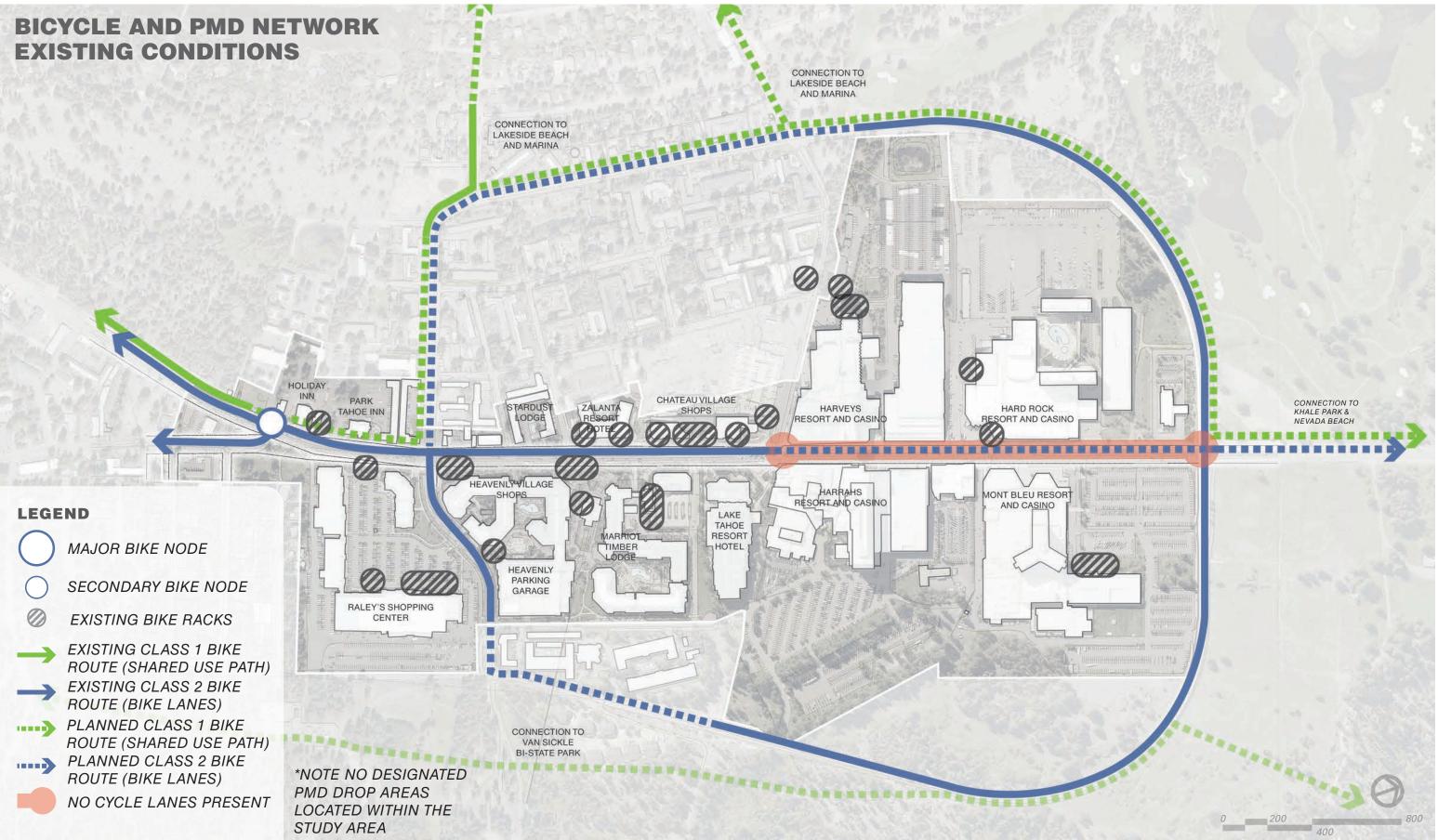
#### **Existing Metrics**

CATEGORY	METRIC	UNIT	NEVADA	CALIFORNIA
Space Allocation	Width of cross section dedicated to cycle facilities	Ft.	0	8′
	% of Cross section dedicated to cycle facilities	%	0%	10%
	Туре	N/A	None	Conventional
	Length	Ft.	0	2,752
Facility	Width	Ft.	0	6′
	Buffer Type	N/A	None	None
	Buffer Width	Ft.	0	0
	Bike Racks	Qty.	5	20
Provisions	Bike parking Capacity	Qty.	25	100









### **Proposed** BICYCLE FACILITIES

#### **OVERVIEW**

Based on stakeholder input and public comment, bicycle facilities are located both within the street edge (conventional painted lanes) and the public realm (shared-use path, lake side). The proposed cycle facilities effectively connect to the surrounding regional systems established. At intersections, where conflicts between users exist, the design implores striping through crosswalks, and bicycle boxes to help mitigate conflicts. Cyclists can use both the shared-use path and conventional painted lanes.

#### **FACILITY 1: CONVENTIONAL BIKE LANE**

- Designate space within the travelway for cyclists using pavement markings and signage
- Adjacent to travel lanes and in same direction
- 4.5' width through Nevada
- 6' width through California

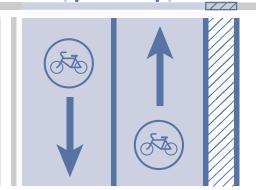
#### **FACILITY 2: SHARED-USE PATH**

- Designated space within pedestrian realm for PMD's, cyclists, and pedestrian traffic with minimum 5' landscape buffer
- 8' minimum width at certain pinch points, 10-12' width through corridor

#### **Proposed Metrics**

CATEGORY	METRIC	UNIT	NEVADA	CALIFORNIA
Space	Width dedicated	Ft.	19′	22′
Allocation	% Dedicated	%	24%	25%
	Туре	N/A	Conventional	Conventional
Facility 1	Length	Ft.	1,706′	2,752′
-	Width	Ft.	4.5′	6′
Conventional Bike Lane	Buffer Type	N/A	Painted Stripe	Painted Stripe
	Buffer Width	Ft.	6″ - 8″	6″ - 8″
	Туре	N/A	Multi-Use Path	Multi-Use Path
Facility 2	Length	Ft.	1,706′	2,752′
Shared-use	Width	Ft.	10′ - 12′	10′ - 12′
Path	Buffer Type	N/A	Vegetated	Vegetated
	Buffer Width	Ft.	6′ - 10′	8′ - 20′
Ducuicione	Bike Racks	Oty.	20	30
Provisions	Capacity	N/A	100	150





10' MINIMUM 3' BUFFER MINIMUM



#### **HARVEY'S CASINO**

#### HIGHLIGHTED CROSSING WITH STRIPING AND PAVING

10' MINIMUM SHARED-USE PATH WITH PAVER APPLICATION

#### BICYCLE BOX AT INTERSECTION

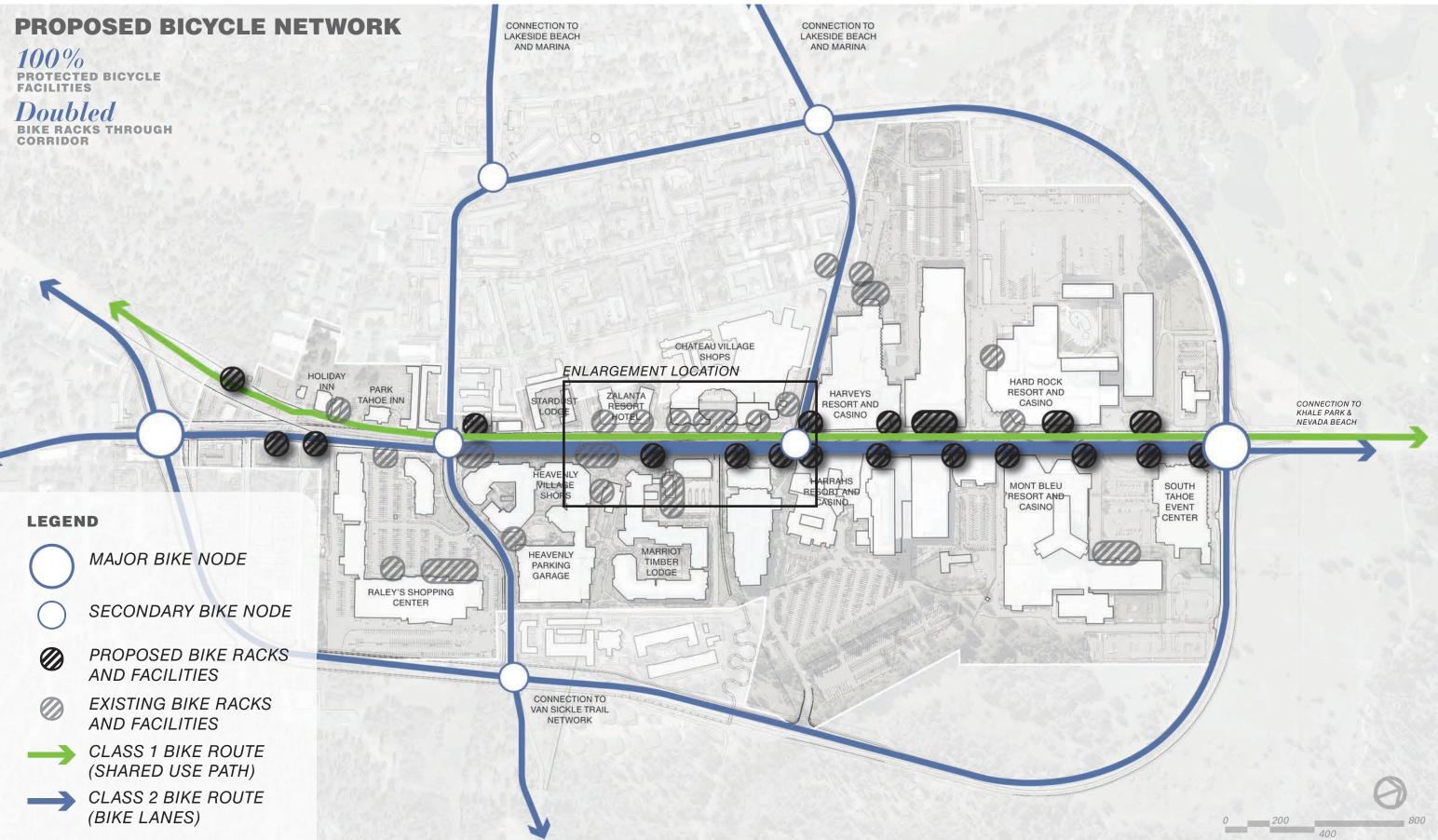
#### PAINTED OR COLORED ASPHALT CYCLE LANE 4.5' MINIMUM

#### ADDITIONAL BIKE & PMD DROP NEAR INTERSECTIONS

**HARRAH'S CASINO** 

3.22 Preferred Alternative Highlight Stateline Ave. & Proposed Cycle Improvements





# **Proposed** PMD FACILITIES

Following the existing laws, PMD's will be allowed to use the shared-use path and conventional painted bike lanes through the Main Street Corridor. PMD parking and drop locations have been designated near transit facilities, with (7) drop locations in total. PMD drop location capacity should follow the operators recommendations of 10-15 devices in each location.

Designated drop and parking locations help prevent conflicts between users and makes it easier to locate PMD's. This plan effectively recommends that the operators of PMD's reduce the allowable speed to 5 MPH between the proposed roundabout to the Heavenly Village Way intersection (see pg. 49).

The following facilities are available for use by PMD's:

#### **FACILITY 1: CONVENTIONAL BIKE LANE**

- Designate space within the travelway for scooter/PMD using pavement markings and signage
- · Adjacent to travel lanes and in same direction
- 4.5' width through Nevada
- 6' width through California

#### **FACILITY 2: SHARED-USE PATH**

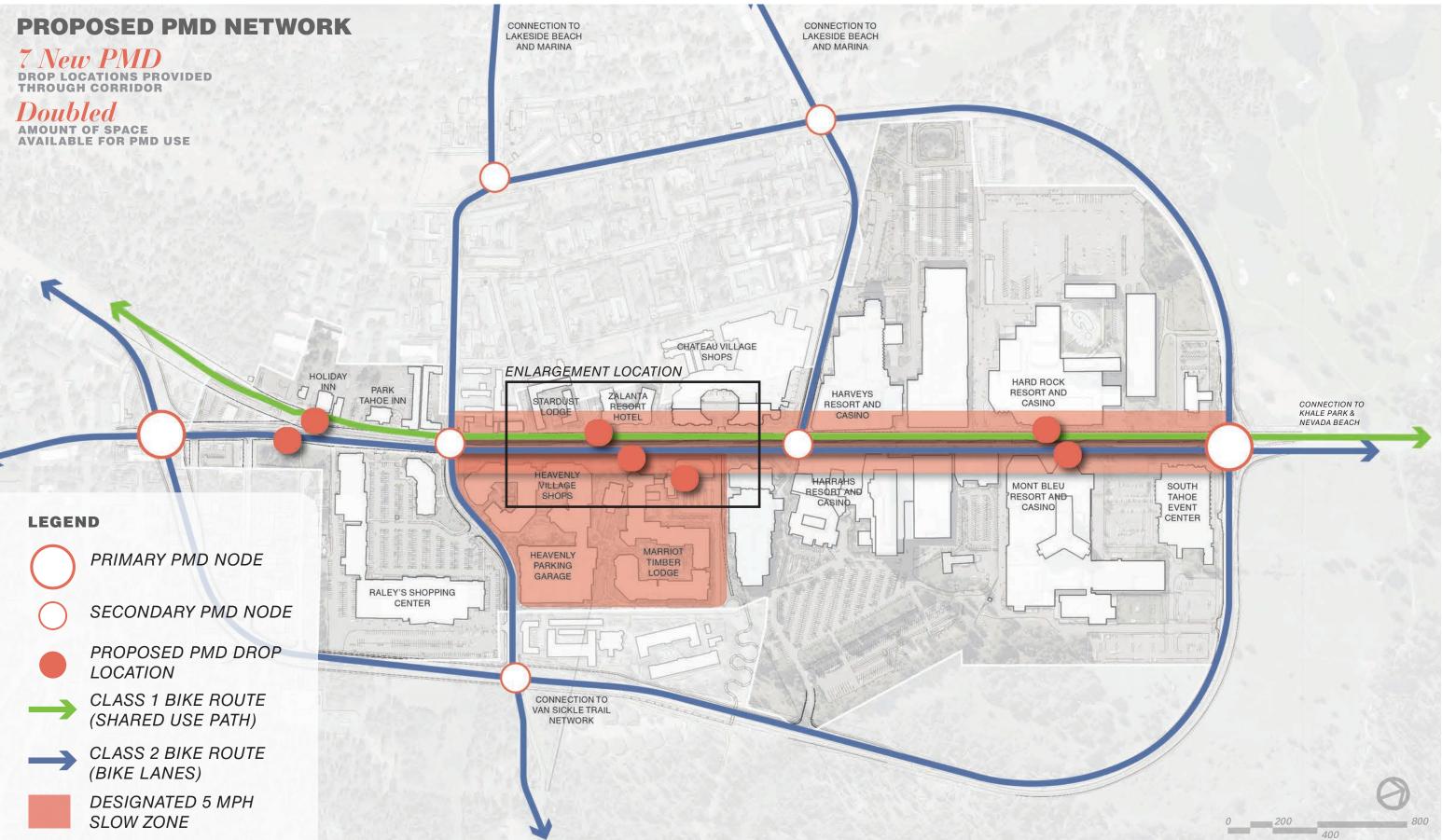
- Designated space within pedestrian realm for PMD's, cyclists, and pedestrian traffic with minimum 5' landscape buffer
- 8' minimum width at certain pinch points, 10-12' width through corridor
- Recommend that the operator reduce allowable speed in the MSMP area to 5 mph



#### CHARACTER IMAGES







### **GREEN INFRASTRUCTURE**

### **Proposed STORMWATER IMPROVEMENTS**

Historically, streets have formed an impermeable paved layer on top of what was once greenspace. Landscape that is incorporated into the urban realm can provide many cultural, ecological, and economic benefits to the environment.

Main Street will utilize stormwater bioretention planters and bioswales throughout the entirety of the corridor. The stormwater planters will act as a natural filter, where run-off will be captured and native/low-water vegetation and trees will then absorb many of the pollutants prior to reaching the greater stormwater system. The proposed design, which includes over 19,000 sqft area of stormwater treatment planters, will in effect treat 80-90% of stormwater though the corridor. Surface run-off from the 3-lane street and adjacent sidewalks/shared-use path will be collected in the following stormwater facilities:

#### **FACILITY 1: BIORETENTION PLANTERS**

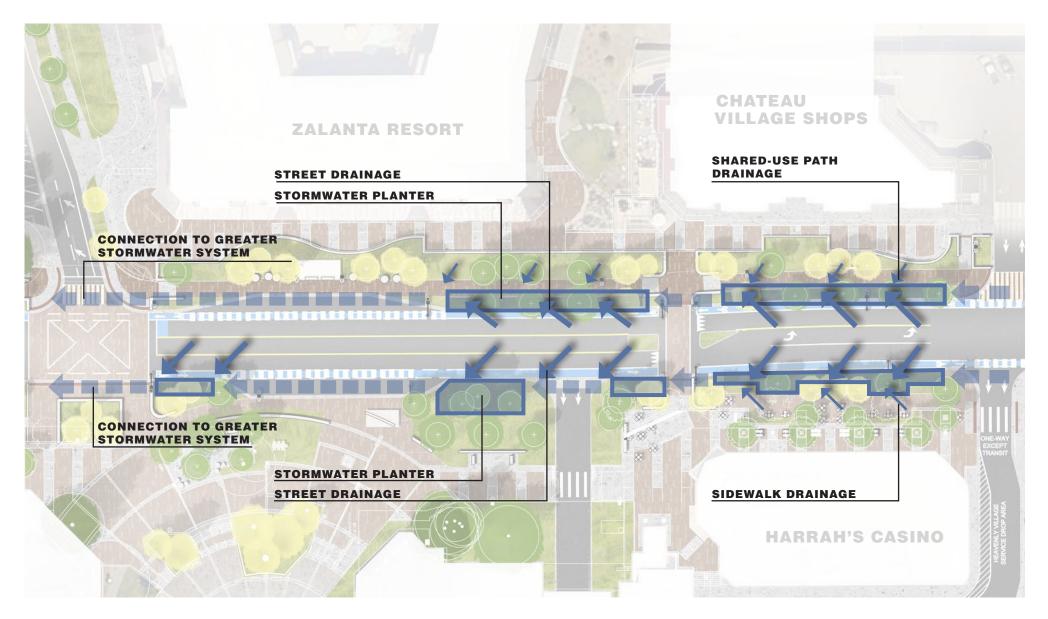
- Bioretention cells are walled vertically on either side of the planter. Location recommendations include areas within the right-of-way, medians & pedestrian areas. Planters are particularly effective where right-of-way width is constrained.
- Biodetention application is most conducive when retention planters cannot be achieved. Filtration planter bottoms can be concrete or lined to deter water from infiltrating.

#### **FACILITY 2: BIOSWALES & HYBRID**

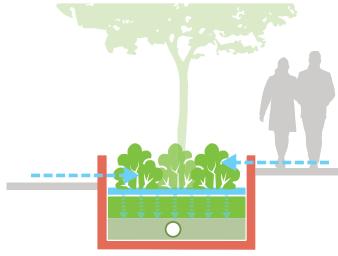
- Bioretention swales are shallow vegetated depressions that slope towards a low point. Much like the bioretention planters, swale are designed to capture, treat, and infiltrate stormwater runoff as it moves throughout a corridor.
- This hybrid cell combines elements of both swales and planters, with a side that is sloped and one side being a wall. Walls or graded sides can be located adjacent to either street or sidewalk.

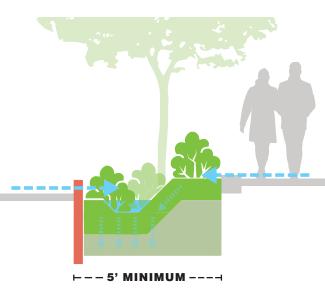
#### **FACILITY 3: PERMEABLE PAVING**

- This paving solution is an effective application when there is limited space to implement bioswales and retention planters.
- Application on Main Street should be explored along the multi-use path



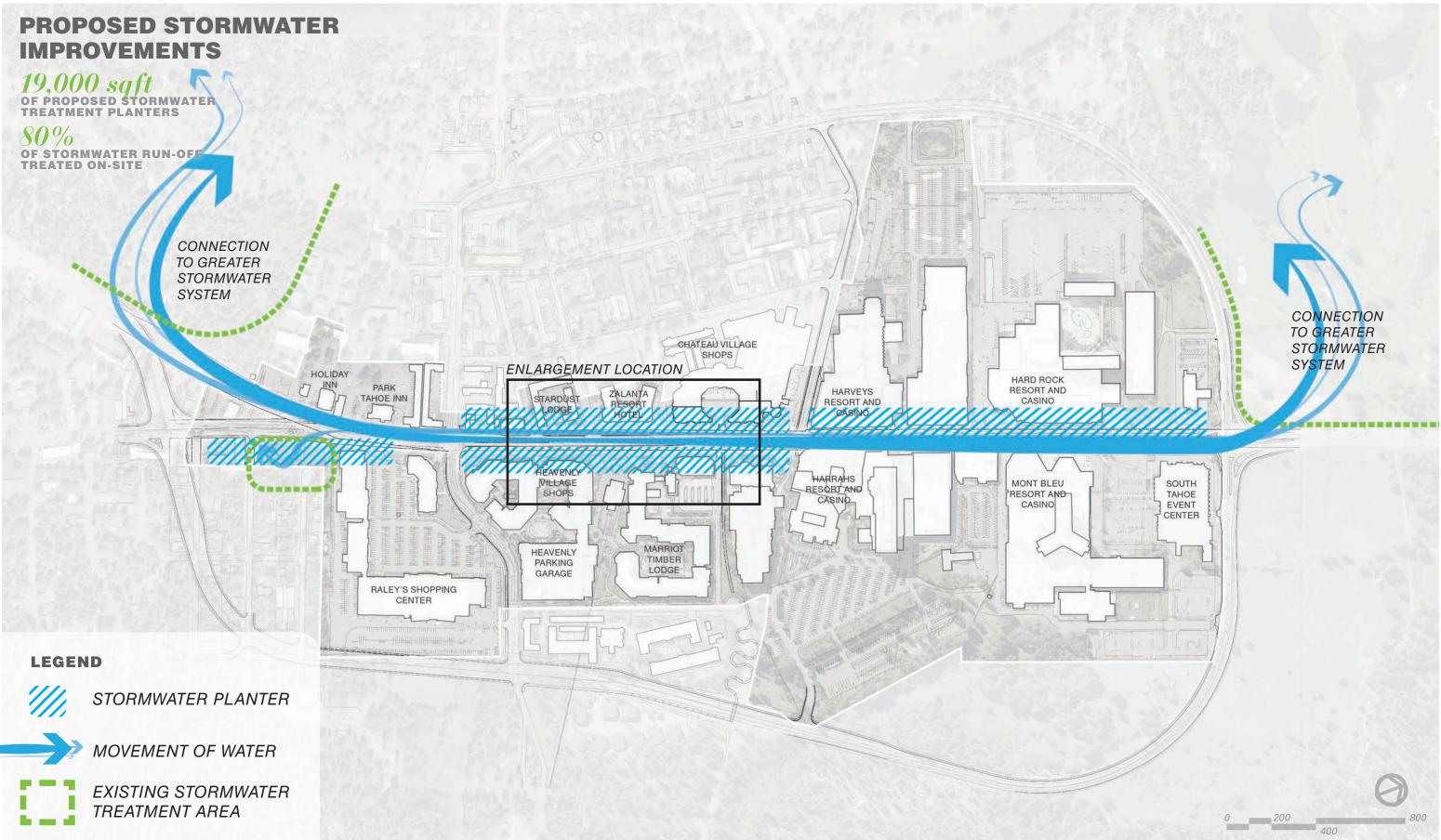
#### STORMWATER PLANTER CONDITIONS





**⊢−−5' MINIMUM −−−**⊣ **BIODETENTION PLANTER**  HYBRID BIORETENTION PLANTER

### **GREEN INFRASTRUCTURE**



### Existing TRANSIT NETWORK

This section addresses facilities and service that increase transit ridership, in both the winter and summer seasons, and connections with other transportation modes. TTD is the lead organization for this component and will submit the most up-to-date transit plan to the TRPA Governing Board for approval regarding consistency with the US 50 SSCRP permit and this plan. This plan includes a transit circulator within the project area that will operate in concert with the parking management plan. The circulator will be operational concurrent with or prior to the completion of the SSCRP.

On the South Shore, TTD operates Route 50, a 30-minute service along Highway 50 from 6:30 a.m. to 8:30 p.m. Route 55 runs hourly along Highway 50 and into some local neighborhoods from 6 a.m. to 7 p.m. TTD also operates hourly local service between Stateline and Daggett Summit along Kingsbury Grade and a commuter route that provides service from Carson City and Minden to Stateline. Complementary paratransit services are provided within one mile of the local fixed routes with added paratransit service to Meyers. In addition to TTD services, Heavenly Mountain Resort provides frequent winter shuttle service between several of its base lodges. These services are open to the public and free-to-the-user.

