



CHAPTER 3

THE PLAN

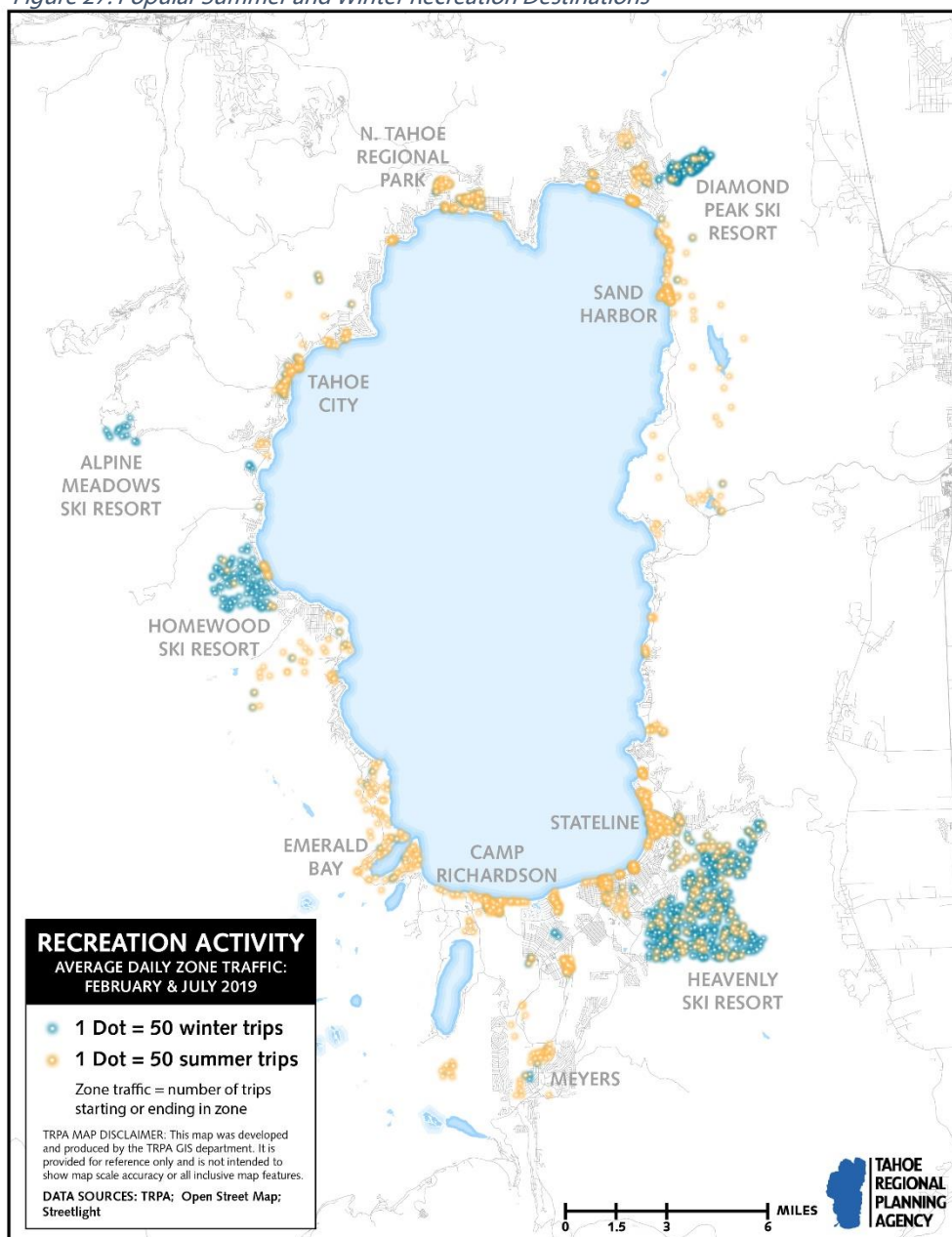
The Plan

The Regional Transportation Plan is the building block for transformative change at Lake Tahoe. It grows and enhances the plan's core focus areas of transit, trails, technology, and communities and their emphasis on creating walkable and bikeable town centers, increasing electric vehicle infrastructure and use, and developing greater walking, biking, and transit options that also connect people to popular recreation destinations in the region.