The Stateline Transit Center is located in the heart of the Main Street Management Plan area, behind the Heavenly Village Shops, yet ridership to, from, and within the MSMP area is underutilized. Making transit faster, cheaper, and more convenient is key to increasing ridership in this area.

#### **ROUTES & FACILITIES**

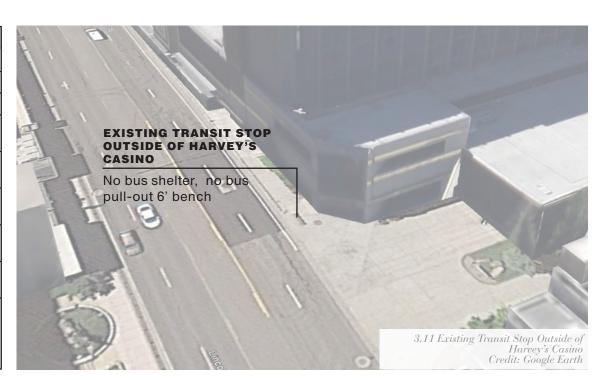
- Transit Center behind Heavenly Village Shops, accessed via Transit Way
- Route 22 Frequency 60 min Service Kingsbury Grade destinations including NV side of Heavenly Resort
- Route 50 Frequency 30 min Service Highway 50 West towards "Y"
- Route 55 Frequency 60 min Service South Lake neighborhoods Ski Run Blvd and Lake Tahoe Community College

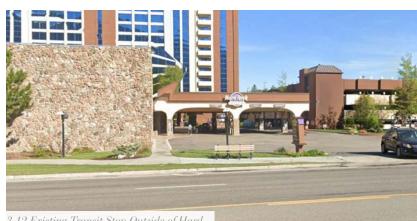
#### WHAT WE HEARD

- Make transit a priority by providing dedicated bus pull outs.
- Provide more frequent transit service that runs 24/7 to the "Y" and other regional hubs.

#### **Existing Metrics**

CATEGORY	METRIC	UNIT	NEVADA	CALIFORNIA		
	Vehicle Type	N/A	TTD	TTD		
Facility	Lane Type	N/A	Shared	Shared		
	Lane Width	Ft.	12′ - 12.5′	11′		
	Number of stations	Qty.	1	0		
	Number of stops	Qty.	3	3		
	Type of bus stop	N/A	Variable	Variable		
Transit Stops	% w/ shelter & seating	%	0%	0%		
	% w/ wayfinding	%	0%	0%		
	% w/ real time arrival data	%	0%	0%		



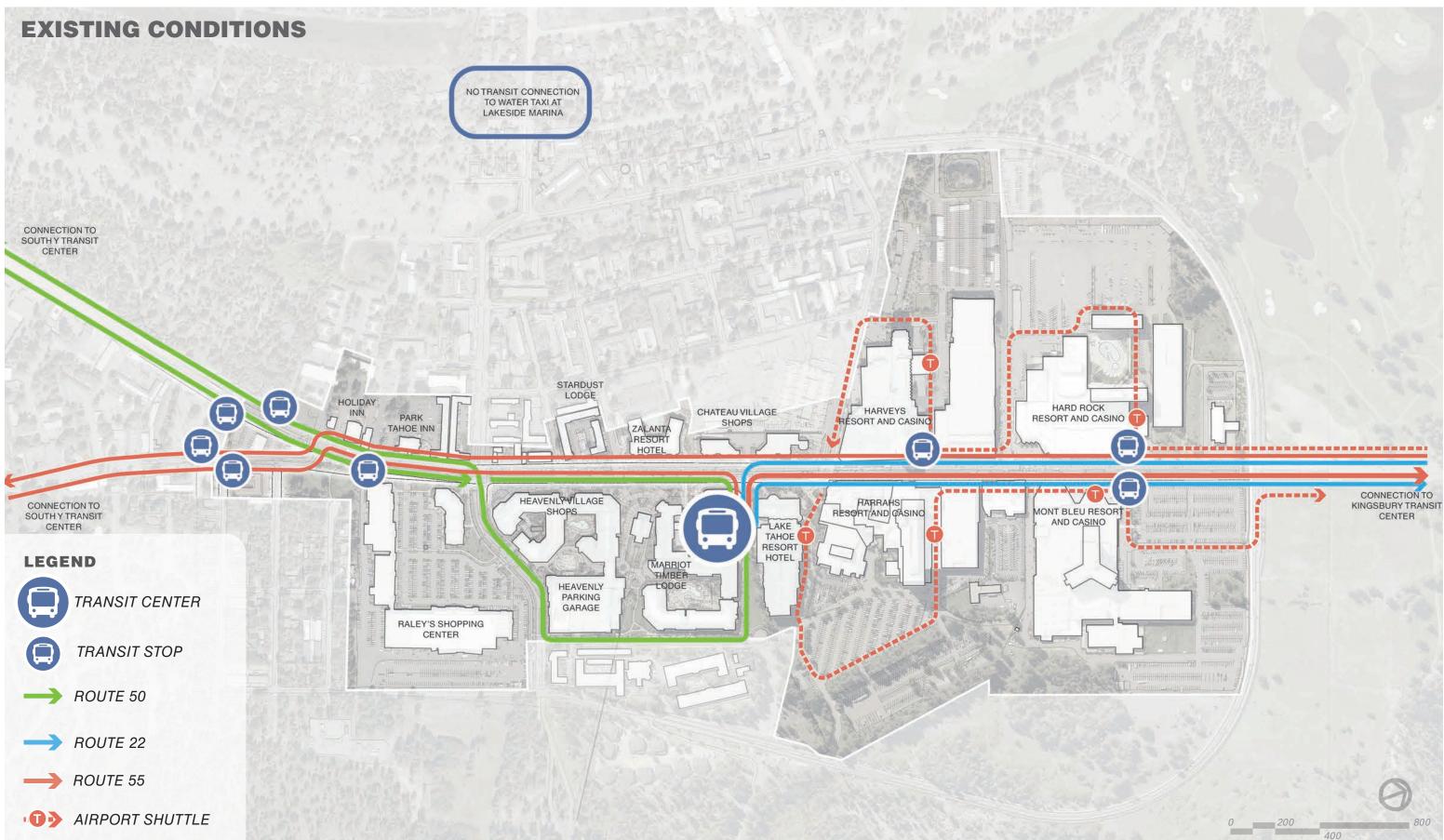


3.12 Existing Transit Stop Outside of Hard Rock Casino Credit: Google Earth



3.13 Existing Transit Stop Outside of Mont Bleu Casino Credit: Google Earth





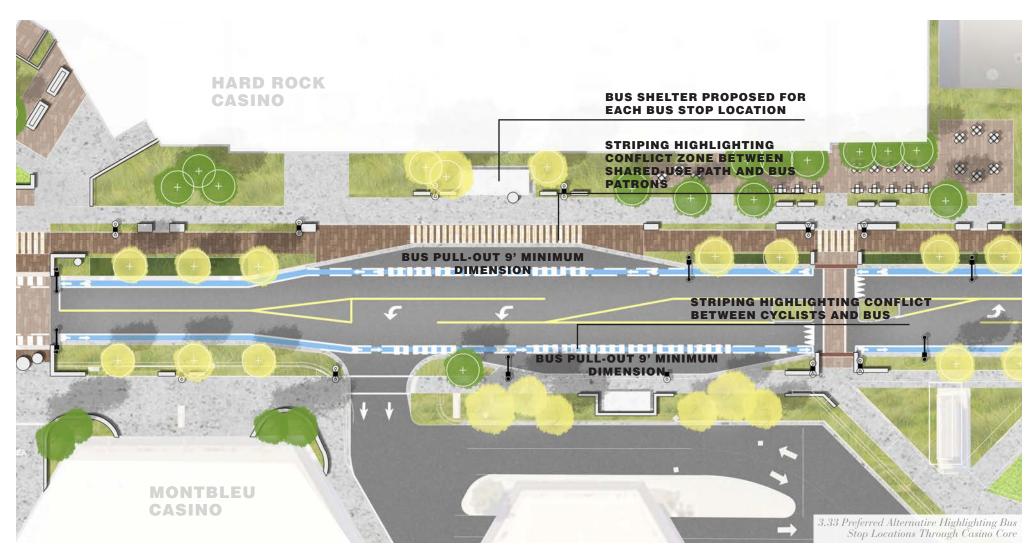
## **Proposed** TRANSIT NETWORK **OVERVIEW**

The proposed design for Main Street provides safer, more frequent and more comfortable transit stops throughout the corridor. Dedicated bus pull-outs will prevent vehicle backups from occurring.

The proposed design shows a connection from Bellamy Court to the Harrah's parking lot. This would provide the ability to circulate more easily from the transit center to the casino parking lots.

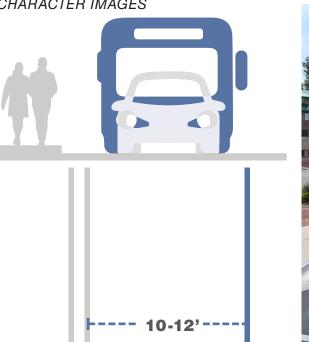
#### **PROPOSED DESIGN FEATURES**

- Transit shared lane with privately-owned vehicles (POV)
- Bus pull-out 9' width minimum in dimension
- Covered bus shelter for transit users
- Clearly marked bus loading and unloading areas that are ADA compliant



#### CHARACTER IMAGES

Proposed Metrics					
CATEGORY	METRIC	UNIT	NEVADA	CALIFORNIA	
	Vehicle Type	N/A	TTD + Circulator	TTD + Circulator	
Facility	Lane Type	N/A	Shared/in- Iane	Shared/in- lane	
	Lane Width	Ft.	11′	11′	
	Number of stations	Qty.	1	0	
	Number of stops	Oty.	2	4	
Transit	Type of bus stop	N/A	Pull-Off	Pull-Off	
Stops	% w/ shelter & seating	%	100%	100%	
	% w/ wayfinding	%	100%	100%	
	% w/ real time arrival data	%	100%	100%	





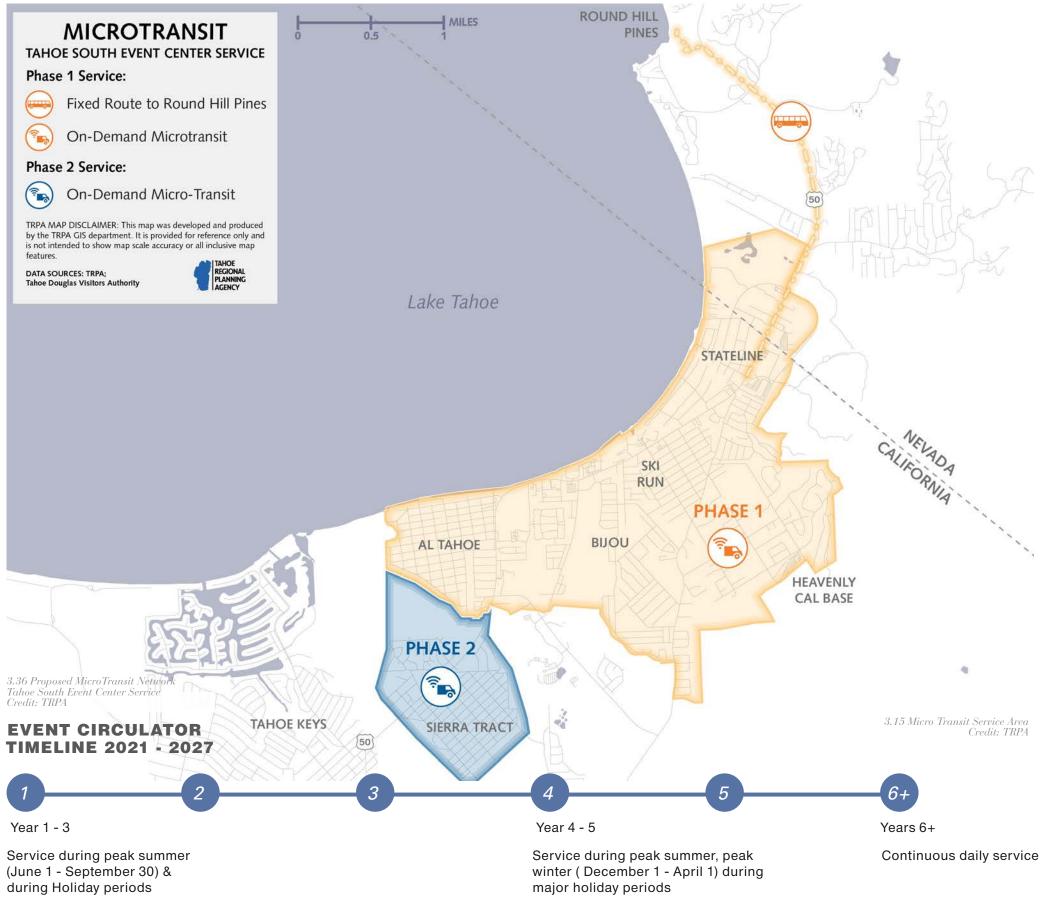
Credit: Flickr



3.35 RFTA Bus Shelter Highlighting Design that Responds to Regional Context, Credit: Flickr

### **SOUTH TAHOE EVENT CENTER CIRCULATOR**

In 2020, the TRPA Governing Board approved plans for the 6,000-person Tahoe South Events Center in the MSMP area. As part of the project, the event center will provide a combination of free fixed-route, and on-demand micro transit service to the MSMP area from Round Hill in Nevada to the Bijou neighborhood in South Lake Tahoe, California. Service will begin in summer 2021 and expand from seasonal to yearround over a six-year period. Add on areas could further expand service to South Lake Tahoe's Sierra Tract Neighborhood.



Continuous daily service year-round

### EXPANSION OF TRANSIT SERVICE

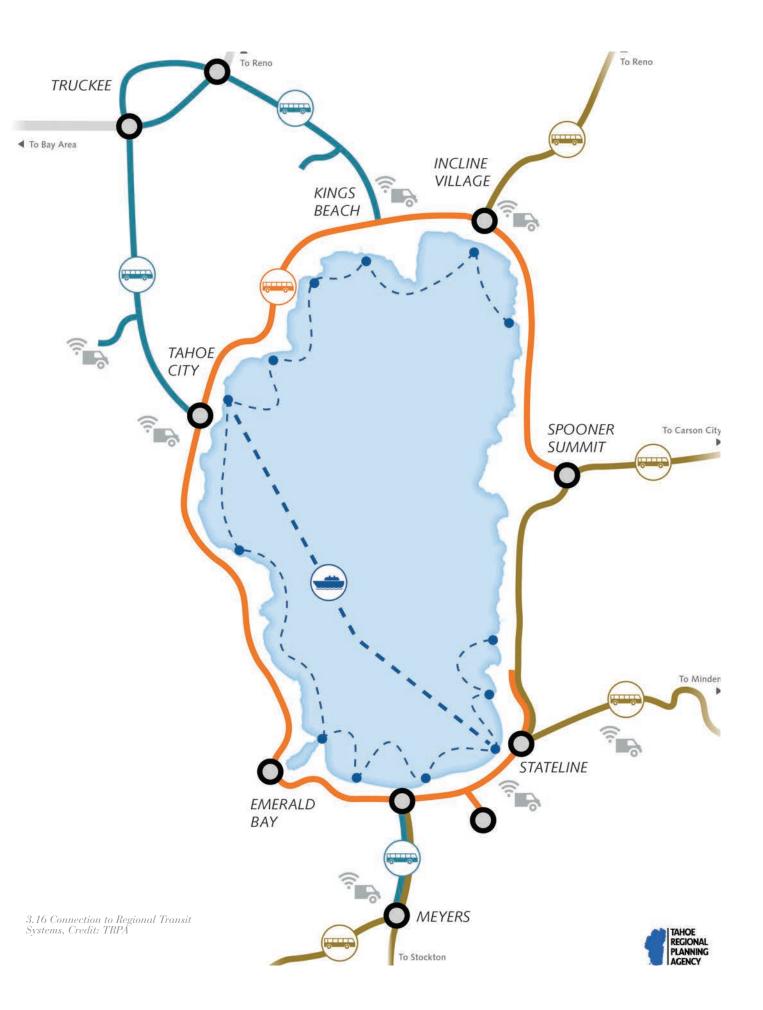
In addition to the Event Center Circulator, a smaller scale circulator for the MSMP area could be provided to connect people more seamlessly to local shops and hotels, recreation destinations and parking facilities. This service could be provided by TTD, a private transit provider, or through a public private partnership. The exact route and implementation details of an MSMP circulator will be based on transit need and the availability of funding once the Main Street has been implemented.

### **CONNECTIONS TO REGIONAL TRANSIT**

Future transit services will build on existing fixed routes operated by TTD to improve frequency, service span, and provide more service to the MSMP area and surrounding hotspots. In 2020, TTD began providing free-to-the-user service on all routes and will continue to offer free fares on in-basin public transit through 2045. Private transit providers will also play a key role in transit access to the project area and help fill gaps to surrounding recreation sites and neighborhoods and assist in offering additional regional service. This section highlights how public and private partners can work together to provide frequent and fun transit service to the MSMP area that encourages residents and visitors to leave their car behind.

Consistent with the Regional Transportation Plan and Short Range Transit Plan, future transit to the MSMP area will include the following:

- The Stateline Transit Center will continue to act as a south shore hub with connections to local and regional transit routes.
- Route 50 and 22 will continue to connect the MSMP area to the "Y" with increased frequency 15-minute fixed route service.
- Local routes, including Route 55, will serve surrounding neighborhoods with buses arriving every 30 to 60-minutes, providing connections to more frequent routes.
- On-demand service within neighborhoods and town centers, will link to frequent routes and provide service to the MSMP area.
- Regional routes 21 and 20 will connect commuters to the Stateline Transit Center from Carson City and Minden
- Public and private transit providers will build on the existing water transit to provide more options for commuters and visitors. Water taxis will connect Stateline to the North Shore and popular beaches and marinas in the South Shore during peak summer months.



#### TRANSIT

2045 TRANSPORTATION PLAN Planned Projects by 2045\*

Frequent Transit (~15 min)

Local Transit (~30 min)

Regional Transit



0

Water Transit

🔄 On-Demand Micro-Transit

Proposed Mobility Hubs

\*For more information on individual projects, visit www.trpa.org/rtp

TRPA MAP DISCLAIMER: This map was developed and produced by the TRPA GIS department. It is provided for reference only and is not intended to show map scale accuracy or all inclusive map features.

DATA SOURCES: TRPA; Tahoe Transportation District; Placer County

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### **Existing CONDITIONS**

#### **OVERVIEW**

Existing vehicle access points are focused along Main Street, causing traffic and conflicts between different users. Curb cuts should be reduced in size and number to reduce conflicts between vehicles and pedestrians. There is currently ample parking within the Casino Core, but access and connectivity between these parking areas lack cohesion. Future access to parking should look at the opportunity to join the parking areas via Bellamy Ct.

#### WHAT WE HEARD

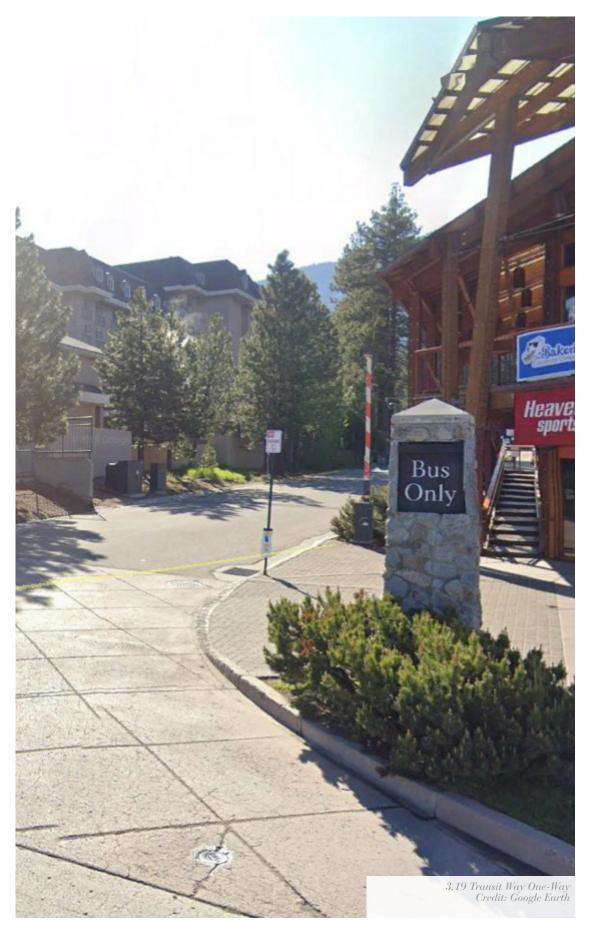
Based on stakeholder input and public comment, the vehicle network will focus on providing access to destinations and rerouting vehicle departures off of Main Street to Highway 50 and Lakeview Parkway by implementing the following solutions:

- Vehicle access points to be provided on Main Street
- Reduce sizes of access points to decrease the length of curb cuts
- Eliminate ingress/egress point when possible while maintaining minimum emergency and safety requirements
- Encourage vehicle departures to Lake Parkway Ave. and new Highway 50
- No vehicle departures on Main Street except transit via Transit Way
- Provide strategically located access to parking via Main Street utilize Highway 50 and Lake Parkway Ave for access during street event closures
- Connect large parking areas via Bellamy Ct.



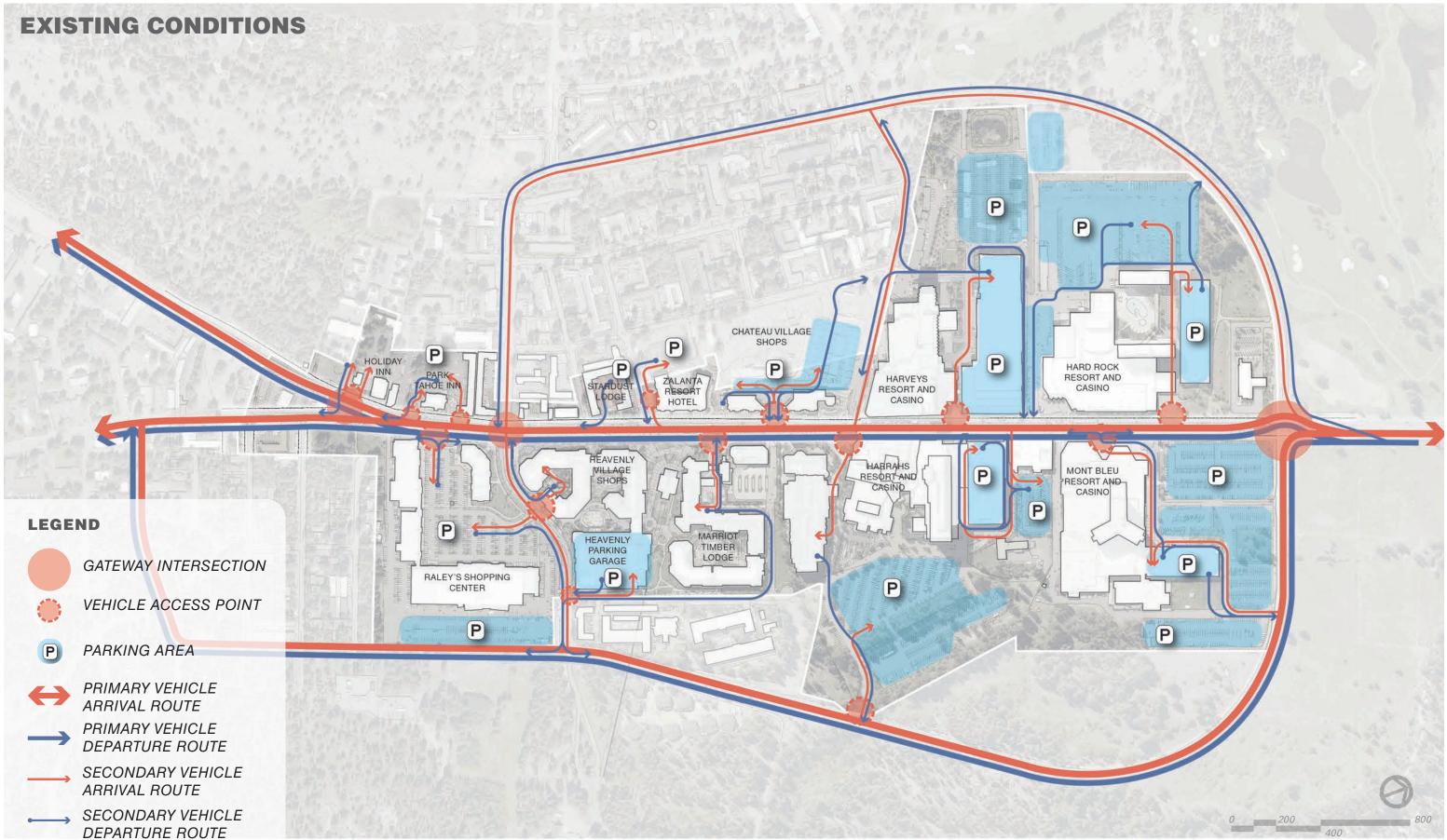
3.17 Existing Cul-de-sac at Bellamy Ct. Credit: Google Earth





#### **Existing Metrics**

CATEGORY	METRIC	UNIT	NEVADA	CALIFORNIA	
<b>T</b>	Number	Qty.	4	4	
Travel Lanes	Width	Ft.	11′ - 12.5′	11′	
Turn Lanes	Number	Qty.	1	1	
Turn Lanes	Width	Ft.	12′ - 12.5′	12.5′	
Curb Cuts	Qty.	Ft.	480′	850′	
Car Share	Number	Qty.	0	0	
Facilities	Number	Qty.	0	0	



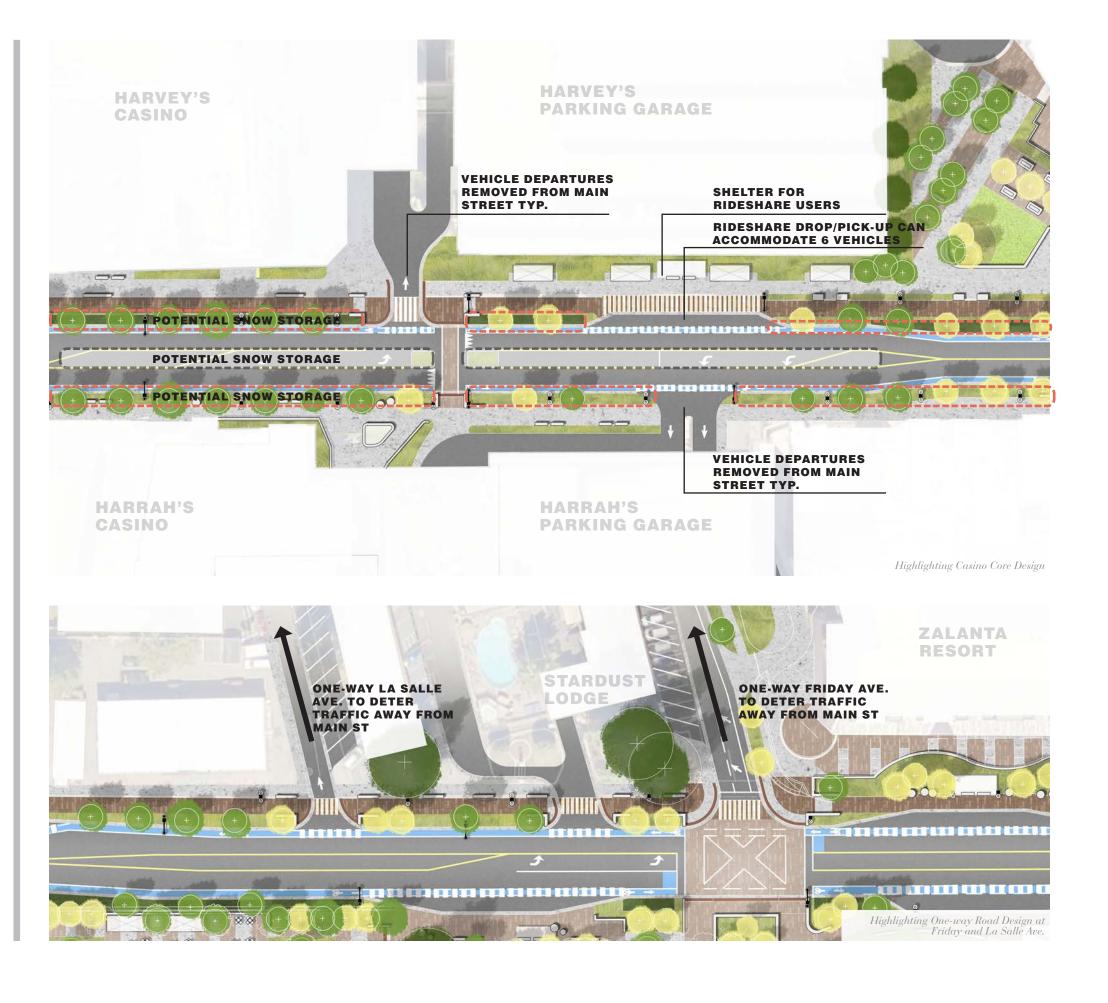
## **Proposed VEHICLE NETWORK**

The Main Street design creates a vehicle network that seamlessly directs vehicles to parking areas and destinations. From parking areas, vehicle departure traffic is directed off of Main Street to peripheral roads, Highway 50 and Lakeview Parkway. Ingress points are reduced in quantity and size to alleviate conflict between pedestrians and vehicle traffic.

Two-lanes of traffic with a center turn lane provide access to users traveling east or west though the corridor. During street event closures, access to primary destinations is directed to Highway 50 and Lake Parkway Ave, see pages 72-76 for further clarification on vehicle access during street events closures.

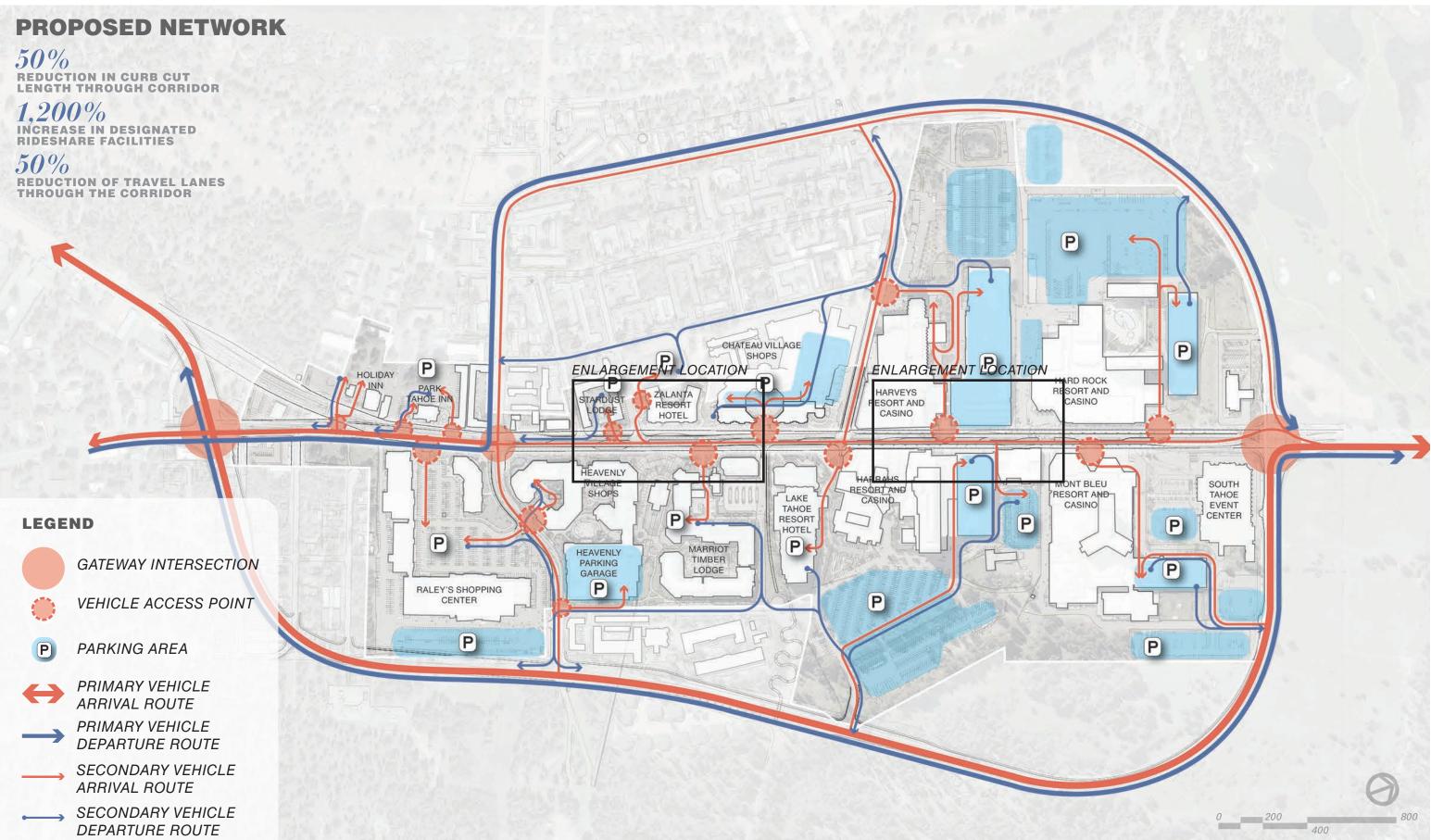
#### **PROPOSED DESIGN FEATURES**

- Vehicle access provided to major destinations via Main Street, except during events
- Vehicle access point widths reduced by 50%
- Vehicle departures restricted on Main Street
- Departures directed to Lake Parkway and new Highway 50
- Access to all parking areas provided via Main Street and secondary routes - Lake Parkway Ave., and Highway 50
- Rideshare drop/pick-ups provided in both Nevada and California



#### **Proposed Metrics**

CATEGORY	METRIC	UNIT	NEVADA	CALIFORNIA	
	Number	Qty.	2	2	
Travel Lanes	Width	Ft.	11′	11′	
Tours	Number	Qty.	1	1	
Turn Lanes	Width	Ft.	11′	11′	
Curb Cuts	Qty.	Ft.	129′	593′	
Car Share	Number	Qty.	1	1	
Facilities	Number	Qty.	5	7	



# Existing service access

#### **OVERVIEW**

The existing service access area at many locations through Main Street struggle with conflict between transit and POVs. What was once a bus stop at Heavenly Village, has transformed into a service pull-out and POV drop off for skiers during the winter months effectively eliminating transit stops though the Heavenly Village Core. At the Stateline Transit Center, transit vehicles are often in conflict with service vehicles attempting to deliver to Heavenly Village Shops via Transit Way.

Other conflicts with service arise with the proposed street closures during events, namely at Lake Tahoe Resort Hotel, Stardust Lodge, and business locations within Heavenly Village. The design will provide service access to destinations during events via Lake Parkway Ave, Highway 50, and other peripheral streets.

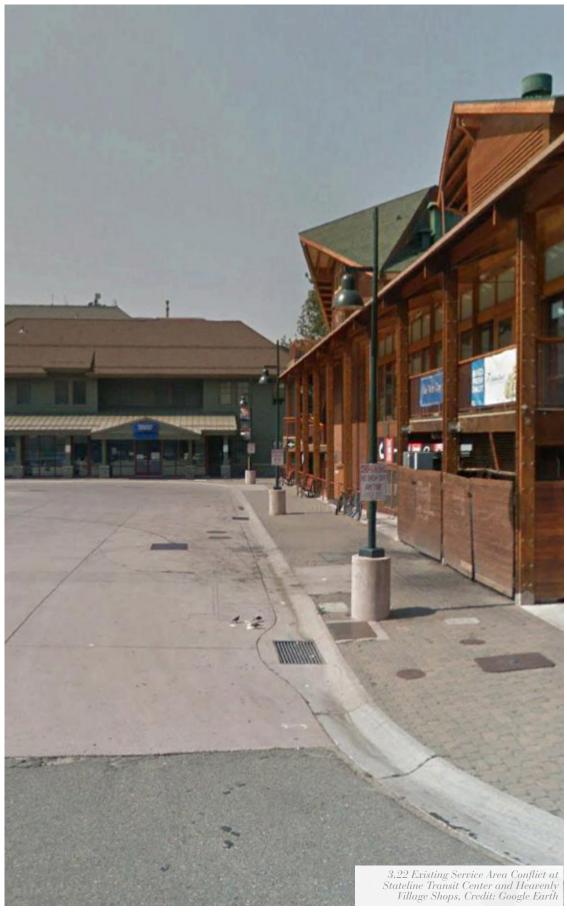
#### WHAT WE HEARD

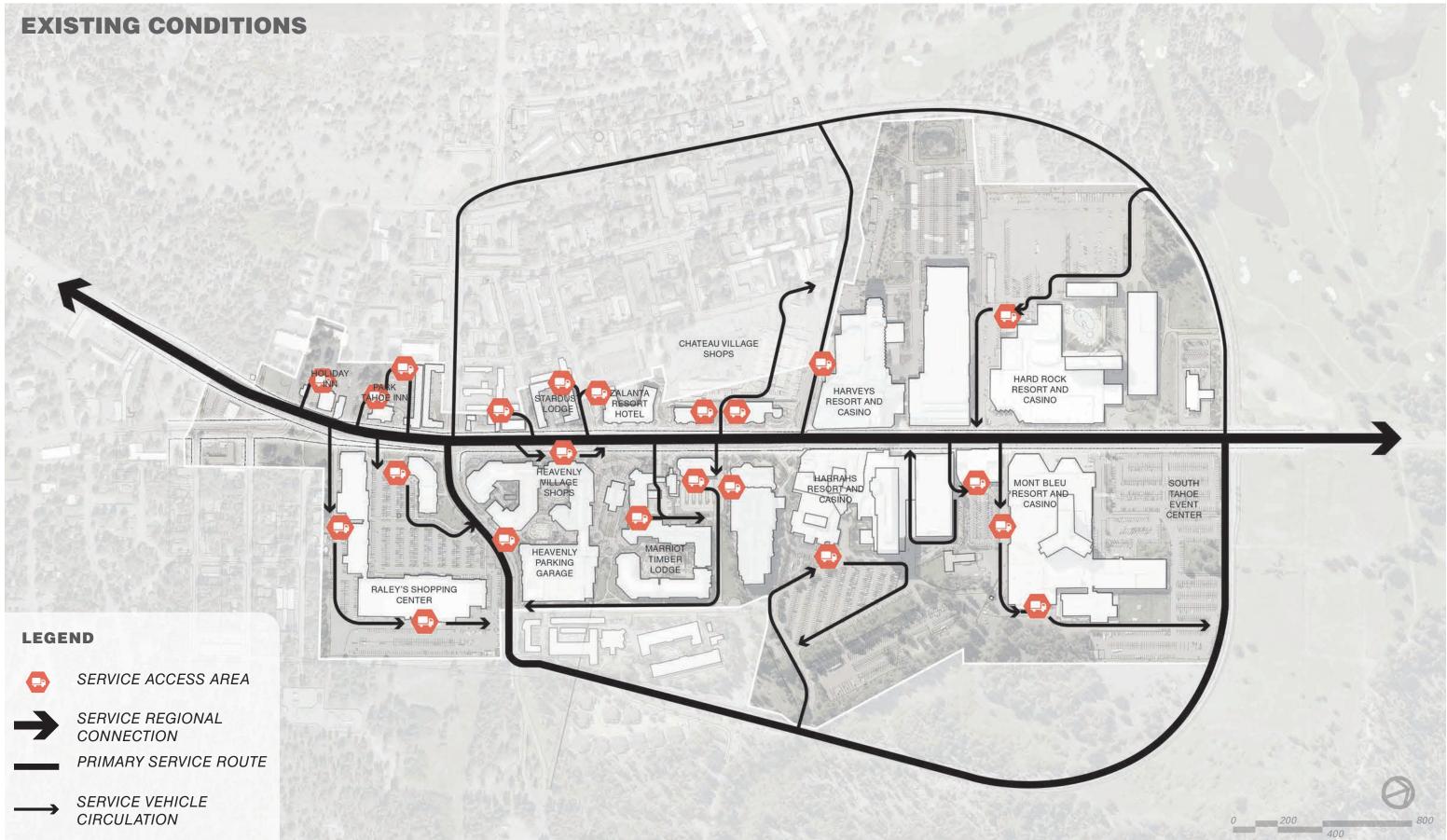
Based on stakeholder input and public comment, service access focused on all businesses located in the Main Street Corridor and address the following concerns

- Provided the necessary infrastructure for service access during events
- Eliminated conflicts between transit and service vehicles
- Eliminated conflicts between POV and service vehicles
- When possible, eliminate the need for service access from Main Street









### **Proposed** SERVICE ACCESS OVERVIEW

Service access in the proposed design addresses the conflicts between other modes of vehicular traffic by creating designated service access areas where conflict is prevalent. Along Transit Way, an allotted space for up to (3) service vehicles is provided to mitigate the existing conflicts between transit and service vehicles.

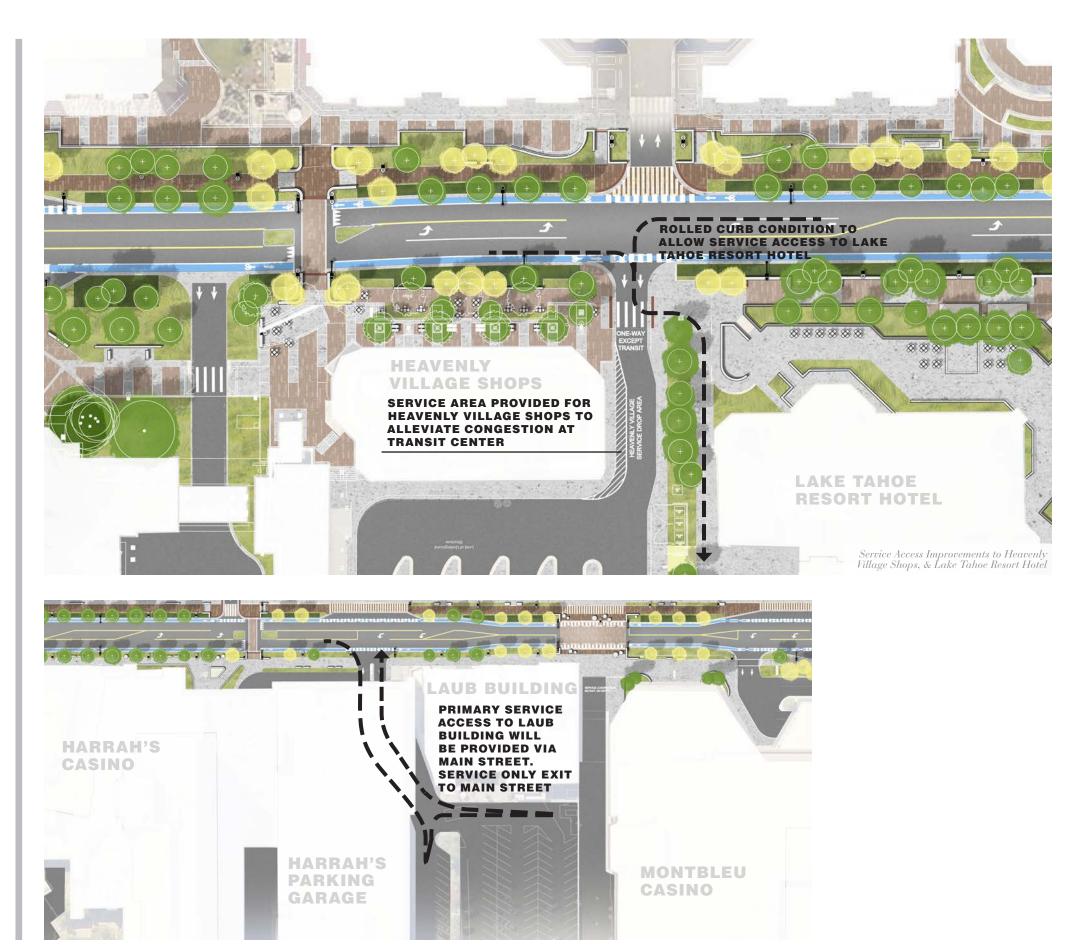
Lake Tahoe Resort Hotel has a unique service access drive that flows parallel to Transit Way, but is separated by significant grade change. The result is a required access point from the intersection of Transit Way and Main Street with a rolled curb application. This allows service vehicles to access Lake Tahoe Resort Hotel loading bay from Main Street and from Transit Way (during events, see pages 77-79 for more information on service access during events).

Friday Ave is a proposed one-way that will function as a two way street during event closures. This will provide access to Stardust Lodge and Zalanta Resort..

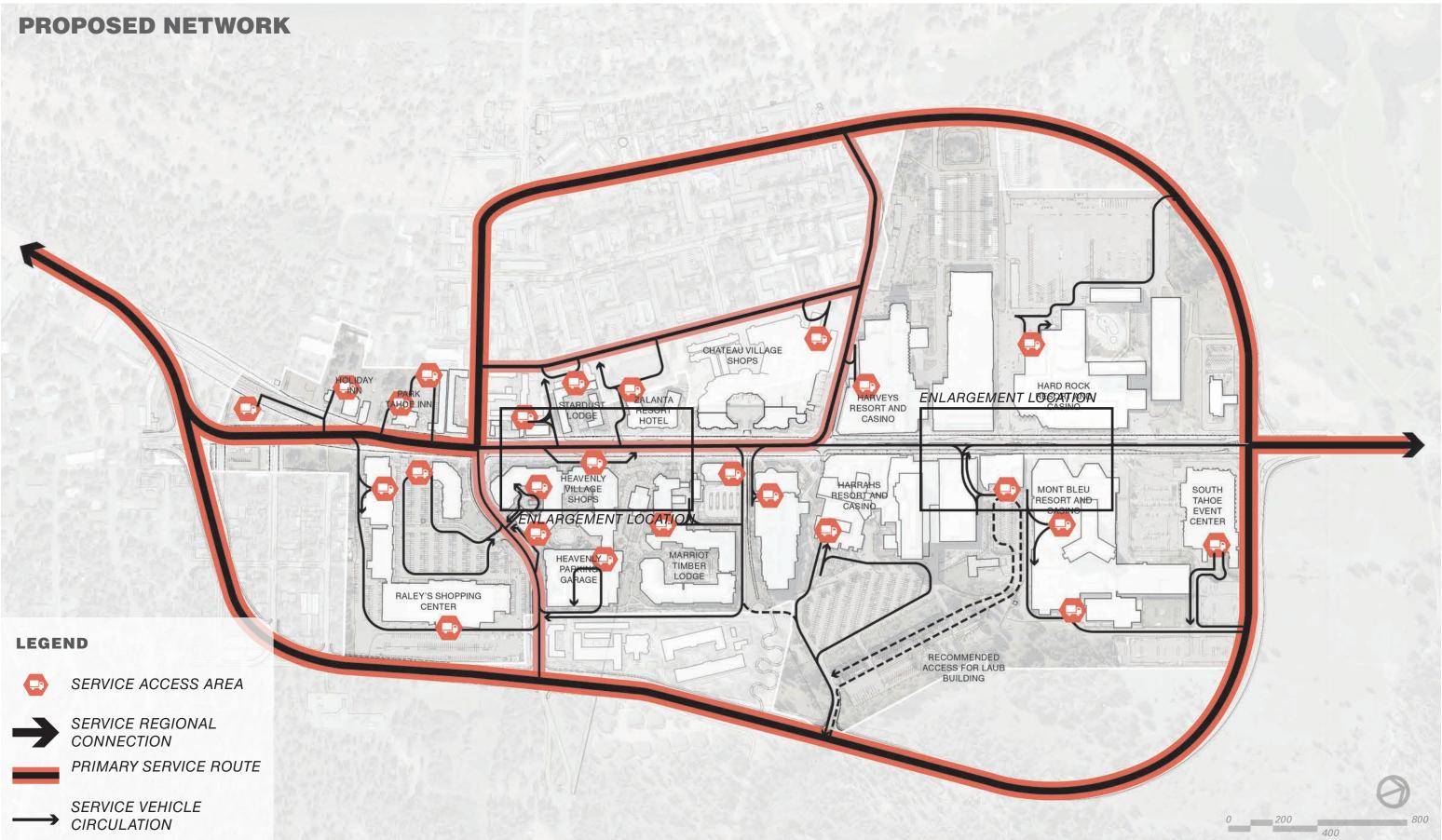
Service access to businesses within the Casino Core will primarily be from Highway 50 and Lake Parkway. The exception, seen in the diagram on the right, is service access to the Laub Building. This plan recommends service access to the Laub Building be provided through an easement on Harrah's Casino property. Until this is feasible, service access will continue to utilize Main Street as the primary access route.

#### **PROPOSED DESIGN FEATURES**

- Provides the necessary infrastructure for service access during events
- Eliminates conflicts between transit and service vehicles
- Eliminates conflicts between POV and service vehicles
- Eliminates the need for service access from Main Street where possible



Service Access Improvements to Casino Core



### **EMERGENCY ACCESS**

### Existing EMERGENCY ACCESS

#### **OVERVIEW**

The primary routes for emergency access through Main Street utilizes the Lake Parkway and existing Highway 50. Ensuring adequate emergency access to all businesses and destinations will be imperative the successful design of Main Street.