Policy Highlight

Policy 4.1: Prioritize regional and local investments that fulfill TRPA objectives in transit, active transportation, transportation demand management, and other programs which support identified TRPA transportation performance outcomes.

Figure 27: Popular Summer and Winter Recreation Destinations



UNDERSTANDING TRAVEL BEHAVIOR PATTERNS

Lake Tahoe's transportation system must serve everyone—and to do so successfully requires understanding the needs of three distinct groups of users: Residents, commuters, and visitors.

Knowing who is using the system, when and how they are traveling, the purpose of their

trip, and where they are traveling to and from, helps TRPA and its partners build a better transportation system, and one that can scale with the seasons.

Three distinct user types form the basis for this understanding. Visit Tahoe, Discover Tahoe, and Everyday Tahoe.

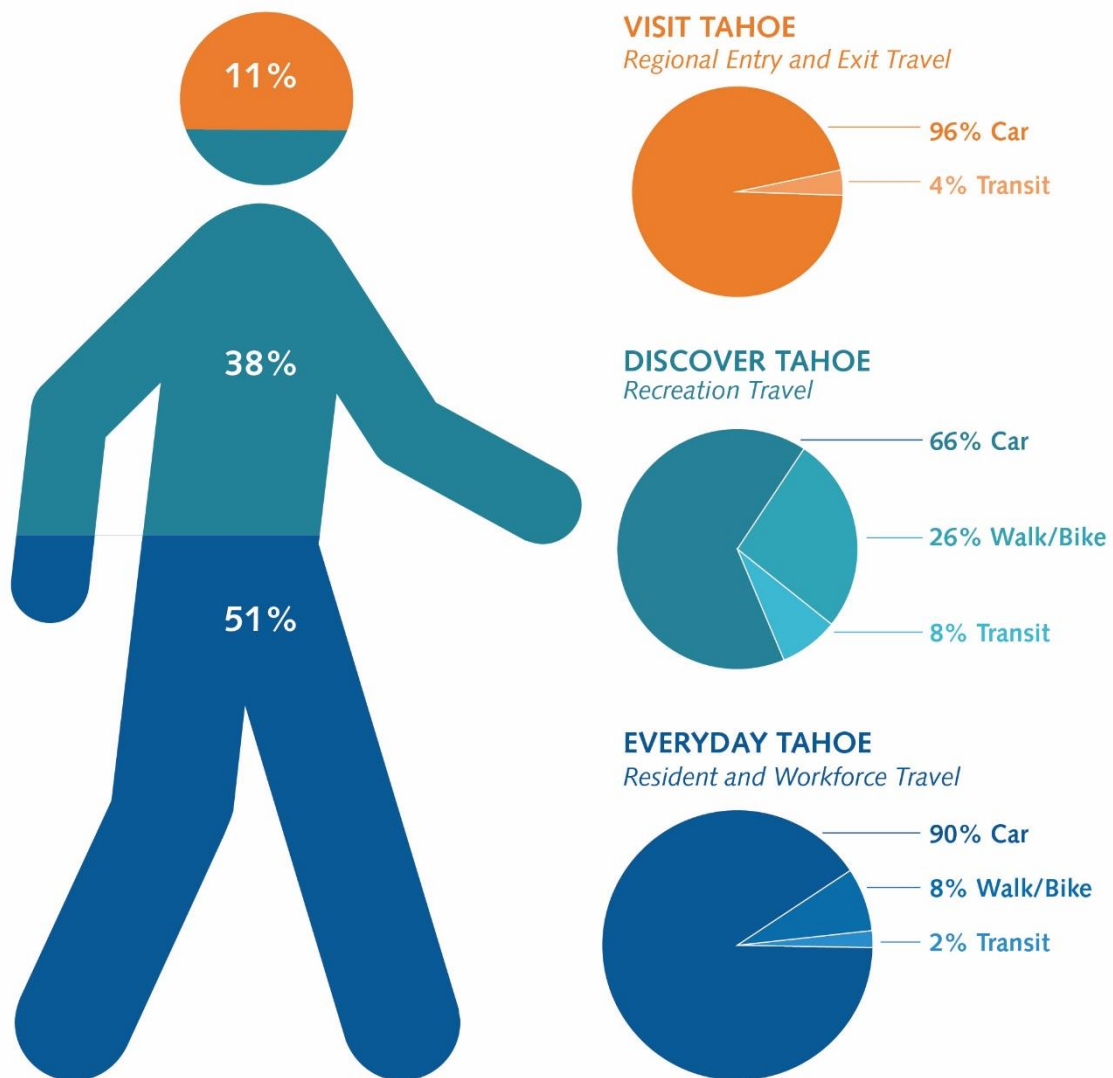
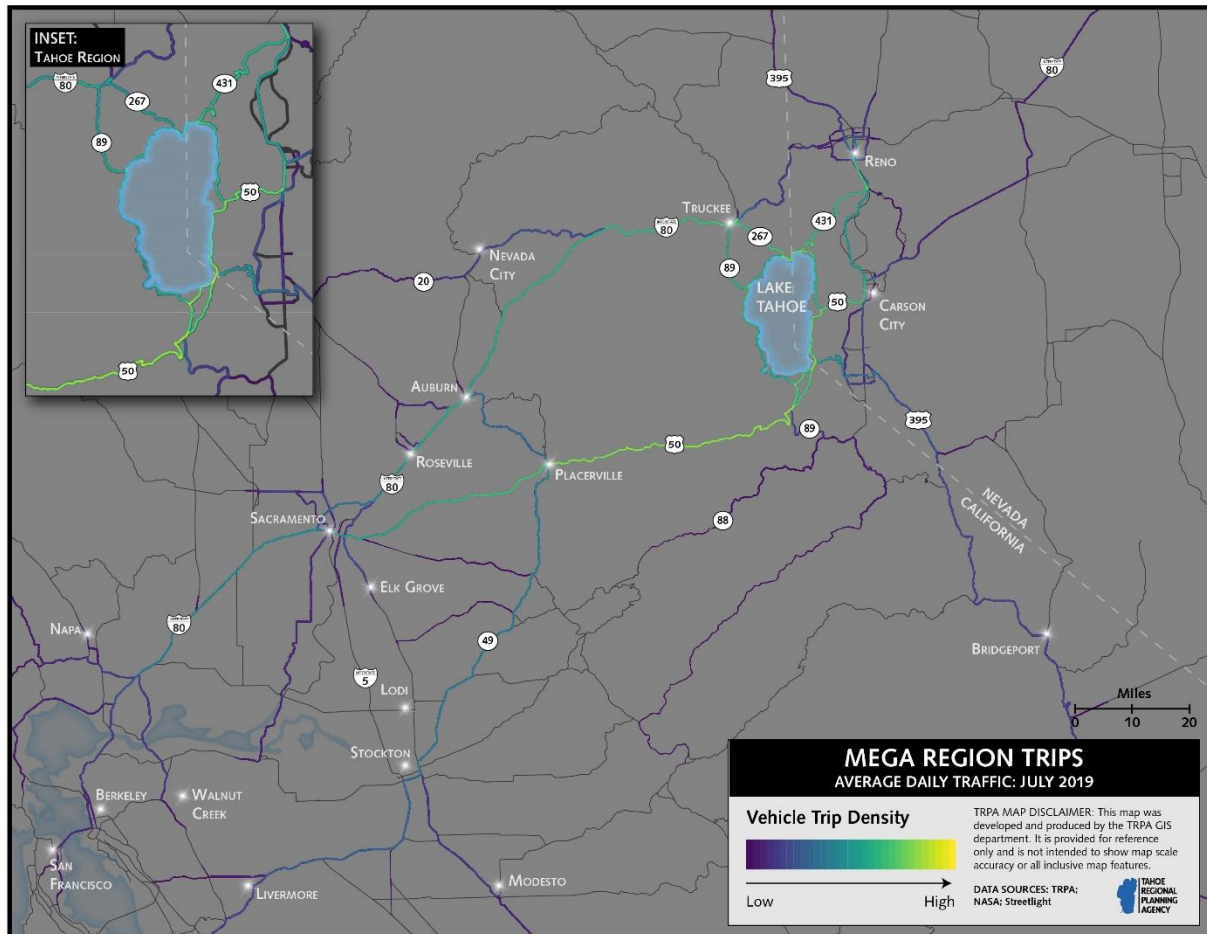