#### WHAT WE HEARD

- Provide primary service access from rerouted U.S. 50 and Lake Parkway Ave.
- Provide the necessary infrastructure for service access during events

OLIDAY

PARK

HOE IN

RALEY'S SHOPPING CENTER

INN

LODGE

HEAVENLYVILLAGE

HEAVENLY

PARKING

ZALANTA

HOTEL

MARRIO

TODGE

HARVEYS

RESORT AND CASIN

RESORT AND CASING

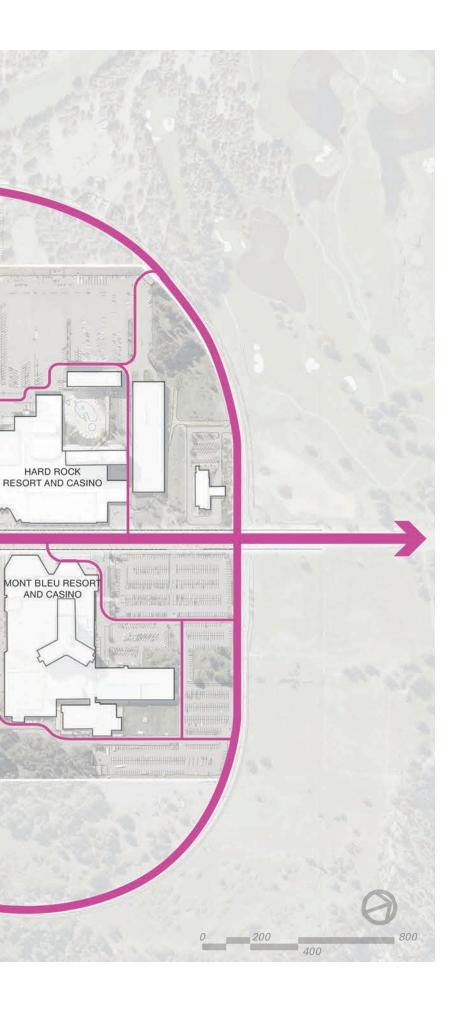
CHATEAU VILLAGE

SHOPS

LAKE TAHOE RESORT HOTEL



PRIMARY EMERGENCY ROUTE SECONDARY EMERGENCY ROUTE



### **EMERGENCY ACCESS**

### **Proposed** EMERGENCY ACCESS

#### **OVERVIEW**

Proposed emergency access utilizes much of the same route configurations that exist within the district today. The principle difference for Main Street will be that primary routes for emergency access will be from Highway 50, Lake Parkway Ave., and Cedar Ave.

#### **OUTCOMES**

- Provides primary service access from rerouted U.S. 50 and Lake Parkway Ave.
- Provides the necessary infrastructure for service access during events
  - See pages 44-46 for additional information on emergency access during street event closures

HOLIDAY

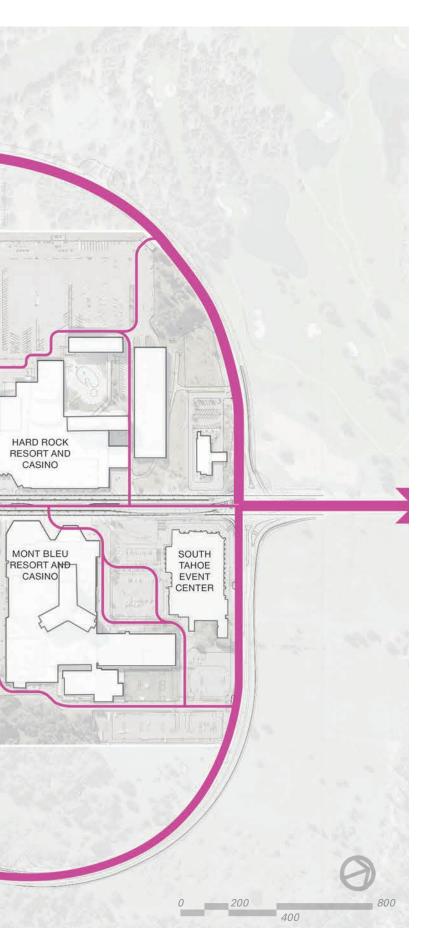
INN

PAR

RALEY'S SHOPPING CENTER

LEGEND

PRIMARY EMERGENCY ROUTE SECONDARY EMERGENCY ROUTE



CHATEAU VILLAGE SHOPS

J-

HARVEYS RESORT AND

CASINO

V I

HARRAHS

CASINO

STARDUST

HEAVENLY

VILLAGE

SHOPS

HEAVENLY

PARKING GARAGE ZALANTA

HOTEL

MARRIOT

TIMBER

### **ADJACENT LAND USES & ACTIVATION**

### Existing LAND USES & ACTIVATION OVERVIEW

Throughout the Casino Core, many of the public spaces and street frontages lack activation. The casinos are a product of an antiquated casino design strategy, that encouraged the activity and dining to be located within buildings, and the outdoor spaces and street frontages - an after thought. As the gaming industry continues to see declines in revenue, many casinos will be looking for alternative sources of revenue, which will include dining and events. Hard Rock Casino has been the first to explore some of the alternative revenue strategies, and last year Harvey's Casino created temporary outdoor dining along Stateline Avenue.

As the trends of outdoor dining and activation continue to grow within the casino industry, so will the demand for space to provide these services. This, along with the recent COVID-19 pandemic which has forced local business and restaurants to provide outdoor dining to remain open, will create the incentives necessary for Main Street to bloom into an activated street.

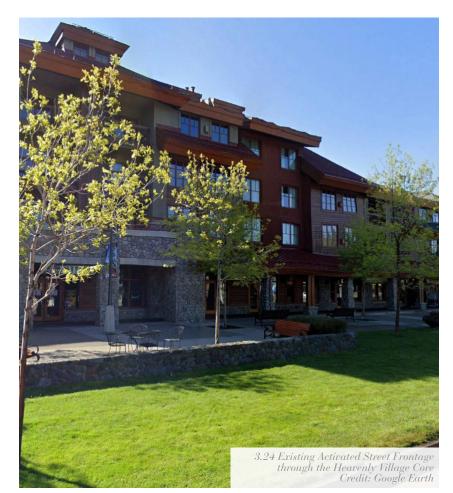
The Heavenly Village Core has a robust and healthy streetscape that provides abundant space for businesses and restaurants to utilize outdoor dining and off-street events. Solutions will build off the existing successes found at Heavenly Village, and extend through the Main Street Corridor.

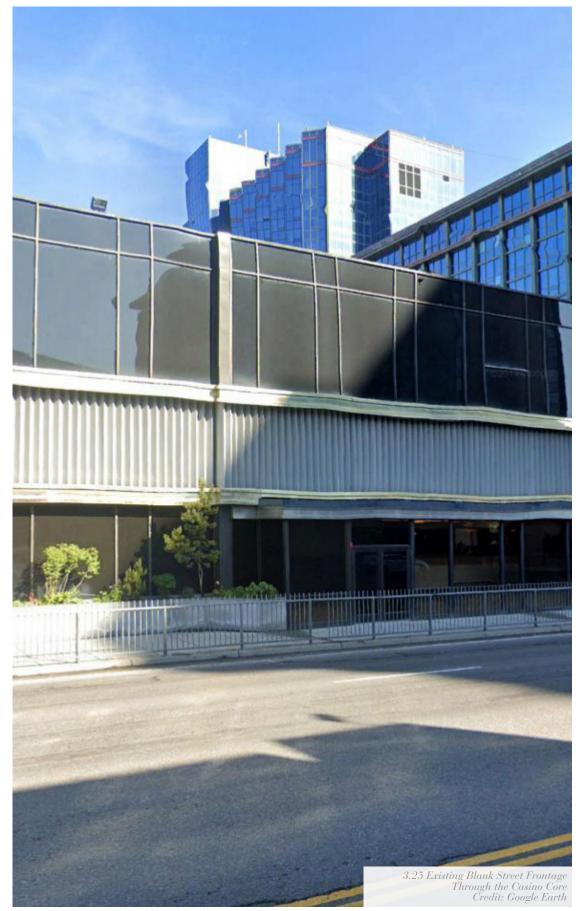
#### WHAT WE HEARD

- Establish anchors to enhance the sense of arrival
- Promote connectivity to surround destinations
- Draw visitors along the street by encouraging outdoor dining and activated street frontage through the corridor





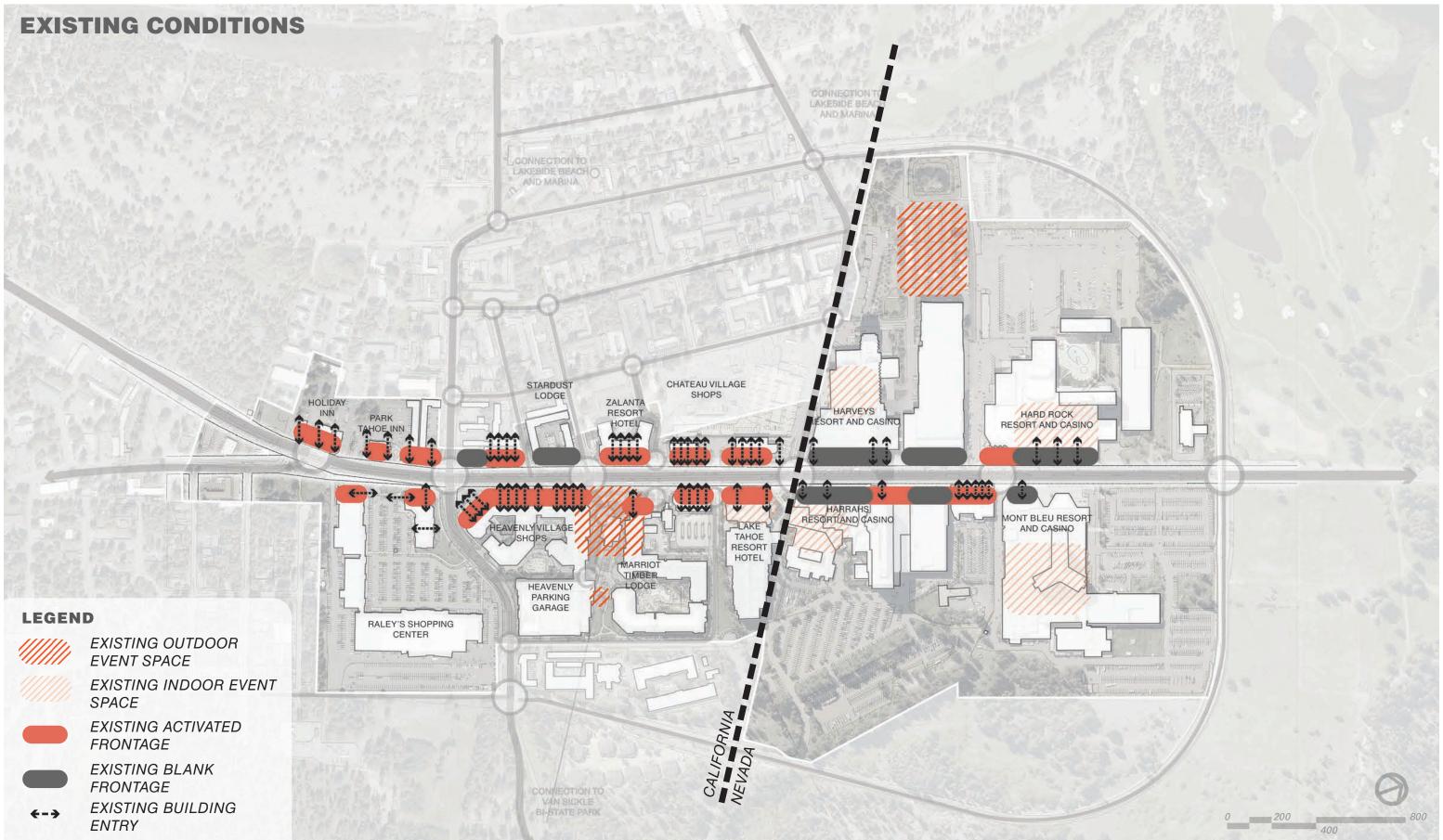




#### **Existing Metrics**

CATEGORY	METRIC	UNIT	NEVADA	CALIFORNIA
	Length of Facade	Ft.	2253	2565
Active Facade	Length of Active Facade	Ft.	100	2045
	% of Active	%	4%	80%

## **ADJACENT LAND USES & ACTIVATION**



## **ADJACENT LAND USES & ACTIVATION**

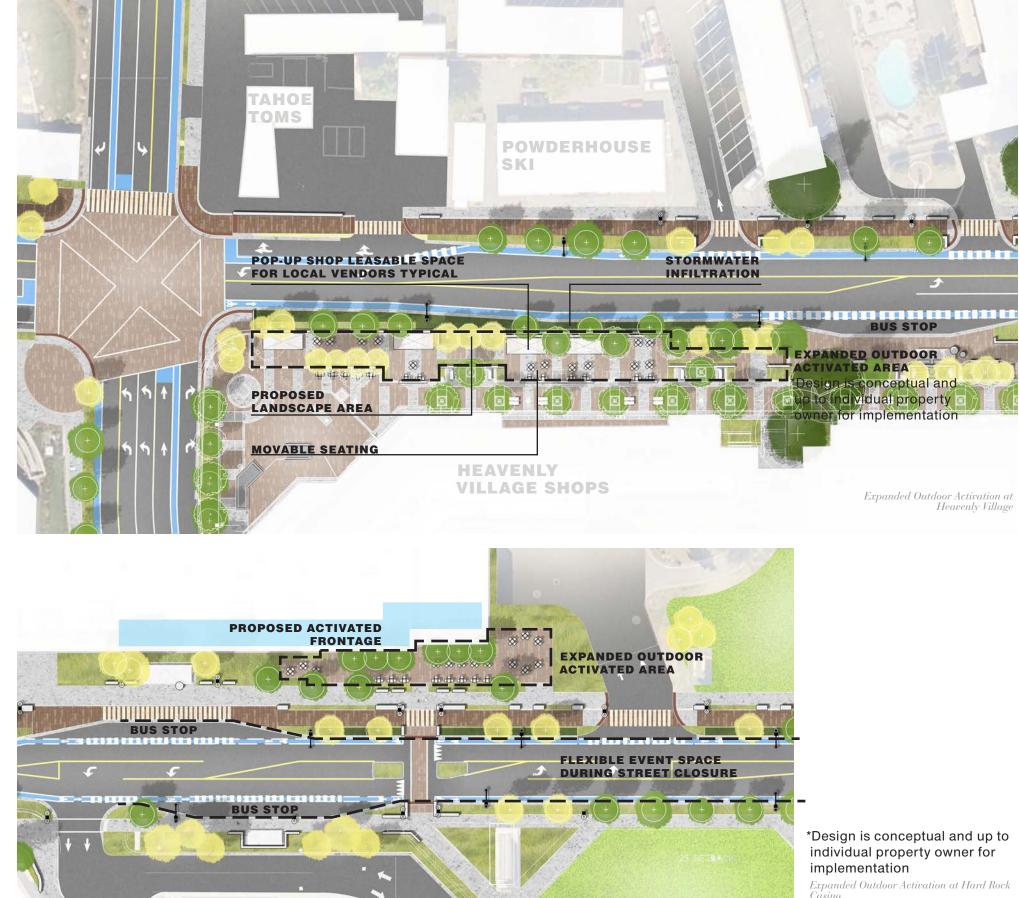
## **Proposed** LAND USES & ACTIVATION **OVERVIEW**

Main Street design will effectively increase the amount of activated street frontage by 42% throughout the corridor with an added 15,000 sf of potential outdoor dining space. Many of the locations identified for increased activated street frontage and outdoor dining are outside of the current ROW. It is the intent of this plan to encourage individual property owners throughout the corridor to improve the street frontages of their businesses, but ultimately will be decided by the individual property owners.

To encourage and promote local businesses, several locations through Main Street have been identified as potential "pop-up shop" locations (see diagram on right). These areas will be small leasable spaces, available to local business and vendors to occupy to sell goods and services on a year round basis.

#### **OUTCOMES**

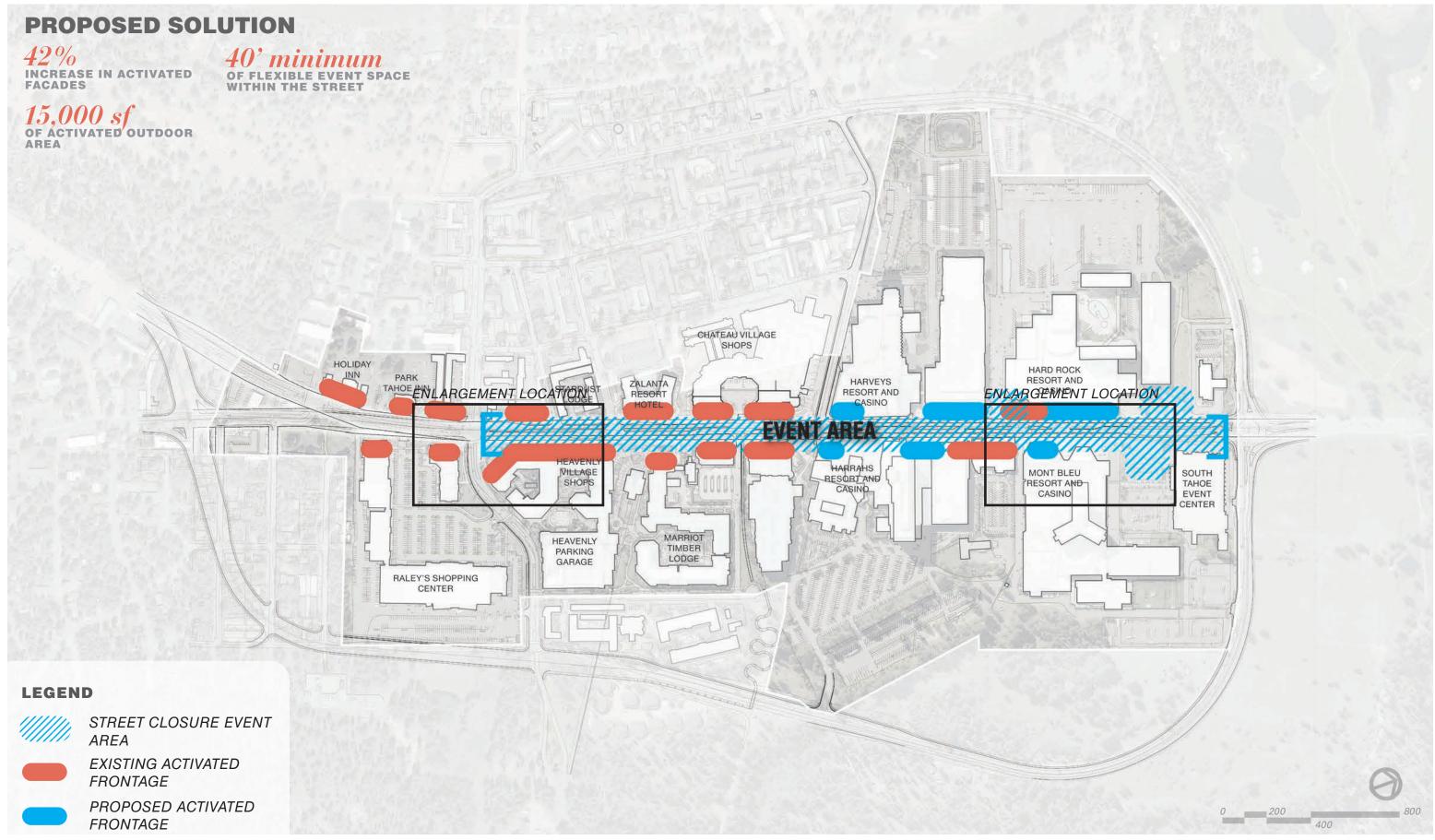
- Establishes open space anchors at gateways into the corridor to enhance the sense of arrival
- Promotes connectivity to surrounding destinations
- Draws visitors along the street by providing a consistent rhythm of outdoor dining and activated street frontage through the corridor
- Makes the streetscape more walkable, reducing dependence on cars throughout the corridor



#### **Proposed Metrics**

CATEGORY	METRIC	UNIT	NEVADA	CALIFORNIA
Active Facade	Length of Facade	Ft.	2253	2565
	Length of Active Facade	Ft.	100	2045
	% Active	%	4%	80%

## **ADJACENT LAND USES & ACTIVATION**



### **Events** on main street

Building on the success of the Heavenly Village, the Ski Run Farmers Markets, and pulling from best practices around the world, Main Street has been designed with the flexibility for the street to come alive with outdoor street events. Year-round events like farmers markets and mini outdoor concert series previously were not possible due to the presence of Highway 50 separating the two sides of Main Street. With an estimated 70% reduction in traffic on this converted local street, Main Street will provide an opportunity for locals and visitors to gather in celebration of Tahoe's unique environment.

#### **SEASONAL EVENTS**

Events of all sizes help local businesses thrive during the slower shoulder season and provide a gathering space in the High-Density Tourist Core Area. Events that could be held on Main Street include:

SUMMER	SHOULDER SEASON	WINTER
Summer mini- concert series	Trick-Or-Treat	Holiday Markets
Farmers Markets	Oktoberfest	Winter Carnival
Wine Walk	Wanderlust Festival	Snowglobe
Art Walk	Farmers markets	New Year's Eve fireworks

#### WHAT WE HEARD

• Provide flexibility for events within the street, and pedestrian realm

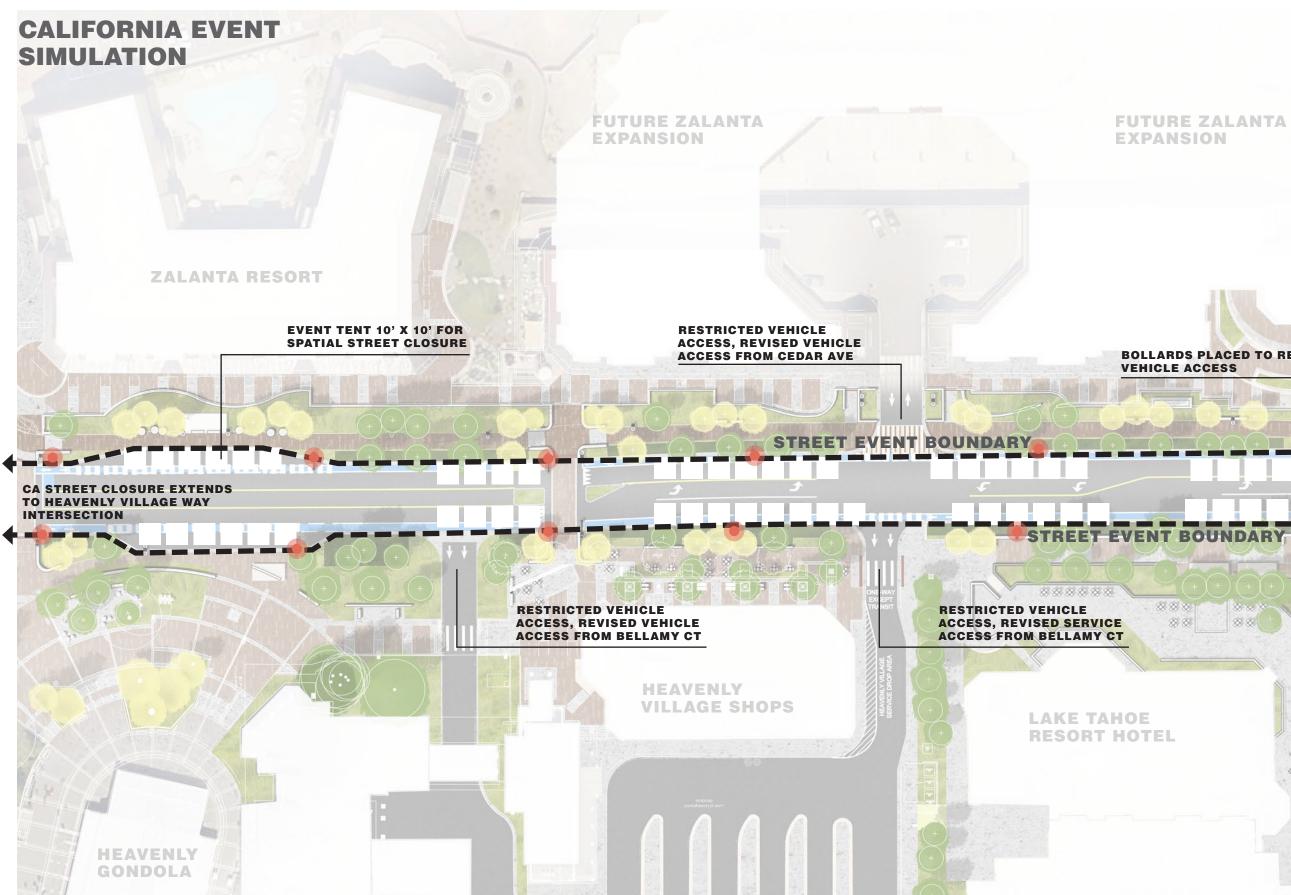
#### **RECOMMENDATIONS FOR IMPLEMENTATION**

- Provide key infrastructure to host and maintain street events include power, storage, and bollards for safety (conceptual infrastructure locations shown on diagram)
- Convene an events management group or business partnership that includes representatives from the City of South Lake Tahoe, Douglas County, Park Avenue Redevelopment Management Agency (PADMA), and local business owners, among others, to coordinate events that only require a partial closure, event permits, event management, etc.
- Consider public-private partnership, with local jurisdictions contributing TOT funding to event production.









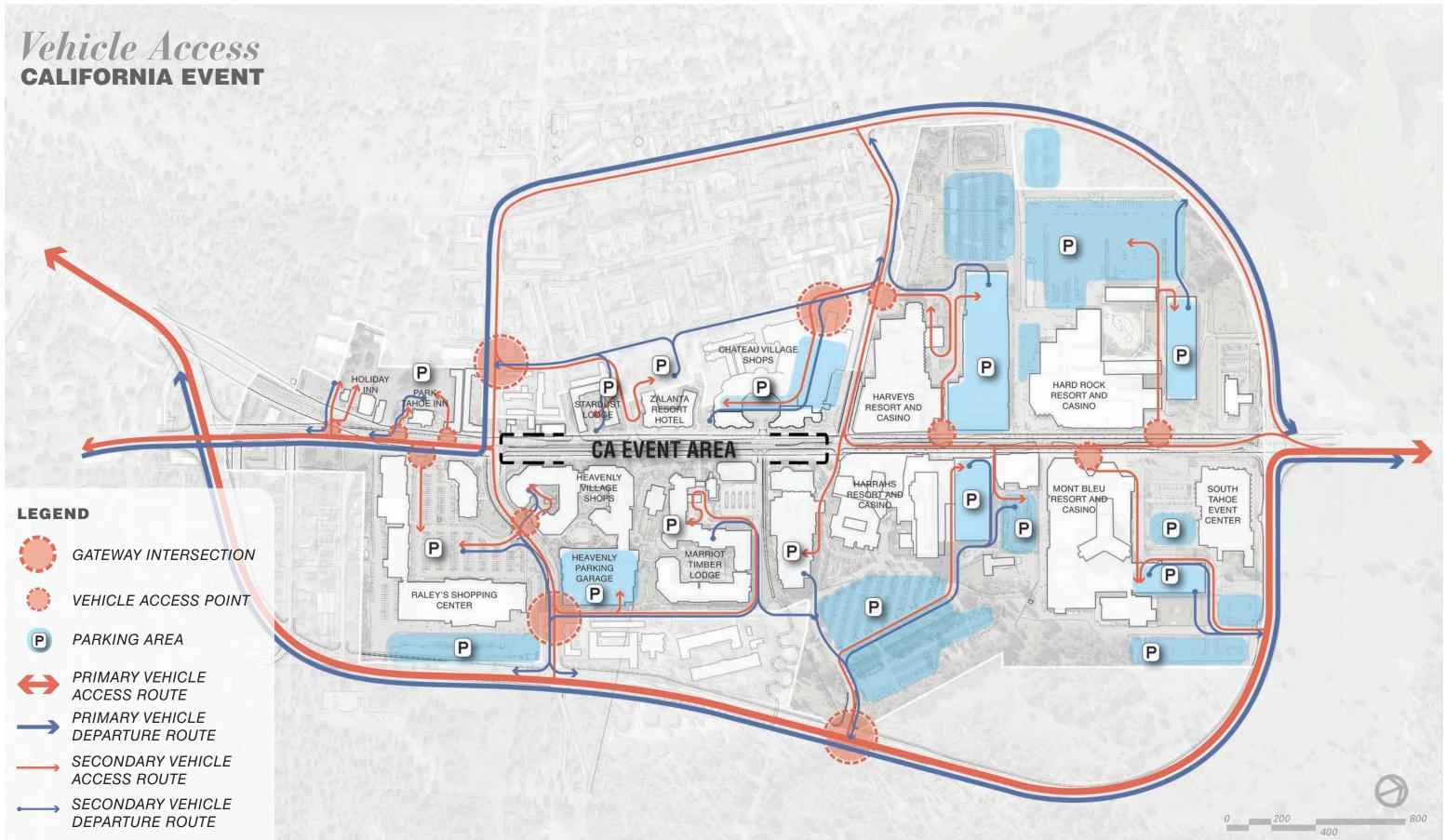
### **BOLLARDS PLACED TO RESTRICT**

#### POWER SOURCES FOR EVENTS EMBEDDED AT STREET LIGHT LOCATIONS

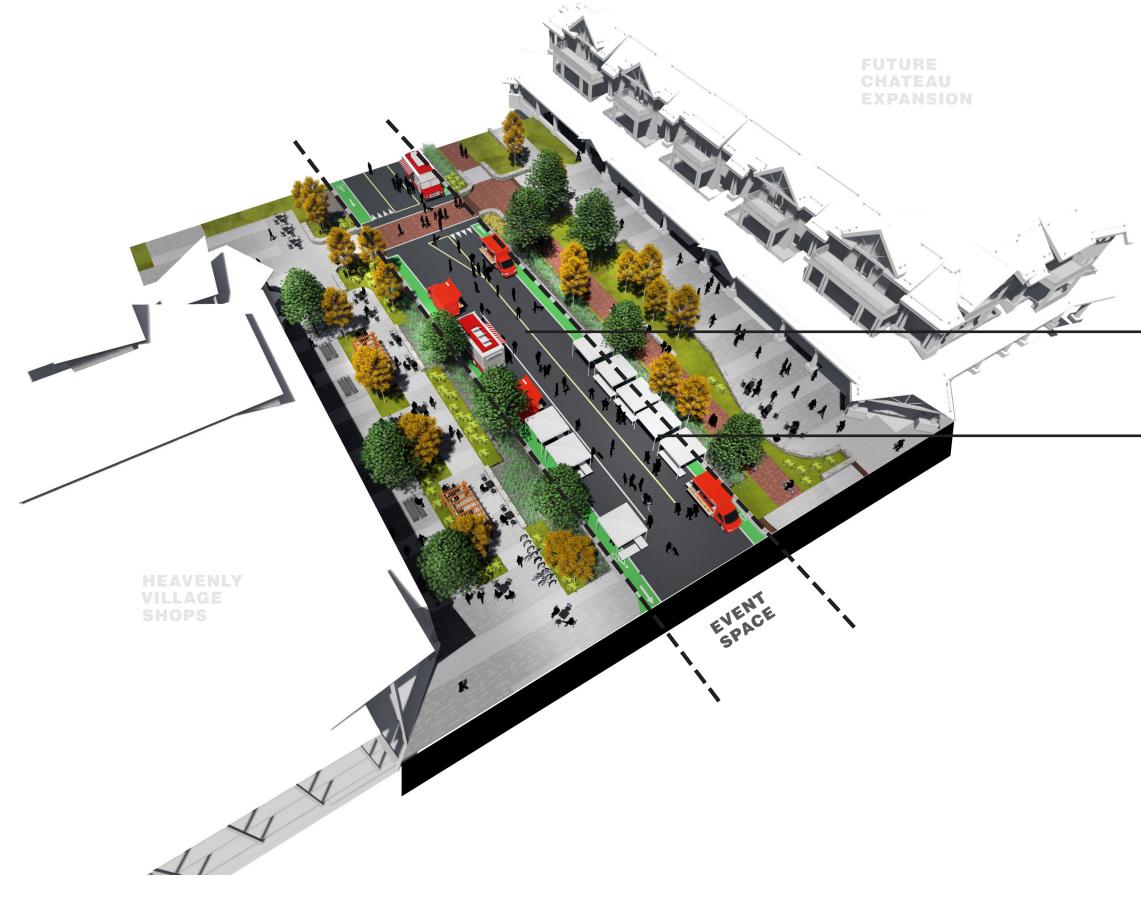
### 60

**DESIGN**WORKSHOP 73

30

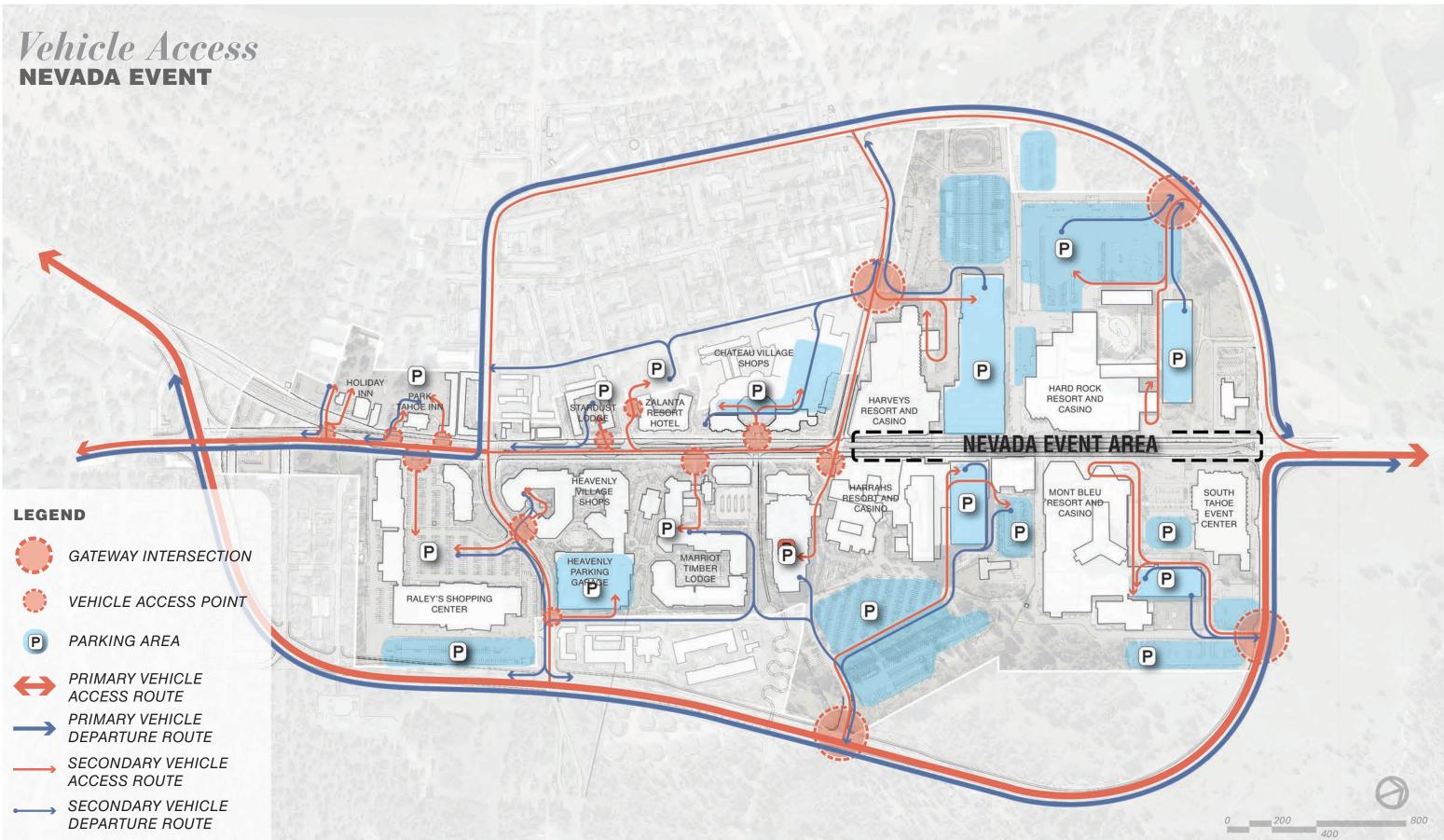


### STREET EVENT CLOSURE CALIFORNIA EVENT



#### PEDESTRIAN CIRCULATION ZONE

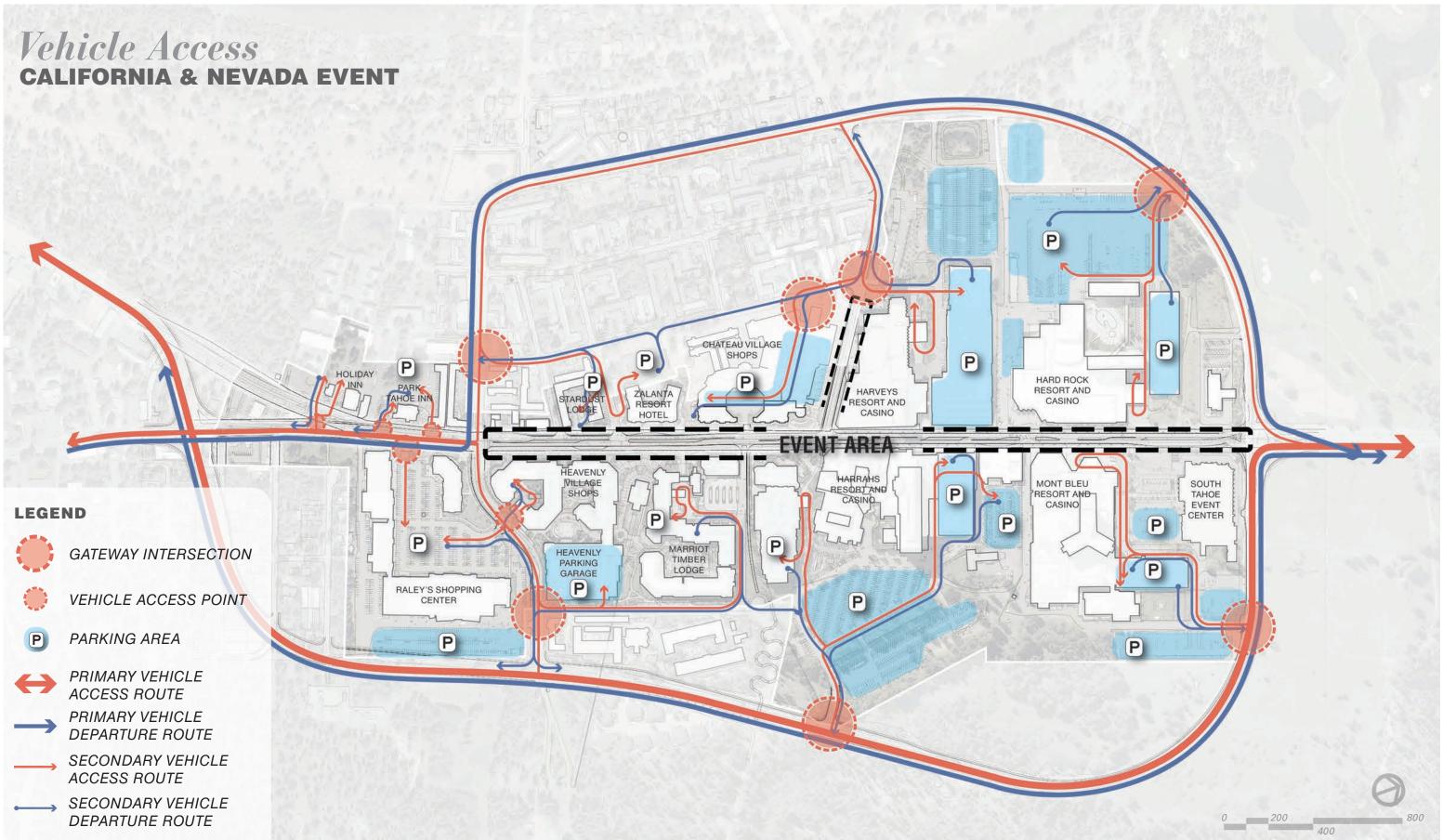
#### VENDOR SPACE For events

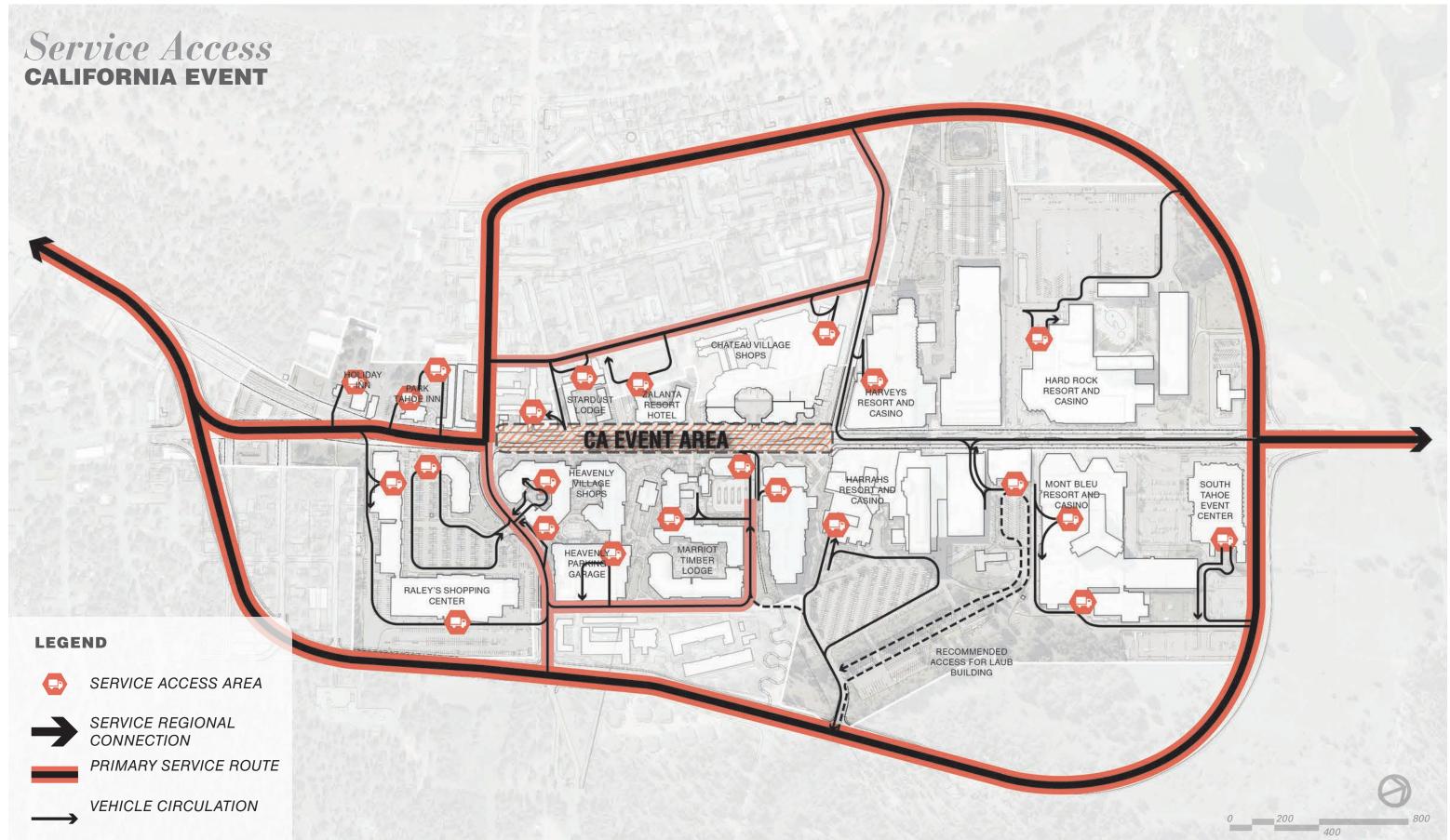


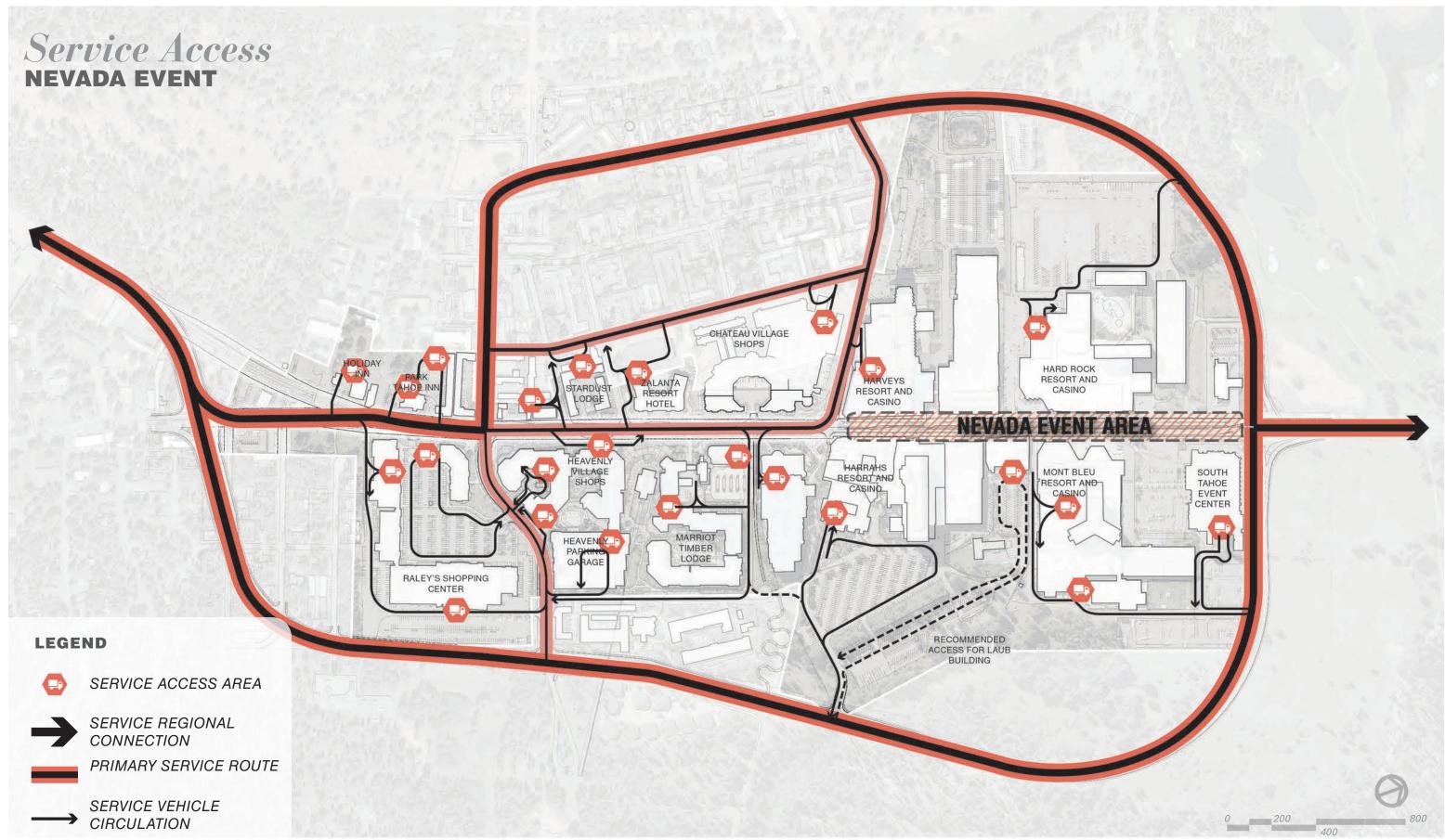


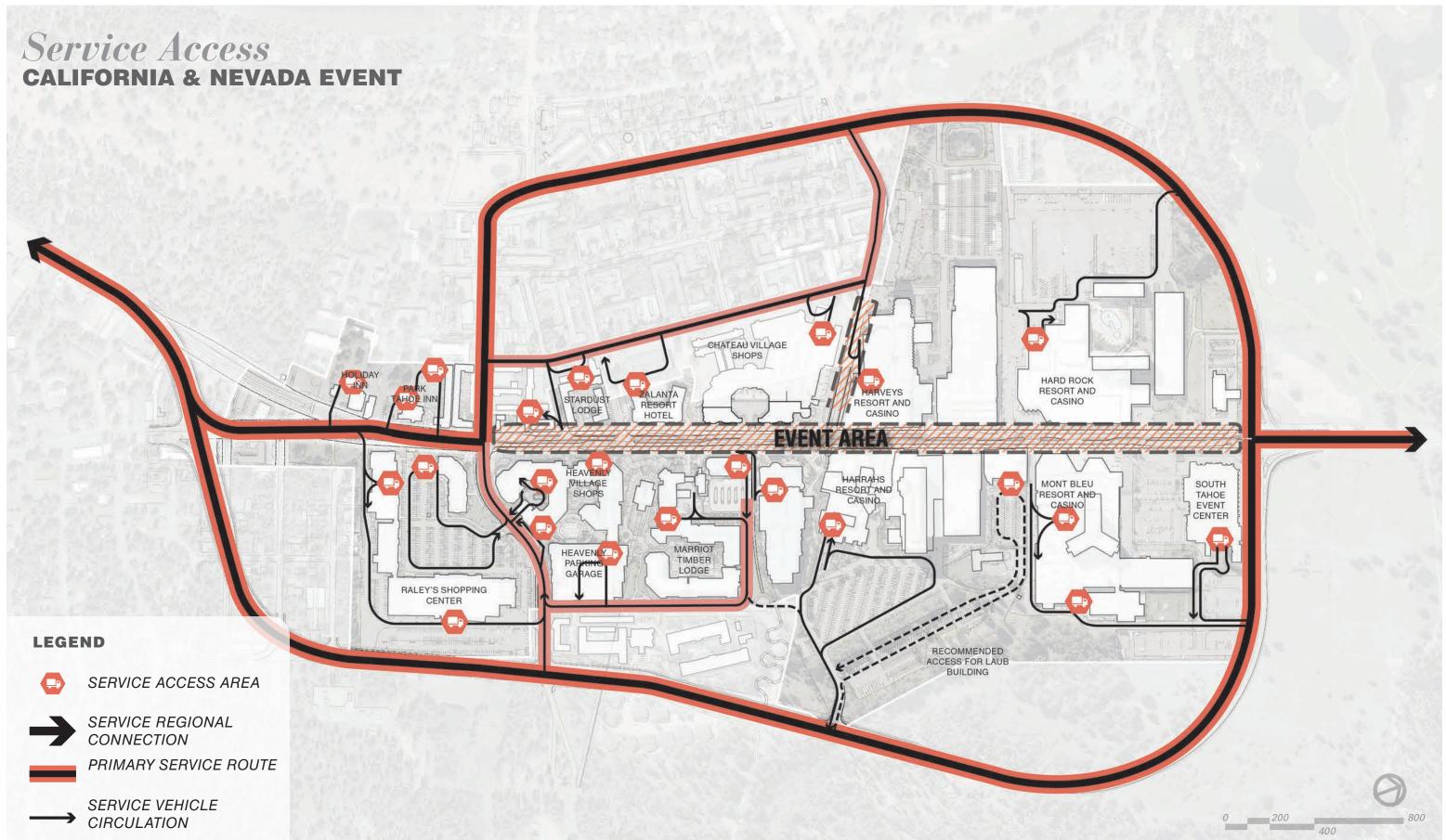
### PEDESTRIAN CIRCULATION ZONE

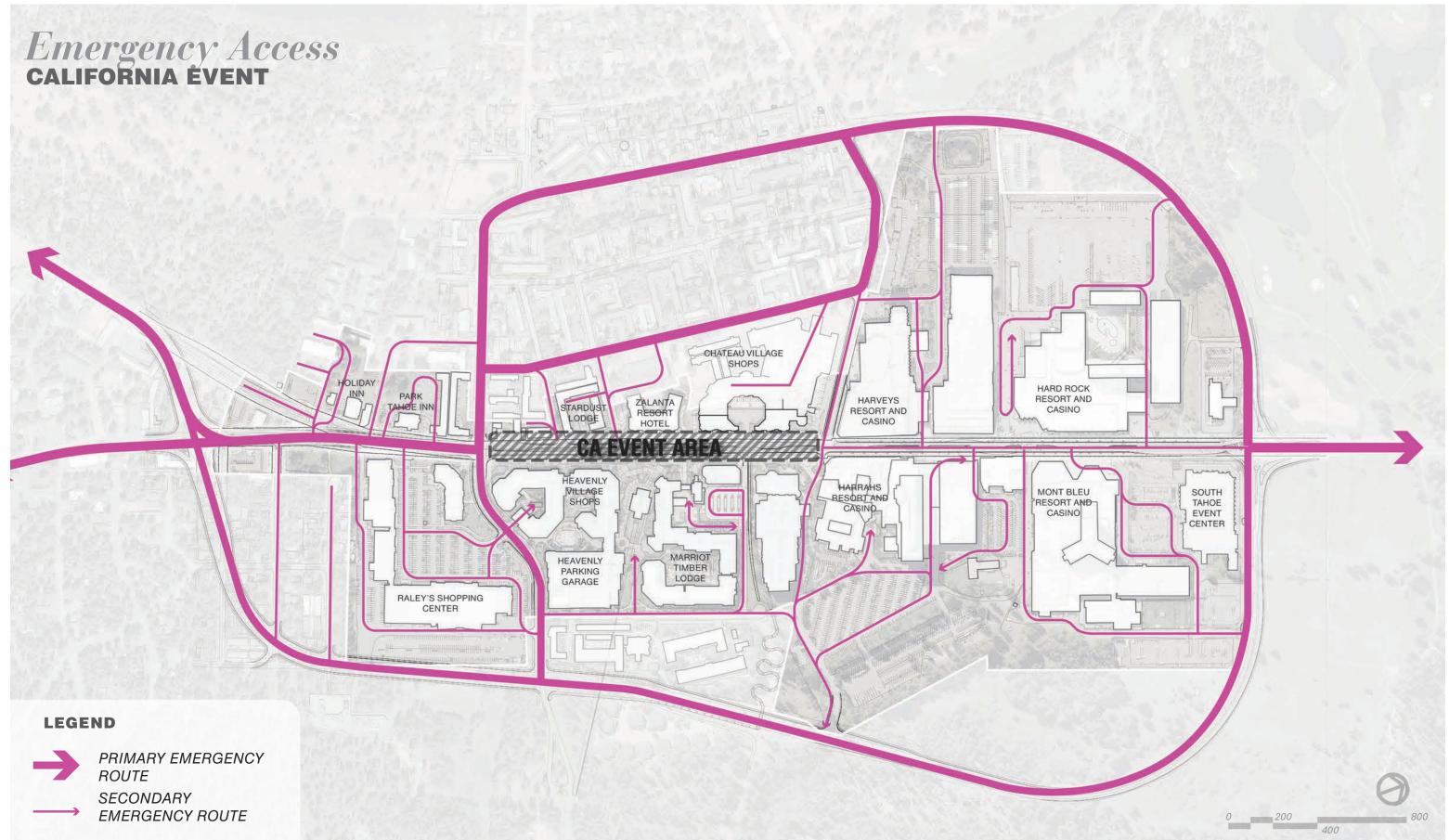
VENDOR SPACE For events

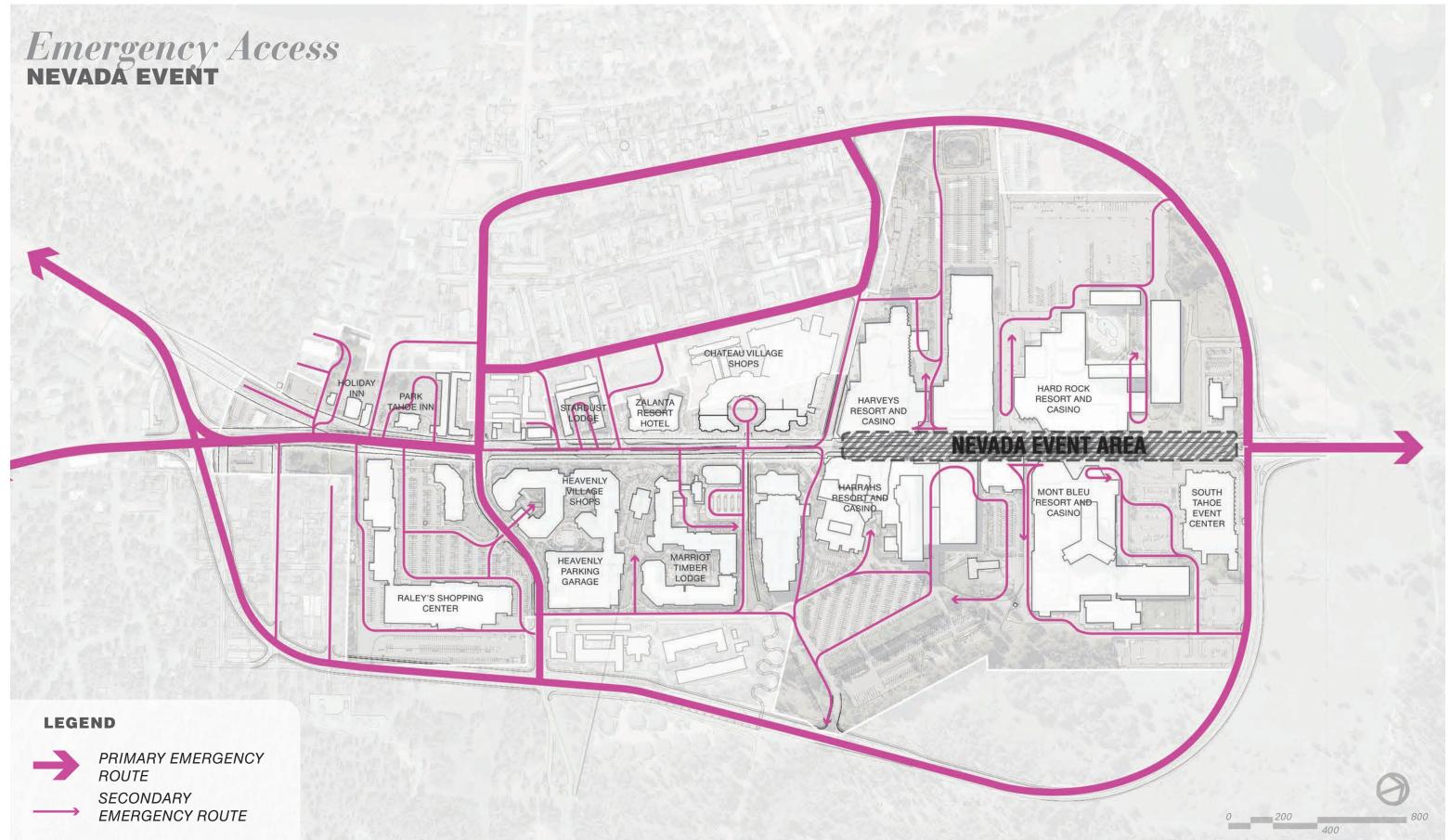


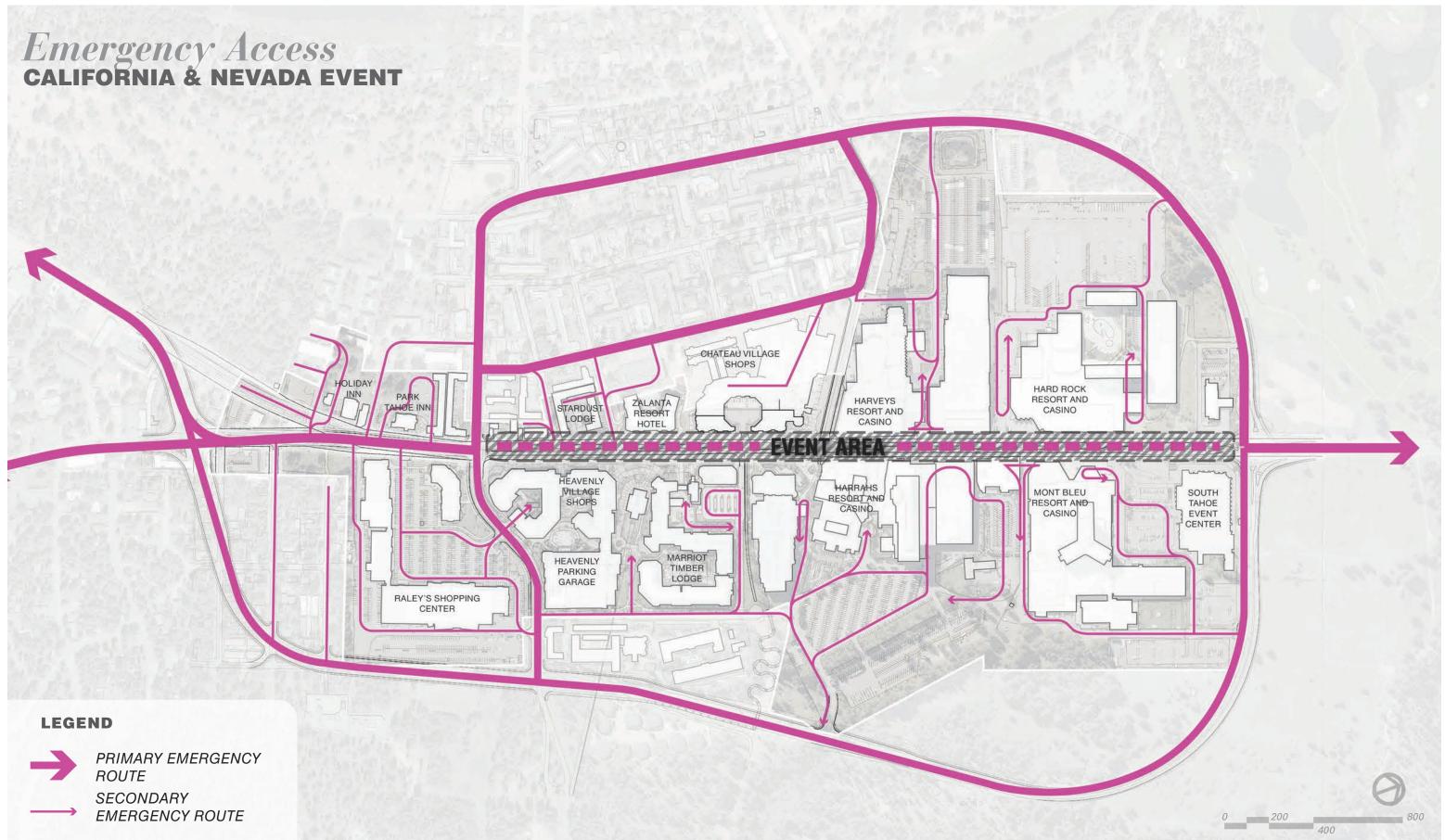












## PARKING

# Existing

#### **PARKING EXPERIENCE**

A common perception among visitors is that there is not enough available parking in the Tourist Core. In reality, thousands of parking spaces remain underutilized (the majority privately owned) even during peak periods. Limited on-street public parking options are unorganized and undefined and existing private parking is fragmented. Parking is not necessarily easy to find for visitors new to the area due to lack of cohesive parking management policy, wayfinding, linkages to other transportation options, and clarity on where to park for what purposes.

#### WHAT WE HEARD

Based off stakeholder and public input, design strategies for improving the parking experience need to address:

- Lack of coordination between parking facilities
- Confusing parking policies across jurisdictions
- Undefined on-street parking
- Lack of cohesive parking policy to support employee parking, varied business types, and destination parking

#### **METRICS**

- Inventory existing parking on and off-street to be considered (limited existing data)
- Location turn-over, vehicle occupancy, pricing, policy, and compliance data

#### PROPOSED

A clear cohesive easy to understand parking system for the project area

#### **OUTCOMES**

A parking system across jurisdictional boundaries is needed with close coordination amongst public and private stakeholders to optimize existing parking supply and improve the destination user experience as part of providing transportation choices. Enhanced wayfinding and digital parking guidance signage with occupancy data should direct drivers to available parking.

#### A SHARED VISION

Parking and traveling into the Tahoe Basin and the Tourist Core should be safe, reliable, sustainable, adaptable, and convenient, giving visitors, residents, and businesses the opportunity to use technology to make informed decisions before and during their trip. Parking strategies should be developed to guide decisions for a destination parking system. Facility specific strategies may vary by operator, season, event, day of the week, or time of day based on parking demand, business need, other transportation options, and accessibility.

- Parking purposes need to be defined to address varied business types, employee parking, spillover, and destination parking to optimize existing availability and turnover to support uses.