Figure 28: Proportion of Travelers by Behavior and Mode

Visit Tahoe

Visit Tahoe trips are long-distance trips to and from Tahoe from the larger Northern Sierra Mega-Region, including nearby airports and freight travel. Visit Tahoe trips account for 11 percent of all trips made within the region. Table 2: Share of Visitation to Tahoe by Entry Point

Basin Entry Point	% of Mega-Region Travel
State Route 89 (Tahoe City)	17%
Highway 267 (Kings Beach)	17%
State Route 431 (Mt. Rose Hwy)	11%
Highway 50 (Echo Summit)	14%
Highway 50 (Spooners Summit)	26%
State Route 207 (Kingsbury Grade)	12%
State Route 89 (Luther Pass Rd)	3%



Discover Tahoe

Discover Tahoe trips include residents and visitors who are making longer distance trips to recreation areas around the region. Discover Tahoe recreation trips account for 38 percent of all trips made to, through, and within the region.

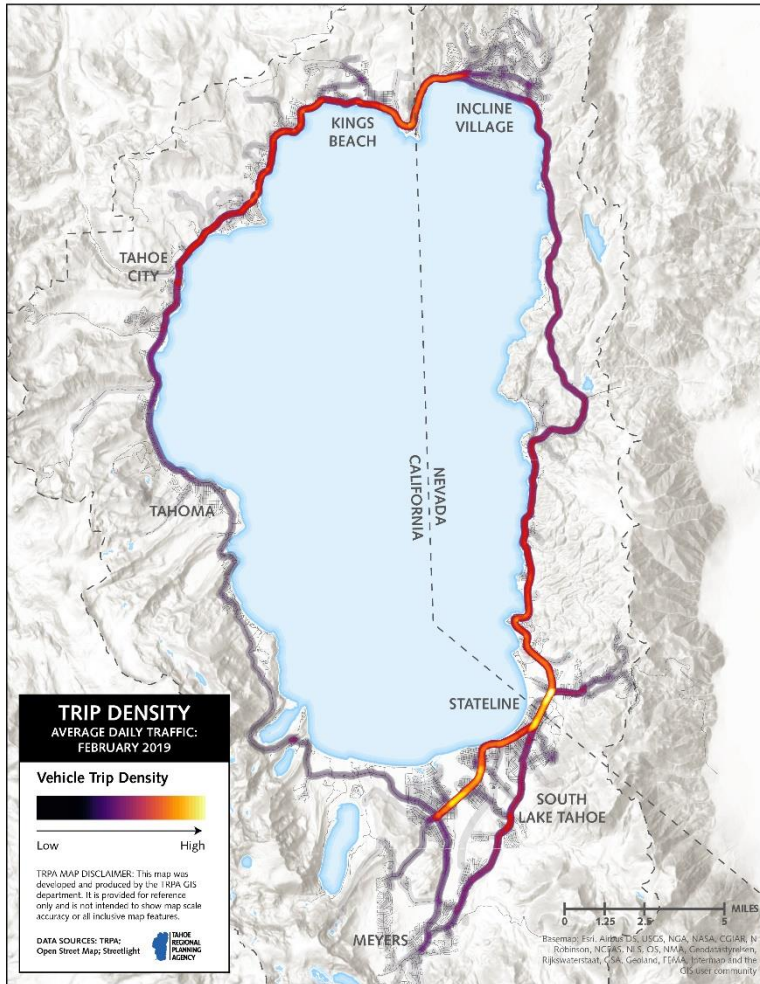


Figure 31: Regional Trip Density February 2019

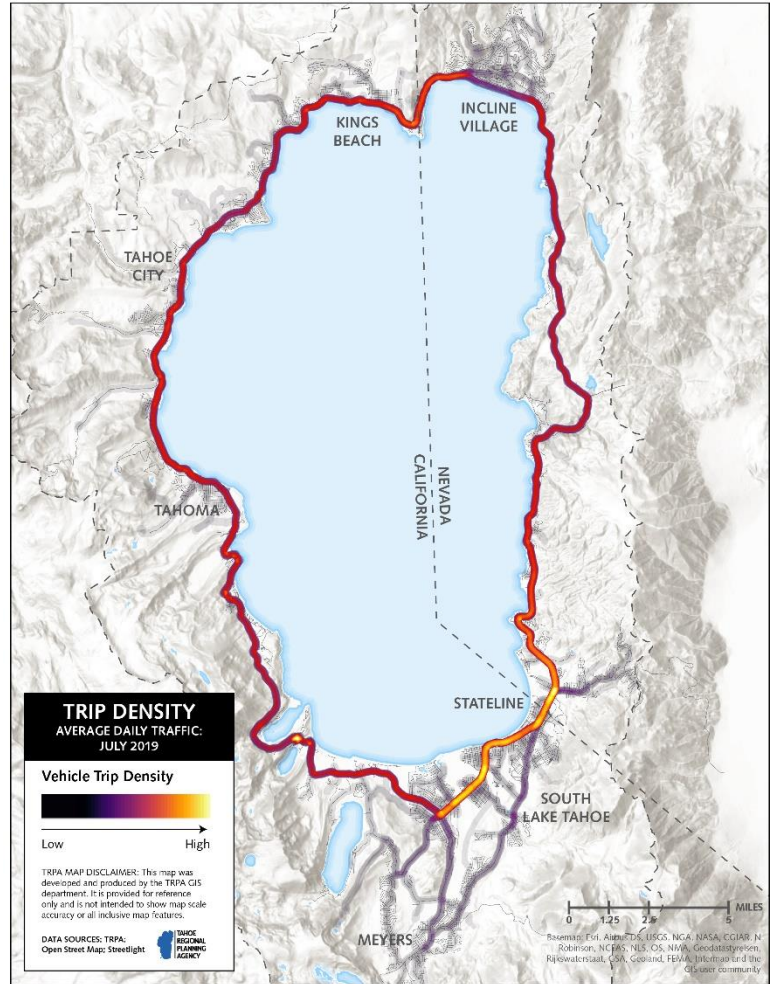


Figure 30: Regional Trip Density July 2019

Everyday Tahoe

Everyday Tahoe trips include commutes to work or school, short trips around town by residents that are often less than two miles in length, and include the most vulnerable community members who live in identified Community Priority Zones. Community Priority Zones are neighborhoods with higher densities of transit dependent populations, including seniors, individuals with a disability, minorities, low-income individuals, and zero vehicle households. Everyday Tahoe trips account for 51 percent of all trips made within the region.