- Parking policies should be developed to provide a cohesive system that is easy for the visitor to understand and comply with in order to reduce vehicle miles traveled from searching for parking which will support other sustainability goals.
- · Parking management should consider the seasonal demands and use of the area to make data driven decisions.
- Parking management should be considered as a component of a larger transportation system with realtime information through cohesive branding giving users clear choices early in their decision making.
- Compliance should be considered through cooperative agreements with outside agencies, cohesive policies and procedures, and the use of technology and data driven decisions.

#### **METRICS**

Metrics such as occupancy, turnover, compliance, and duration as well as available indicator data on the following:

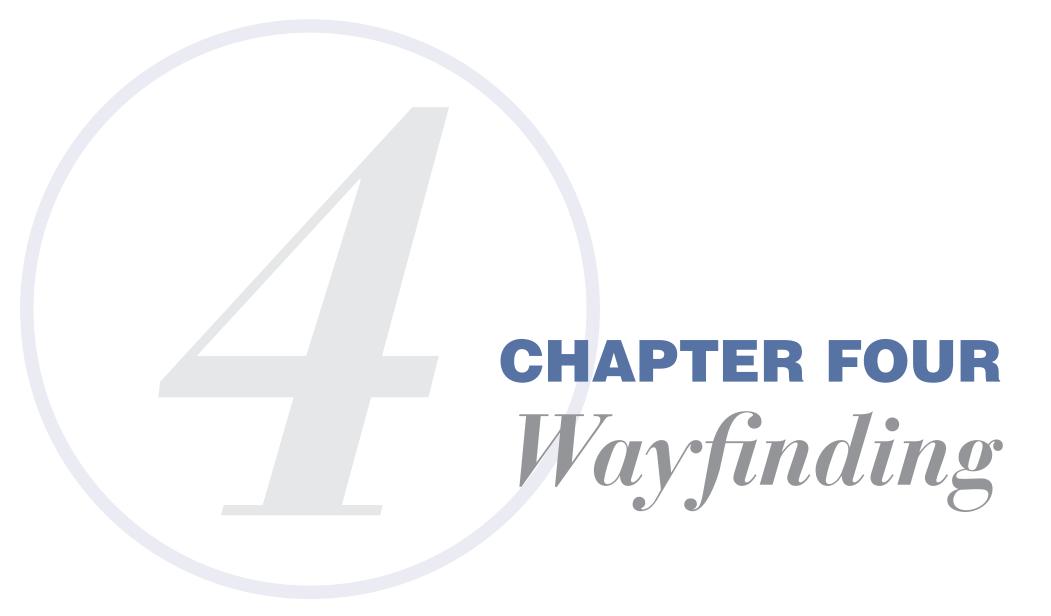
- Traffic congestion;
- Transit use, bicycle and pedestrian counts;
- And other information can be used to guide parking management and traveler choices to adapt and improve the system.





3.28 Existing Parking at Heavenly Village Credit: TRPA





### 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.

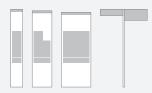
#### SYSTEM GOALS

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 onstreet 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

People		Place				
User centered		Legibility				
Relevant	Fit for purpose	Barrier free	Sense of place			
Intuitive	Provide choice (discover)	Safe and secure	Image and identity			
Inclusive	Simple and easy	Memorable	Impactful			



Information

#### Seamless

Networked

Time/distance

Integrated

Real-time

Connected

Consistent

### 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.

























## **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:

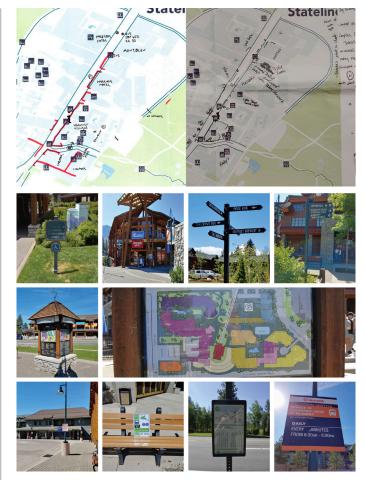
- Document review
- Physical analysis
- Benchmarking and best practice
- Stakeholder consultation

### **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**

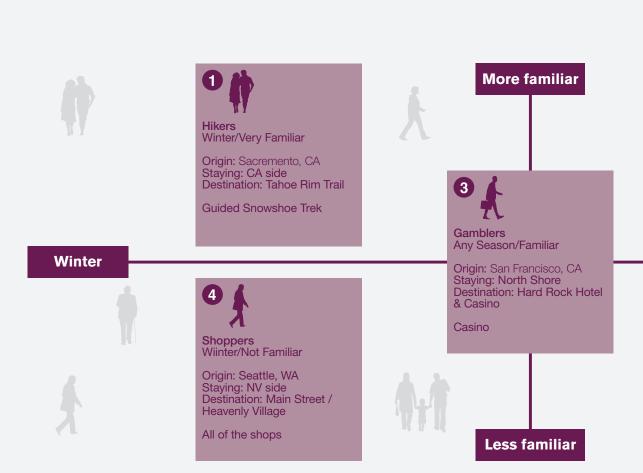
Designing with the needs of people at the forefront of the process is the foundation of good design. Such a design approach has the capacity to create an environment that mirrors the user's understanding of place and thus resonates more deeply with the user.

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.





Family Reunion Summer/Very Familiar

Origin: Reno, NV Staying: NV side Destination: Lakeside Beach

Beach Picnic



Cyclists Summer/Not Familiar

Origin: Columbus, OH Staying: CA side Destination: Bijou Bike Park

Compacted dirt courses



#### Summer



### **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.

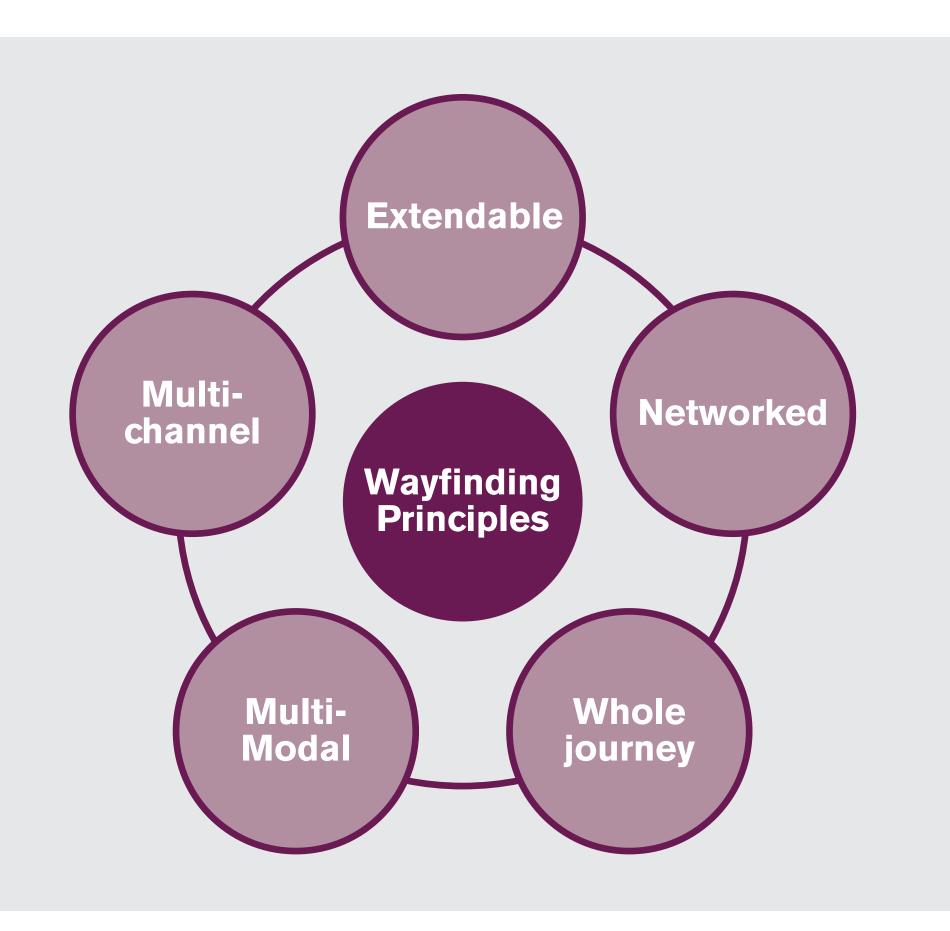
These principles – when combined – will create world-class system that considers the how information is provided across a users journey and provides that information in the most appropriate channel to a user or at a specific journey stage.

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.

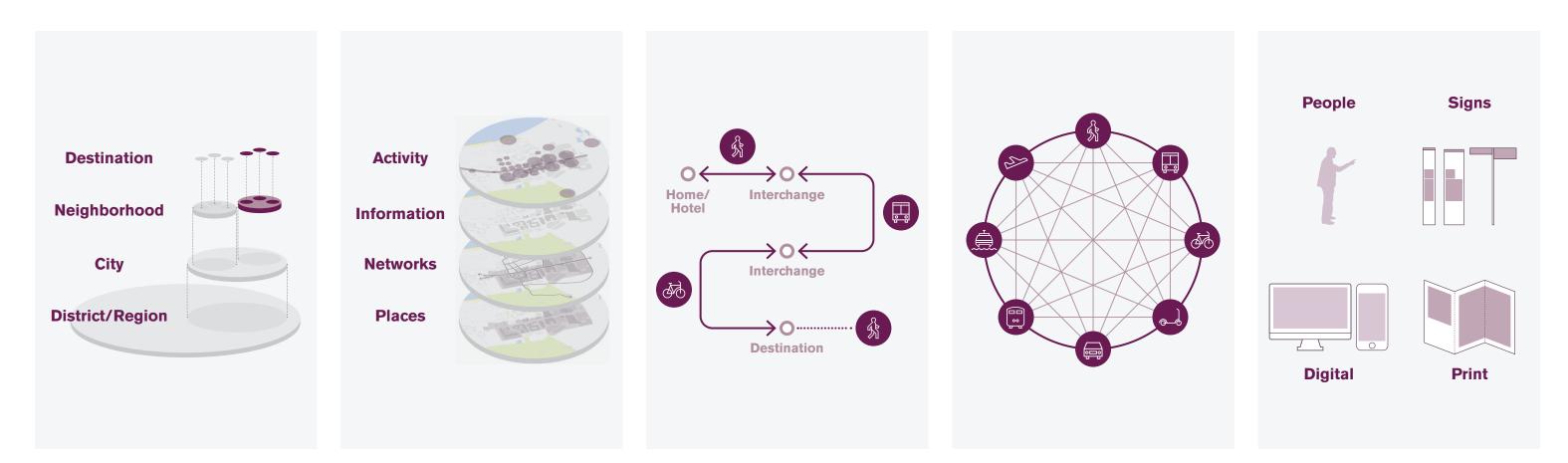
Provide a consistent system of information using a unified system of parts, with a clear and intuitive visual language to create a seamless experience through all points of touch.

#### **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.

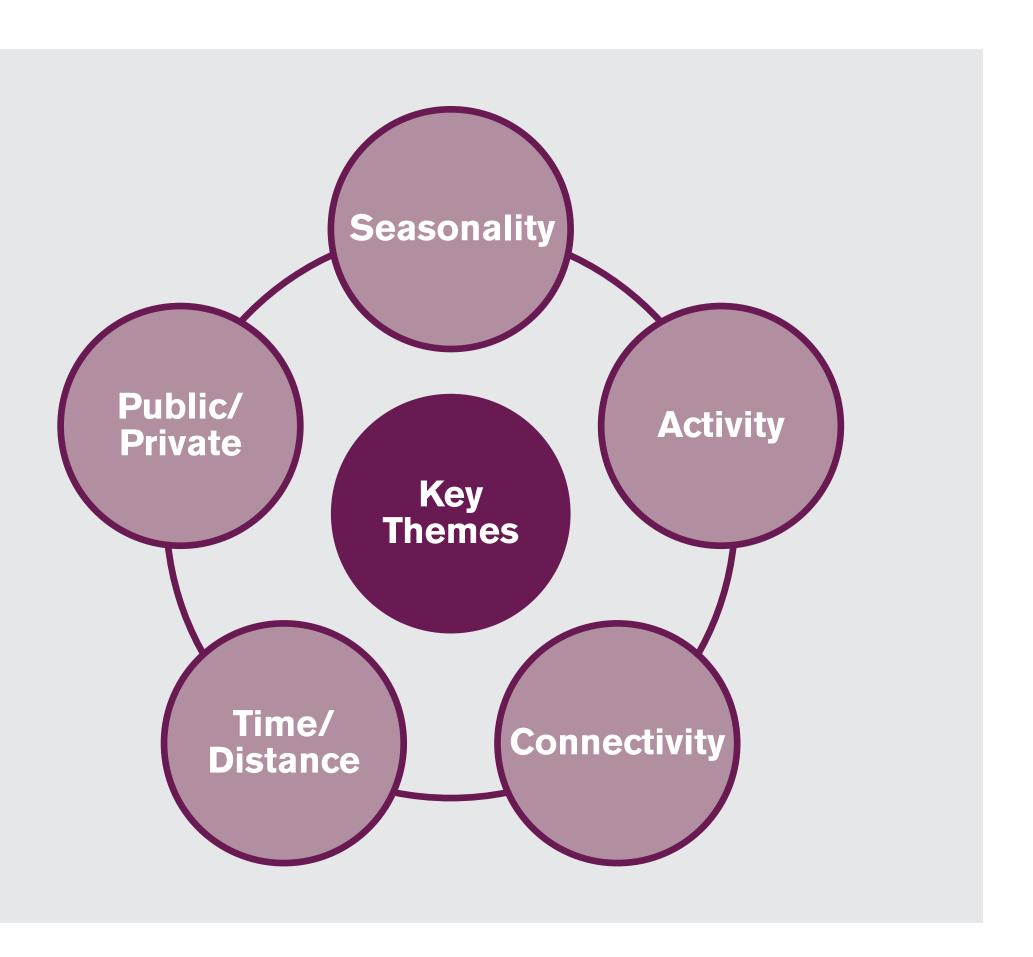
#### RECOMMENDATIONS

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



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'.

#### CONNECTIVITY

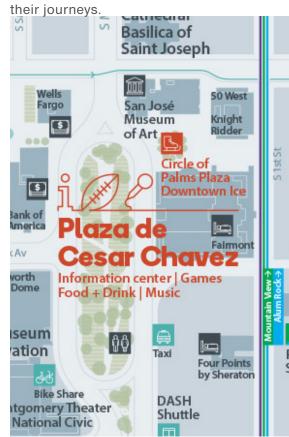
Main Street requires a system that works at the level of a 'complete multi-modal network' as well as linking both inwardly and outwardly to neighboring destinations and other parts of the Region.

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.

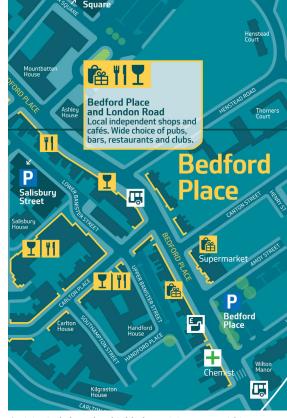
#### **TIME & DISTANCE**

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

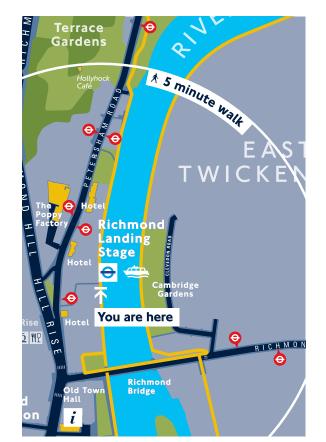
Providing a sense of geographical context through time and distance (graphic devices such as walk circles and off-map pointers) will greatly improve a users' understanding the scale of Main Street, South Lake Tahoe and the surrounding areas. A heightened understanding of time and distance will encourage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



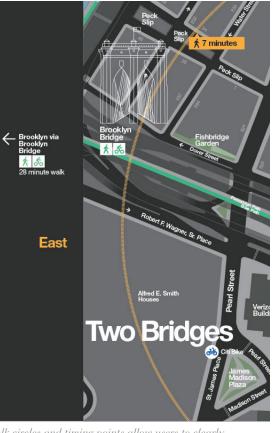
Tailored mapping for events (SJ Superbowl) that highlights key areas of interest relating to various activities relating to an event. (example from Downtown SJ Superbowl print map)



Activity '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)



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

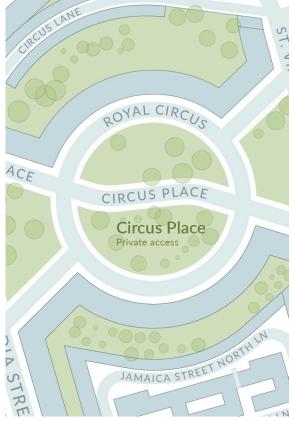


Walk circles and timing points allow users to clearly understand time and distance. Off-map points also aid in understanding what is accessible past the map cut. (example from WalkNYC)

#### **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)

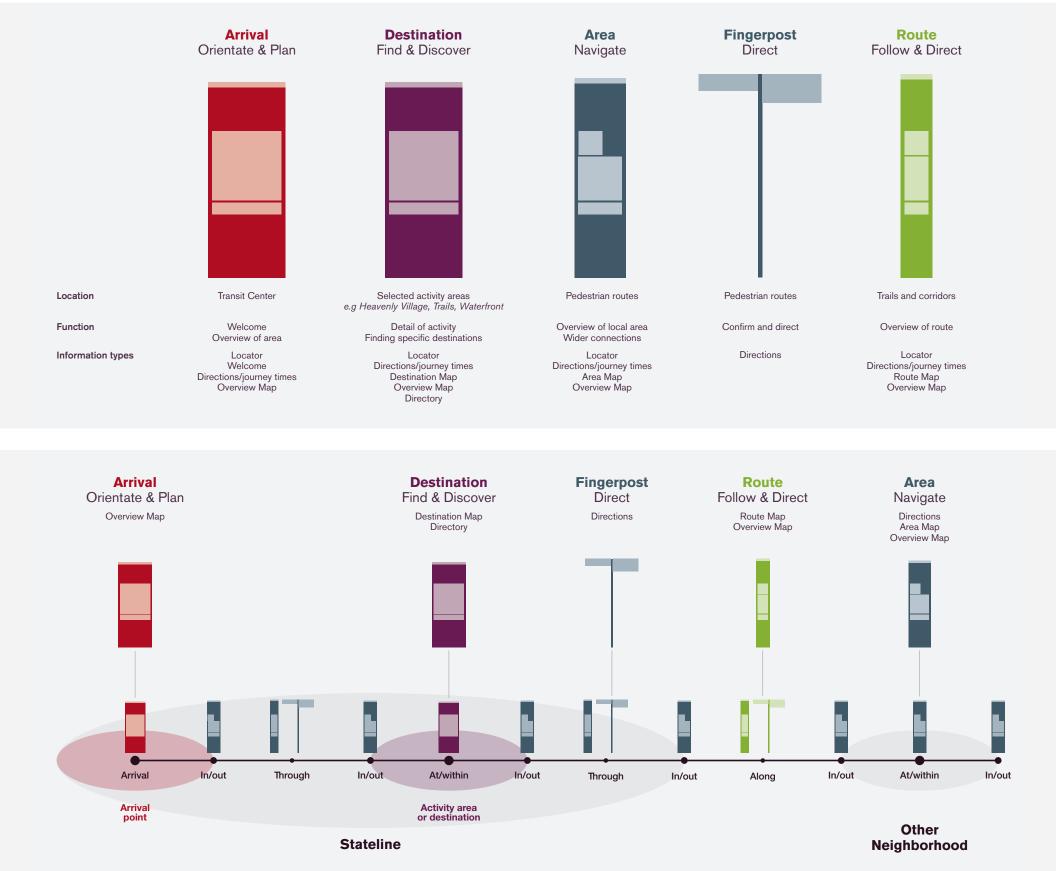
## SYSTEM ARCHITECTURE

### **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.

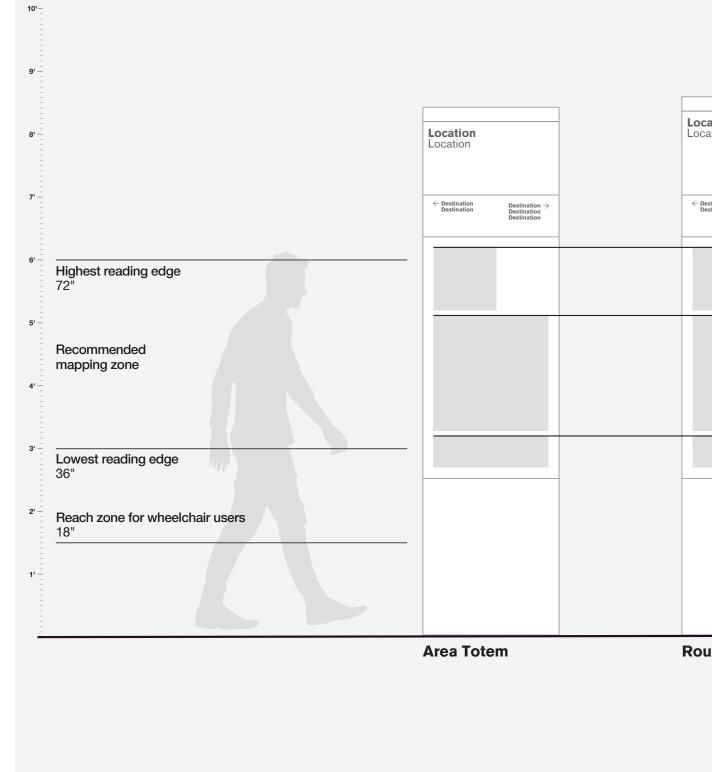


### **INFORMATION CONCEPT**

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 revealed in

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

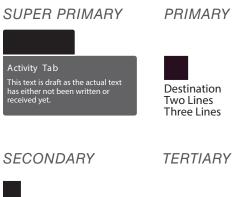


ation		
estination estination Destination → Destination		
	Overview Map 12x12	approx. 1:6000 scale
	Area Map 22x2 Route Map 12x22	approx. 1:1500 scale
	Directory	

#### **Route Totem**

### **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.



Destination Two Lines Three Lines



Destinatio n Two Lines Three Lines

Destinatio n Two Lines Three Lines

#### SUPER PRIMARY

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		
_akeside 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		
tty'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

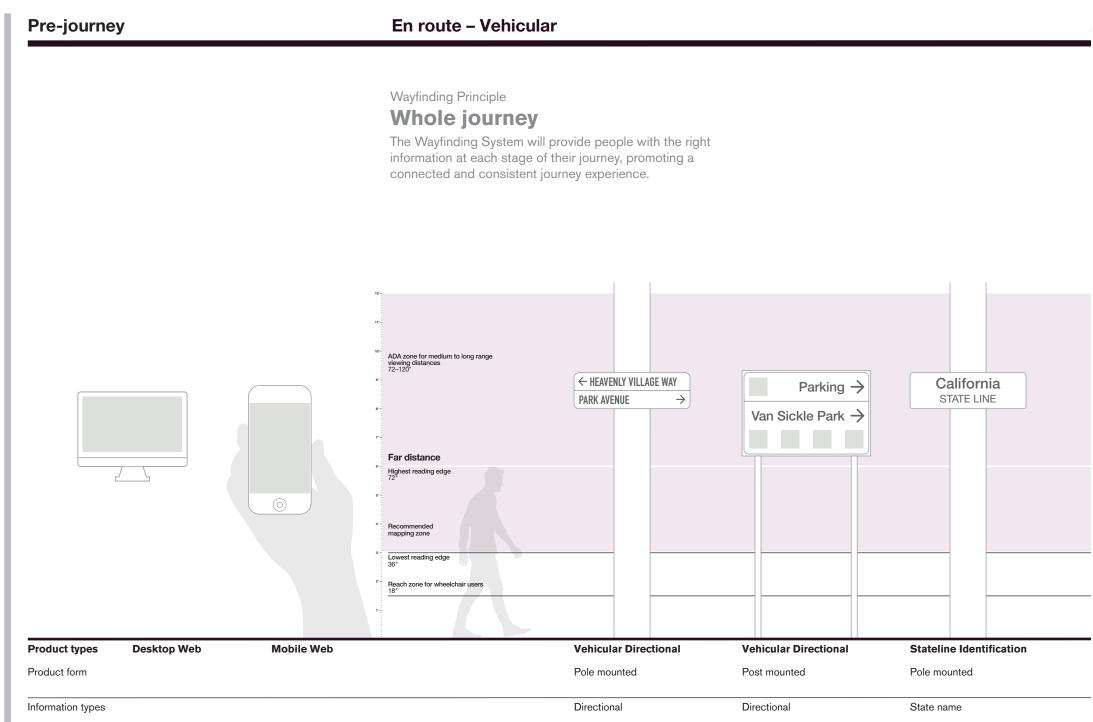


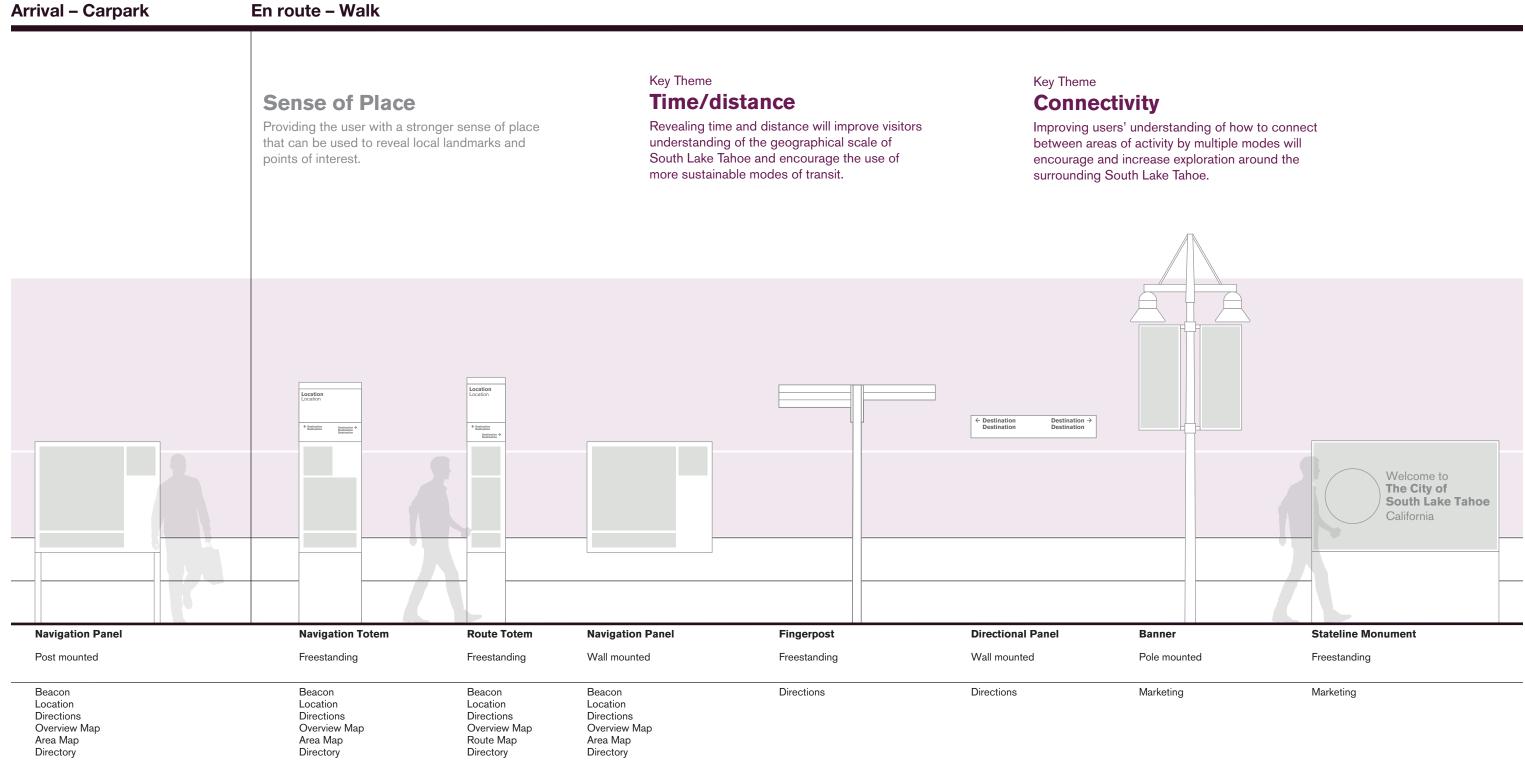
### **INDICATIVE PRODUCT SCOPE**

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.

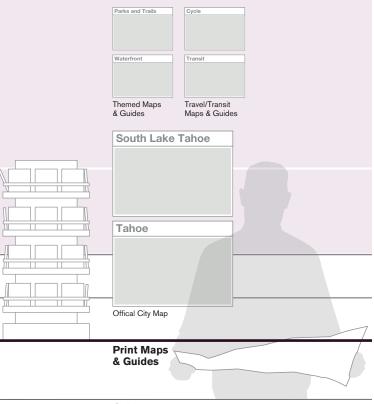




	Routes and trail based infor of distance markers and ca wellbeing and encourage I	rmation will make use alorie counts to promote		changes will pro	eflects the needs of the seasonal ovide more considered and appropriate will improve the overall user experience.	Wayfinding Principle <b>Multi-channe</b> The Information system multiple channels whic on-street, in digital and a more connected jour
	Ø70	Location Location	Location Location  • familiar *		Location Location History Van Sickle of Tahoe Bi-State National Park	
Mobile Application	Cycle Network Totem Freestanding	Park Totem Freestanding	Trail Totem Freestanding	Route Marker Freestanding	Interpretation Freestanding	
Guides	Beacon Location Directions Overview Map Area Map Directory	Beacon Location Directions Overview Map Area Map Directory	Beacon Location Directions Overview Map Area Map Directory		Beacon Location Directions Interpretation Photography	

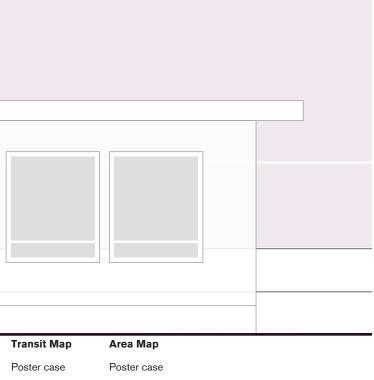
### nel

em should communicate across hich support the user with information and on print formats, building towards burney experience.



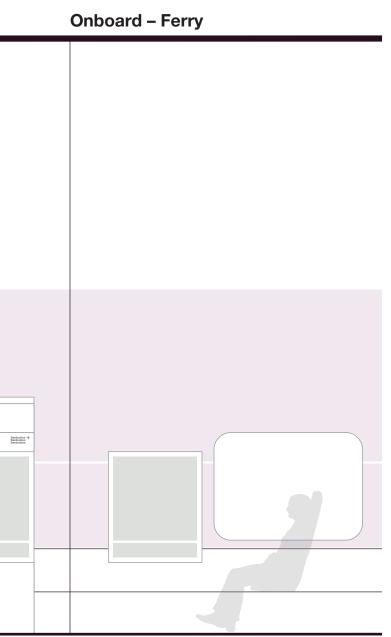
Guides

nsit Center/s –	Bus				At Stop – Bus		
ayfinding Principle Iulti-modal egrated transit informa I contribute towards a perience – improving le	more seamless mu	lti-modal			Increase Transi Providing the user with reli information about transit se the perception of service a public Transit.	able and up top date ervices in order to imp	
	Face A	Face B	Panel A	Panel B			Location Service
Station Signifier Freestanding	Transit Hub Totem		Transit Network Wall mounted	<b>Area Map</b> Wall mounted	Bus Stop Totem Freestanding	Bus Stop Flag Freestanding	Real-time Information (RTI)
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	Destination				
	Key Theme <b>Activity</b> Highlighting areas of of detail and content discover and excoura	activity and providing a ri will enable visitors to exp age return visits.	ch level lore and			
	Face A Location Control Contro Control Control Control Control Control Control Control Control	Face B		Van Sickle Bi-State         Heavenly Village         Livity Maps	Face A	Face B
Route Map	Destination Tote Freestanding	em	Alternative	Print Maps & Guides	Ferry Totem 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	Beacon Location Directions Area Map Directory