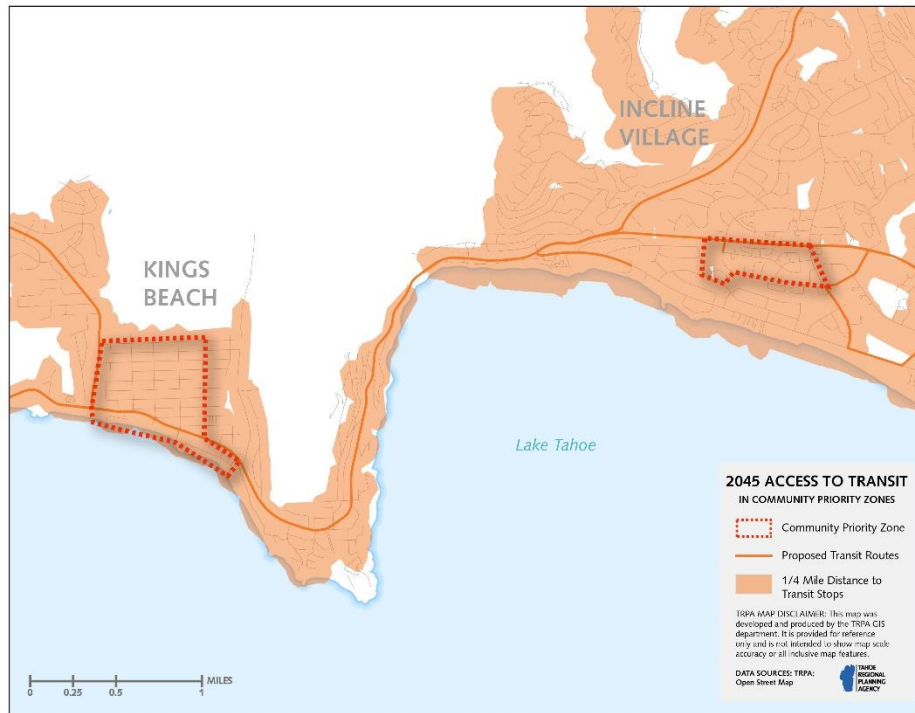


Figure 33: North Shore, Tahoe Community Priority Zones with Proposed Transit in 2045

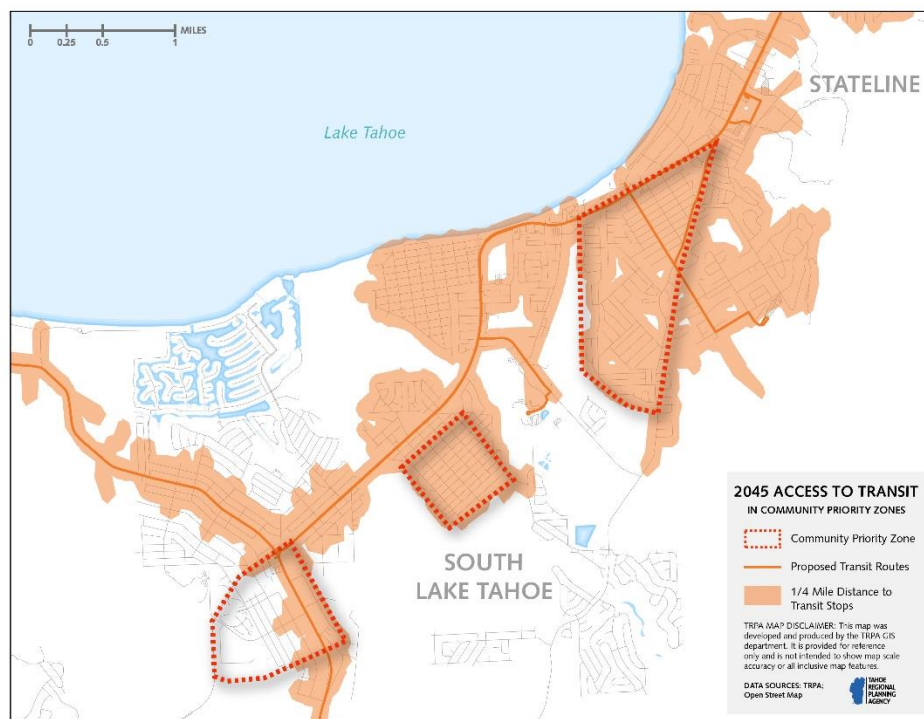


Figure 32: South Shore, Tahoe Community Priority Zones with Proposed Transit in 2045

Day Visitors

Many Discover and Visit Tahoe travelers are day visitors traveling to Tahoe for a day of recreation and returning home the same day. Day visitors may enter the region and make several trips within the region, but they do not stay overnight.

Day visitors make up about nine percent of the total trips and 18 percent of the vehicle miles traveled during a typical day.

TRANSPORTATION DEMAND MANAGEMENT

Transportation demand management (TDM) strategies work to inform travelers about travel options and provide incentives, particularly during peak roadway congestion, to shift travel patterns from the single occupant automobile to walking, biking, transit, and carpooling, or to travel during less busy times when there is more capacity on roadways and at recreation sites.

Outreach is critical to successfully manage travel demand, including strategies to target the three travel groups differently:

Visit Tahoe – Regional Entry and Exit

Travel: Peaks in visitor travel to and from Tahoe typically occur over holiday weekends, for special events, and on high snowfall days. TDM strategies targeting the millions of people who visit the Tahoe Region each year encourage them to travel to and from Tahoe during non-peak times, or to leave the car at home and arrive by public or private transit service that provides recreational amenities like carrying gear — knowing that they will be able to access all the region offers on foot, bike, or transit once here.