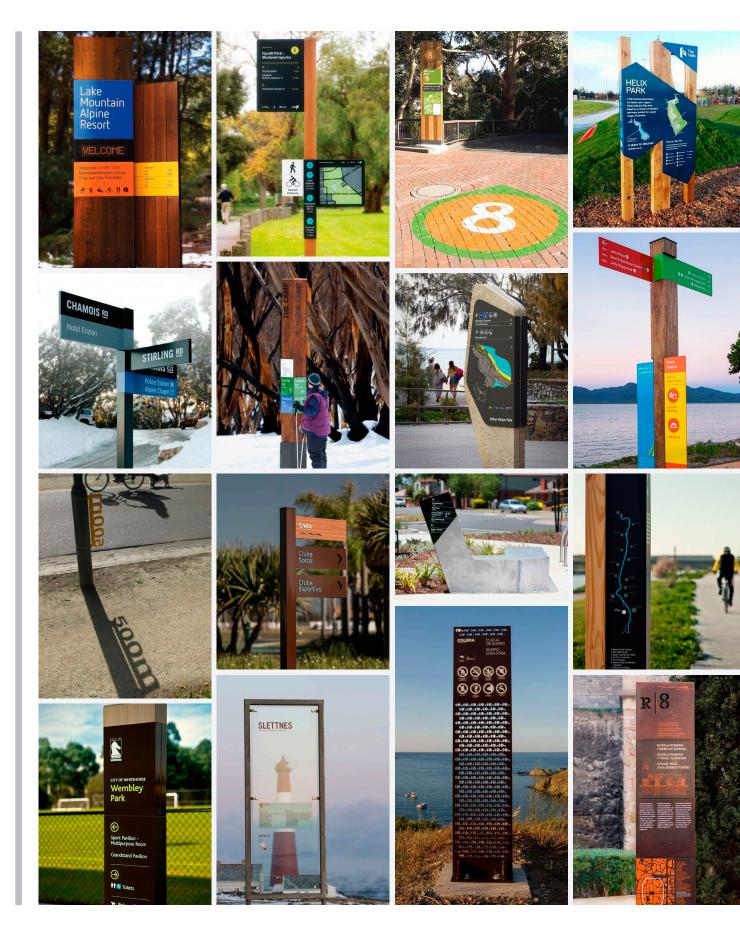
Ferry Network Map

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**

PLAYER

VELOPMENT COMPLEX







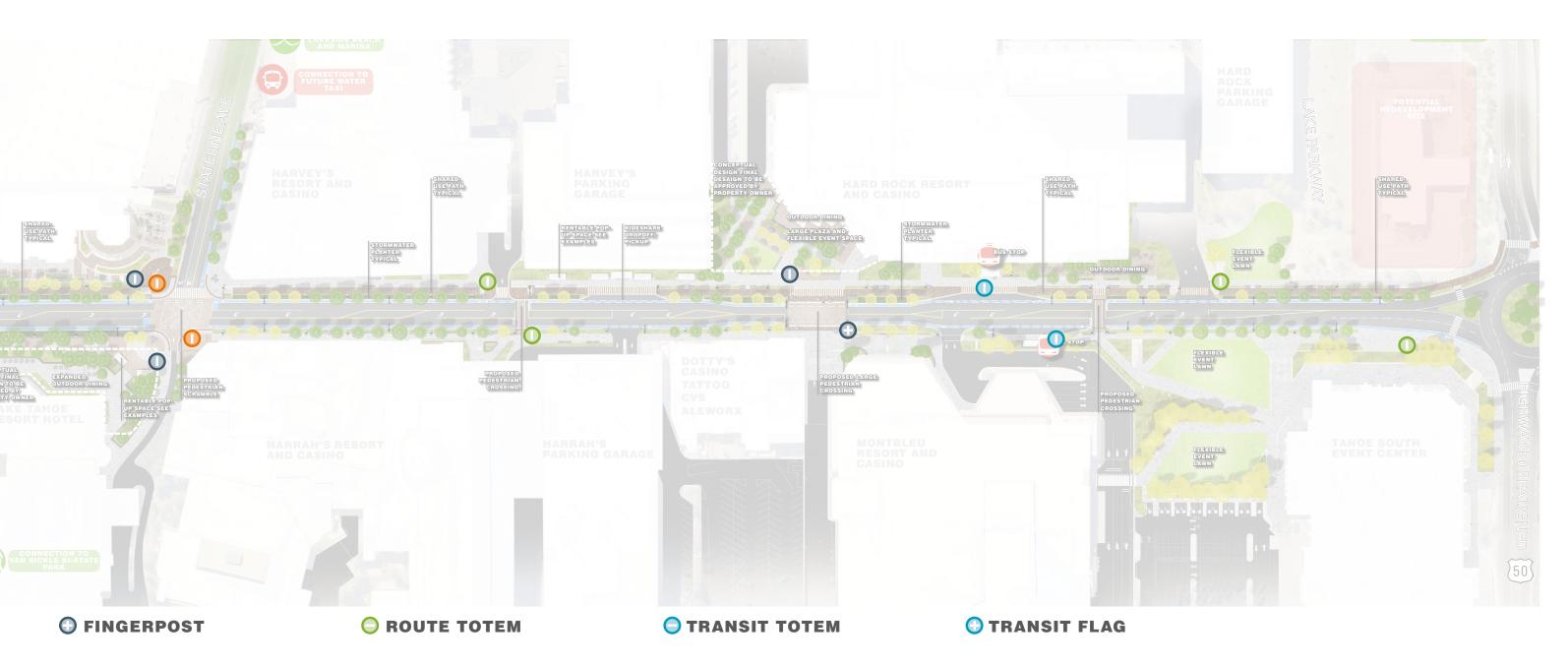


**AREA TOTEM** 













### **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

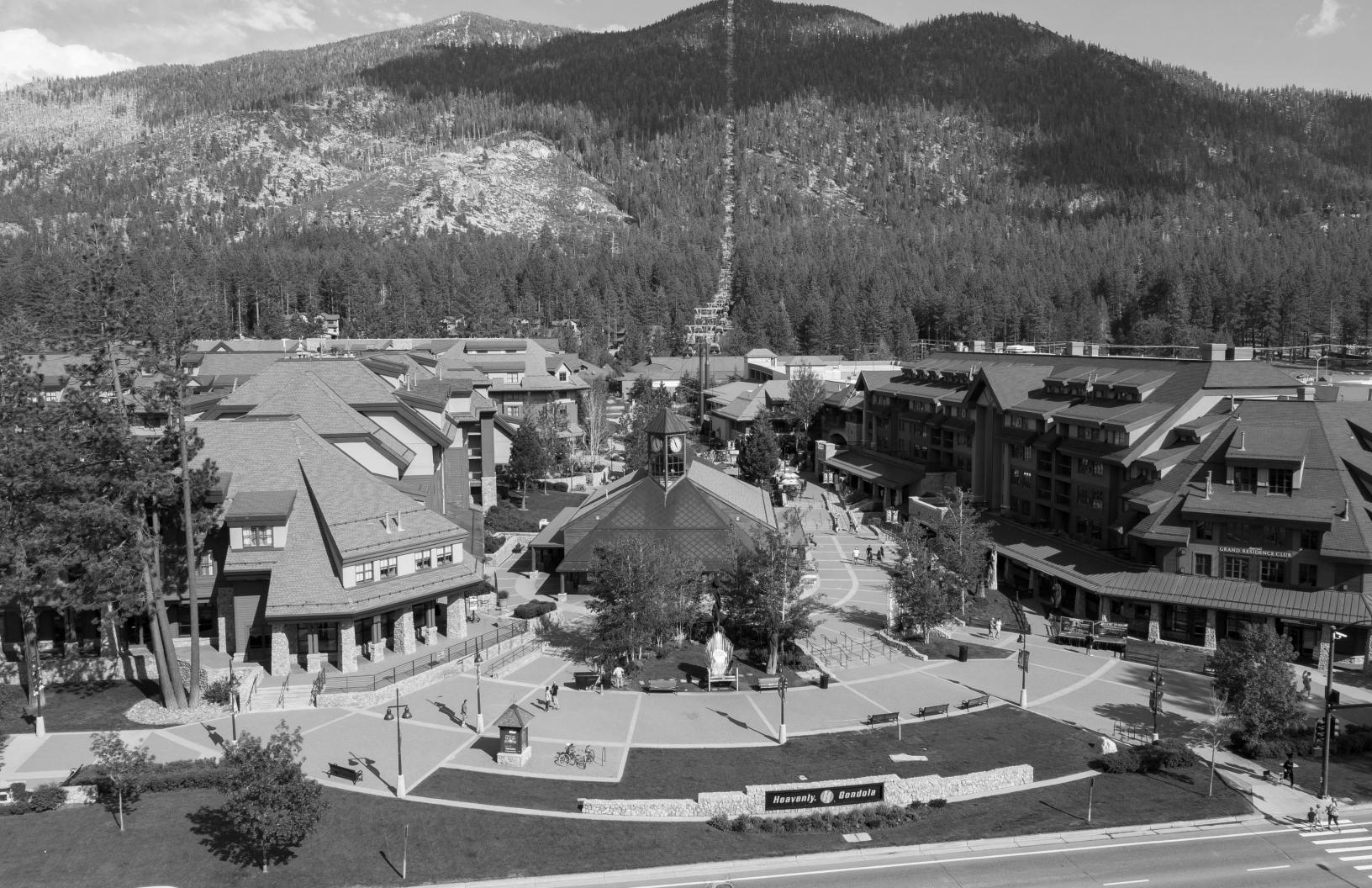
Manufacture of all products comprising the wayfinding system hardware. Procurement of manufacturing services and design engineering in liaison with appointed manufacturer(s).

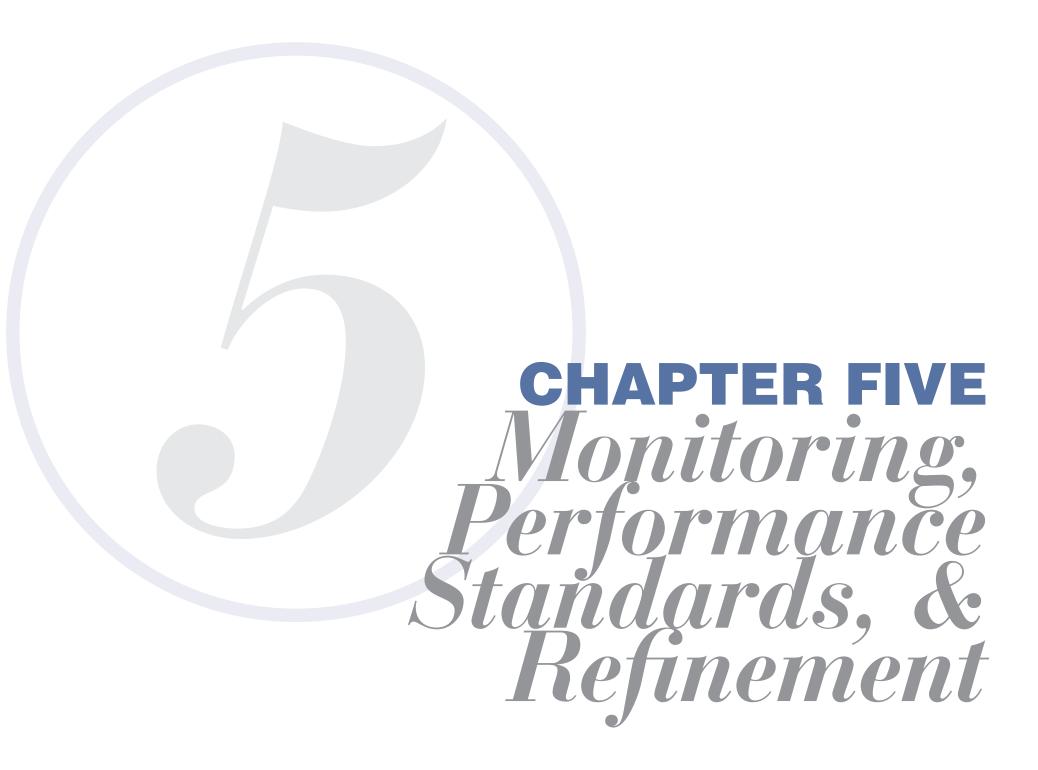
3.6 WAYFINDING SYSTEM INSTALLATION Installation of all products comprising the wayfinding system hardware.

#### 3.7 SYSTEM MAINTENANCE

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

DESIGNWORKSHOP 109





# **OVERVIEW**

### **Permit** Condition Requirements

This section will include:

- The purpose of the Main Street project monitoring;
- Monitoring methods and documentation;
- Performance standards against which the monitoring data will be evaluated:
- Reporting protocols and; adjustment mechanisms
- Performance metrics and standards will be consistent with the goals identified in this document and should include VMT generated within the project area; travel times by mode to key destinations; queue lengths at major intersections and at entrances to key destinations; auto, bicycle, and scooter parking availability; and collisions by mode

#### Metrics Overview

Metrics are a discovery-oriented tool to shape a collective point of view about a project's aspirations. They help to develop more thorough design solutions by setting goals, integrating strategies from the four DW Legacy Design® principles and measuring outcomes. Metrics help clients understand how DW Legacy Design® will positively impact their project.

At the outset of the design process the team established SMART goals to guide design efforts and ensure that this final product optimizes benefits for the environment, economics, transportation, and community of South Lake Tahoe which are highlighted on the following pages. With a new design that prioritizes different uses, the community and responsible parties must set new goals to meet the new demands.

Measuring the performance of Main Street and any individual projects will require a multi-scaled approach and methodology so that the many benefits of the Plan may be captured. While the movement of vehicles has traditionally been the measure of a street's success, the corridor's emphasis on multi-modal design may require measuring the safety and movement of all users. Beyond movement and access, projects should also be evaluated to understand whether investments and improvements are supporting community goals.



People crave activity and variety at street level. Streets with active storefronts, foot traffic design, and human scale design contribute toward an active and economically vibrant community. While activity is of paramount importance to the pedestrian realm, public safety, sidewalk width adequately spaced and apportioned, protection from rain, and shade from the sun together make the difference between a successful street and a barren one.

Bicycle facilities should be direct, safe, intuitive, and cohesive. Bicyclists desire a high degree of connectivity and a system that functions well for cyclists of all skill levels, with minimal detour or delay

**Bicyclists benefit** from feeling safe and protected from moving traffic. Bikeways that create an effective division from traffic and are well coordinated with the signal timing and intersection design of the traffic network form the basis of a accessible bicycle network.



be measured by its speed, convenience, reliability, and frequency of service. Trains and buses should permit easy loading and unloading, and be comfortable and not overcrowded. The overall level of access and scope of a transit network should be aligned to actual demand, meeting service

needs without sacrificing

service quality.

Motorists want to get

to their destination as quickly and safely as possible with limited friction, interruption, or delay. Vehicles typically benefit from limited access, higher speed roads with limited chance of conflict or surprise.

Due to their high speeds and overall mass, drivers feel safest when buffered from other moving vehicles, bicyclists, buses, trucks, and crossing pedestrians. Especially when making decisions at high speeds, motorists need adequate lighting and signage, as well as adequate parking provisions at their destinations.



Service operators want to move goods from their origin to their destination as easily, quickly, and conveniently as possible. Trucks benefit from high, but not unsafe speeds, curb access or docks for easy loading and unloading, and overall safety throughout the traffic system.

Emergency responders are responsible for attending to crimes, crashes, fires, and other dire scenarios as quickly as possible. They benefit from safety and predictability along their routes, with minimal conflicts with vehicles, bicyclists, or pedestrians, and direct curb access at their destinations.

.Accommodating commercial activity should balance the various users in a given location and always support a safe and vibrant street environment. Considerations should include siting and location, critical distances to maintain. spacial needs, times and seasons of use, regulations and access to utilities.

# **OVERVIEW**

# What to Measure

Measurements can focus on physical and operational changes, shifts in use, as well as their resulting impacts. The table shown here lists potential measurements to evaluate the impact of street projects of various scales. Measure as much as possible, but be strategic in prioritizing time and resources to collect the metrics that most relate to the project goals and community interests. There are three main categories of metrics for consideration.

### Physical & Operational Changes

These metrics help document and evaluate the physical changes in street conditions, and the resultant operational shifts, in order to understand the impact of a particular project.

### Use & Function

The measurement and evaluation of changes in use, behavioral changes, user comfort and satisfaction, and functional shifts help you to understand the success of a project and its impacts.

### **Resulting Impacts**

Measuring and evaluating street projects can help estimate overall neighborhood and citywide impacts.

### **CHOOSING STANDARDS**

The next page highlights goals and strategies developed collaboratively with the stakeholders and community. There are far too many to measure each individually so it will be necessary to evaluate the goals and strategies to determine holistic measures that align with the goals of the Plan and community.

CATEGORY	WHAT TO MEASURE	WHEN TO MEASURE	WHY IT'S IMPORTANT	HOW TO MEASURE	WHERE TO MEASURE
Physical & Operational Changes	The physical and operational changes resulting from a specific project.	Before: Measure and document existing site conditions. After: Measure immediately after construction completion	<ul> <li>For benchmarking against prior conditions or control areas.</li> <li>To build an inventory and database of the city's infrastructure.</li> <li>To demonstrate and communicate short-term achievements and progress to stakeholders.</li> <li>To measure perceived quality of conditions.</li> </ul>	Before-and-after photos and videos Before-and-after plans and sections Qualitative surveys of infrastructure quality	Project site and immediate surroundings. Maintain consistency with locations measured.
Shifts in Use and Function	The change in behavior and use of the street. Identify how and why the street functions differently, and measure the level of satisfaction with the changes.	Before: Observe and document existing use and function. Note locations on site plans. After: Measure periodically after 1, 3, 6, and 12 months. Measure during different seasons and at varying times of the day and week.	<ul> <li>To evaluate success of intended change in behavior and function.</li> <li>To measure user satisfaction and user perception.</li> <li>For benchmarking against prior conditions and other projects.</li> <li>To build an evidence base for sustainable streets</li> <li>To learn lessons and inform future street designs.</li> </ul>	Before-and-after photos and videos On-site counts and observations Note locations Quantitative analysis Qualitative surveys	Project site, connecting networks, and surrounding neighborhood. Maintain consistency with locations measured.
Resulting Impacts	The extent to which the project contributes to larger local and regional goals and principles of: •Public Health and Safety •Quality of Life •Environmental Sustainability •Economic Sustainability •Equity	Before: Identify existing metrics or collect new data relevant to project goals and priorities. After: Measure matching metrics periodically after multiple months, and after 1, 2, and 3 years.	<ul> <li>To evaluate long-term impacts and benefits.</li> <li>To benchmark against larger citywide goals and priorities.</li> <li>To build an evidence base for sustainable streets.</li> <li>To measure return on investment and evaluate cost effectiveness.</li> <li>To communicate and build support for sustainable streets.</li> </ul>	Quantitative analysis Qualitative surveys Comparative analysis of census results Environmental analysis	Project, neighborhood, network, and citywide scale. Choose scales relevant to specific metrics.

Measuring Streetscapes, Credit: NACTO

# **GOALS & STRATEGIES**



# ECONOMICS

Ensure the financial feasibility of Main Street and maximize community impact

- Catalyze adjacent redevelopment opportunities
- Support the development of an efficient operations and management plan
- Maximize economic impact to the local community by supporting the creation of local jobs
- Select materials and systems with life cycle and maintenance costs in mind
- Encourage private improvement and investment along corridors
- Encourage the revitalization and activation at ground level along corridor to ensure a consistent public realm and frontage
- Encourage redevelopment and new economic investment
- Provide economically viable parking and transit solutions that are coordinated to satisfy demand
- Source local materials and create local jobs
- Encourage a healthy and diverse mix of commercial and recreational offerings throughout the year



Enhance the environmental integrity and resilience of the corridor

- Improve air quality
- Improve stormwater management
- Improve human comfort
- Reduce greenhouse gas emissions
- Improve the urban canopy and species diversity throughout corridor
- Use native, non-invasive vegetation wherever possible
- Direct stormwater to bio-infiltration areas
- Increase permeable surfaces and Naturalize the drainage systems
- Reduce noise pollution
- Increase size of pedestrian spaces that will provide safety and comfort to all users



Promote community interaction and connectivity while enhancing the identity and character of Lake Tahoe

- Increase the amount of flexible community gathering spaces for varying uses and functions
- Create a sense of consistency and clarity in the corridor through implementation of design standards and guidelines that celebrate the unique character of Lake Tahoe
- Increase opportunities for public education/ interpretation along the corridor
- Provide programming opportunities that will respond to the climate and seasonal change
- Provide branding opportunities that respond to the diversity of character present on the corridor
- Increase the amount of flexible community gathering spaces) for varying uses and functions including pedestrian oriented activities and events
- Identify and provide connections to surrounding assets
- Establish gateways at major intersections and pedestrian nodes



## Achieve a pedestrian, bicycle and transitoriented corridor

- Improve conditions for pedestrians and Bicyclists
- Create a year-round multi-modal transportation system that is fun, exciting and enhances the "Tahoe Experience"
- Encourage the shifting of traffic away from main Street
- Increase sidewalk width
- Increase number of crosswalks and decrease crosswalk length
- Reduce vehicle miles travelled
- Increase bike parking and supporting facilities (pump and tool stations, covered parking)
- Provide frequent and reliable transit
- Provide support for multi-modal transportation
- Incorporate infrastructure for innovative micro-transit options that address seasonality and the character of the region
- Utilize loop road for the rerouting of through traffic, parking, service, and business access

### **PERFORMANCE STANDARDS**

#### DOCUMENTATION

In order to measure the success of the Main Street Management Plan to its original goals, an annual report with the following metrics will be compiled by TRPA and partners following implementation of the plan. Most of the metrics listed in this table are already collected by TRPA, TTD or partner agencies, or are proposed to be collected prior to the implementation of the MSMP. This information can be used as a baseline metric to compare future street performance and success.

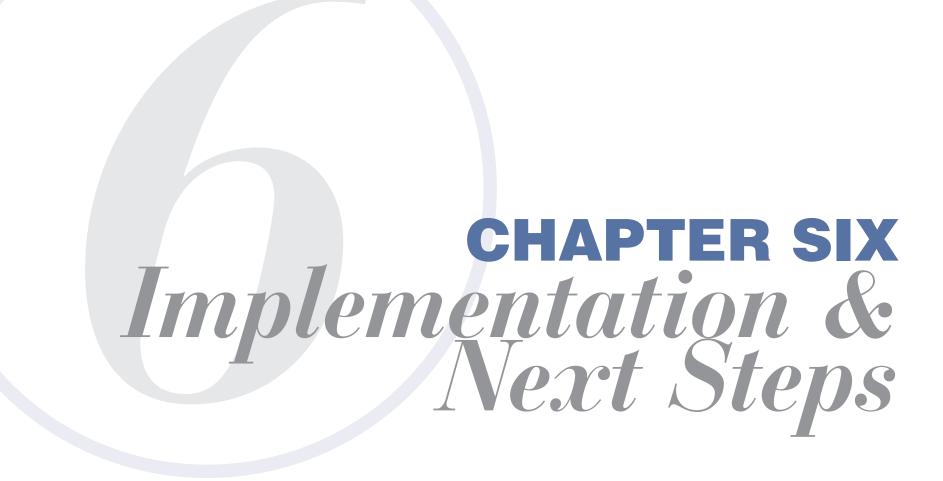
#### STAKEHOLDER COORDINATION

Following implementation of the Main Street Management Plan, TRPA will convene a group of stakeholder representatives of Main Street. TRPA would convene this group three years after the Main Street Management Plan has been implemented to evaluate monitoring results to the overall success of the street. This group would include, but is not limited to, representatives from the City of South Lake Tahoe, Douglas County, the Tahoe Douglas Visitors Authority (TDVA), the Park Avenue Redevelopment Management Agency (PADMA), the Chambers, and local business and property owners. The public would be invited and given an opportunity to provide input on how the street could better function. This group may form naturally prior to implementation of the Main Street Management Plan through the formation of a business improvement district, a downtown partnership association or another entity that assists with the operations, management and funding of implementation of the plan.

Additionally, this group, or a subcommittee of the group, could further serve to coordinate on events that result in a full or partial street closure on Main Street. It is assumed that this group would also coordinate on processing event permits, event management and event tracking.

CATEGORY			<b>8-8</b> 8		METRIC	WHO	WHEN TO MEASURE	HOW TO MEASURE
Physical & Operational		Х	Х	Х	Active transportation: number of bike and pedestrian facilities added to Main Street	TRPA	Before: Measure and document existing conditions prior to implementation.	Before and after photos, plans, and sections
	Х	Х	Х	Х	Environment: square footage of green infrastructure facilities (i.e. bioswales, stormwater planters)	TTD	After: Measure immediately after construction .	Before and after photos, plans, and sections
Use & Function	Х	Х	Х	Х	Satisfaction: percentage of residents satisfied with project outcome	TRPA	N/A	Travel Survey
		Х	Х	Х	Mode Share: percentage of trips by mode as a percentage of total	TRPA TDVA	Bi-annually	Travel Survey
			Х	Х	<i>Speed: change in average vehicle speeds on Main Street</i>	TRPA	Annually	Quantitative analysis (streetlight)
		Х	Х	Х	<i>Transit: transit frequency &amp; hours of service</i>	TTD	Before: Data is currently collected for this metric	Annually using TTD targets following project implementation
Resulting Impacts	Х	Х	Х	Х	Active transportation: annual bicyclist/pedestrian counts	TRPA	Before: Annual data collected for this metric.	Bike/pedestrian counters
			Х	Х	Safety: number of collisions by mode	CSLT Douglas County DOT's	Continue to measure annually prior to implementation	On-site counts from emergency responders
	Х	Х	Х	Х	Transit Ridership	TTD		On-site counts and observations
	Х		X		Real Estate: property values within and surrounding Main Street	CSLT Douglas County	Collect baseline data prior to project implementation. Measure matching metrics annually following implementation	2





# NEXT STEPS

### **IMPLEMENTATION STEPS**

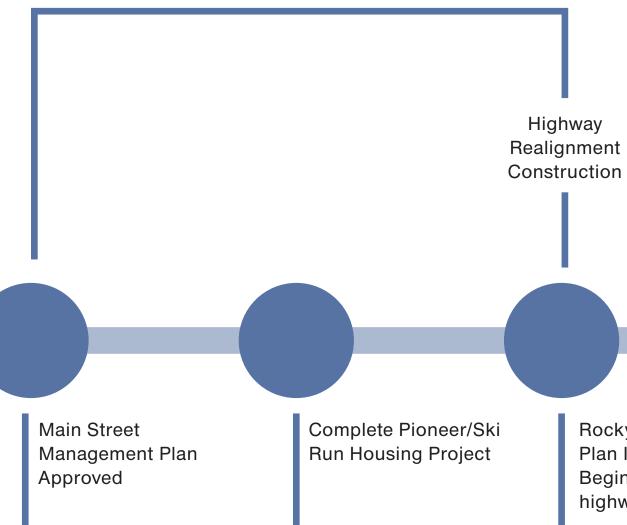
There are a number of tasks that must be complete before the Main Street Management Plan (MSMP) can be implemented. This graphic shows the sequence of steps for each component of the US 50 South Shore Community Revitalization Project to be completed in the upcoming years. The components included in this plan will be brought to the TRPA Governing Board for formal approval as partially satisfying the permit condition required for the US 50 South Shore Community Revitalization Project (SSCRP). The ownership, operations, and management component of the MSMP will be brought to the TRPA Governing Board in the future for formal approval and full satisfaction of the permit condition. Following the partial approval of the MSMP in the fall of 2020, the parking management recommendations should be further developed and implemented over time with stakeholder involvement.

### **INTERIM DESIGN STRATEGIES**

While construction of full design proposed in this plan cannot be accomplished until US Highway 50 has been realigned, certain aspects of the plan can be implemented in the years prior to construction. These include:

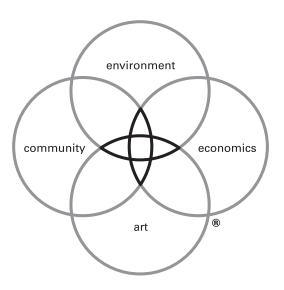
- Traffic Calming can be conducted temporarily using pedestrian curb extensions at key crossings of using landscaping.
- Sidewalks and the pedestrian realm can improved in the shortterm using interim materials such as gravel, paint or planter beds prior to full project implementation.
- Parklets and cycle corrals can be used prior to reconstruction to provide interim activation and increase the public realm. Parklets and cycle corrals can replace existing parking spaces to be used for gathering spaces or bike parking capacity.
- Planters can be used as temporary installations to begin redefining the configuration and space allocation along the corridor. The planters also provide valuable green infrastructure components with immediate environmental and user experience benefits.
- Flexible bollards and modular curbs can also be installed immediately to indicate the transformation that is anticipated to occur. Using interim materials, these temporary and inexpensive additions can reflect the desire configuration of the corridor while helping redirect traffic and pedestrians.
- Work with state DOTs to provide dedicated space for bicycle facilities throughout the corridor.
- Improvements to the existing Stateline Transit Center including improved waiting areas, additional secure bike parking, pick-up/ drop-off space for TNCs, and improved wayfinding including detailed maps of the Stateline area and real-time transit and traffic information.
- Improved wayfinding near term actions could include navigation panels, navigation totems, and interpretation as depicted in the Wayfinding Section of the MSMP.
- · Near-term parking management as identified in the subsequent Parking Management Plan.

### MSMP OWNERSHIP MANAGEMENT, FUNDING, PARKING IMPLEMENTATION & TRANSIT CIRCULATOR PLAN



**Rocky Point Amenities Plan Implementation** Begins (Concurrent with highway construction)

**Begin Main** Street Implementation



### DW LEGACY DESIGN®

We believe that when environment, economics, art and community are combined in harmony with the dictates of the land and needs of society, magical places result — sustainable places of timeless beauty, significant value and enduring quality, places that lift the spirit. Design Workshop is dedicated to creating Legacy projects: for our clients, for society and for the well-being of our planet.

> **DESIGN**WORKSHOP www.designworkshop.com