Discover Tahoe – Recreation Travel:

Access to popular recreation sites and points of interest is often limited by parking availability and inadequate transit services, which combine to create roadway congestion, safety concerns, and environmental degradation caused by people seeking parking further from their destination. TDM strategies for Discover Tahoe travelers include marketing travel options, incentivizing

the use of transit, parking management systems that provide real-time travel and parking information online, convenient and easy transit, and incentivizing zero-emission vehicles charging through infrastructure and parking incentives for electric vehicles.

Everyday Tahoe – Residential and

Workforce Travel: Because Everyday Tahoe trips follow a similar pattern every day, they are the easiest trips to make using transit, biking, or walking. TDM Strategies for Everyday Tahoe travelers include employer trip reduction programs; enhanced transit access to residential neighborhoods, school and work locations; and education and encouragement programs such as the Lake Tahoe Bike Challenge and Bike to School week.

In Tahoe if strategies work for visitors, they become assets for the community, too. As a result, every traveler has a more efficient, safe, and connected transportation system with improved access to Lake Tahoe's world-renowned recreation, reduced daily commute times, improved emergency response times, reduced environmental impacts, and security enhancement.

Marketing and Information

Tahoe residents and travelers will use more environmentally friendly travel modes when provided with information and options; TRPA's Linking Tahoe (www.linkingtahoe.com) website is the source for both. The site includes information on seasonal travel options, including transit

and shuttle routes, walking and biking paths, bike and scooter rentals/share programs, and links to current roadway conditions.

Policy Highlight

Policy 4.7: Promote awareness of travel options through outreach, education, and advertising, particularly in local schools.

The Commute Tahoe employer portal provides resources for employee trip reduction programs, including a step-by-step guide to developing a program suited to the specific workplace. Commute Tahoe seeks to reduce vehicle trips and traffic congestion by encouraging employees to walk, bike, use transit, carpool, vanpool, or drive at non-peak times. The program will be widely launched throughout the region in 2021 and monitored annually by TRPA.



Figure 34: Linking Tahoe Brochures

Since 2017, more than 15,000 “Linking Tahoe” brochures have been distributed to hotels, recreation sites, and retail stores around Tahoe and Truckee to raise awareness and encourage use of non-automotive travel options to, from, and around Tahoe that also benefit the region’s environment and communities.

Creating More Attractive Options

These TDM programs enhance travel options for all types of travelers and incentivizes

them to forgo their personal vehicles in favor of walking, biking, or riding transit.

Policy Highlight

Policy 1.6: Collaborate with all jurisdictions and employers in the basin to develop, maintain, and implement programs to reduce employee vehicle trips.

Real-Time Transit Information

People are more willing to ride the bus if they know when it will arrive. The region’s two public transit operators, TART and TTD, have automatic vehicle location systems so riders know the exact location and real-time arrival for every bus. Real-time information also helps TART and TTD monitor and improve transit on-time performance by identifying and addressing inefficiencies in routes, schedules, and maintenance.

Free-to-the-User Transit

Free transit increases ridership. Piloted for several years, TTD’s “Spare the Air Days” provided free transit on specific peak visitation days at Tahoe and demonstrated dramatic ridership increases. TART implemented free fares on all routes in December 2019 and saw a nearly 25 percent increase in ridership (prior to the COVID-19 pandemic). TTD also began offering free fares in April 2020 and expects to see ridership increase long-term.

Parking Management

The availability of parking significantly shapes people’s travel decisions and paid parking is a powerful disincentive to driving. Where parking is free, disorganized, or not enforced, as it is at many of Tahoe’s popular recreation sites, people are less likely to use transit, roadsides become crowded and unsafe with parked cars and people walking in the street, and the environment is damaged from roadside erosion.

Parking management strategies are dependent on the location and use of an

area. For recreational areas, strategies include combinations of higher priced parking lots with no time limit, medium priced time limited roadway parking, and free shuttle service. In developed areas, local jurisdictions develop area plans with parking management strategies designed for the communities' needs. For example, Placer County's Tahoe Basin Area Plan envisions shared public-private partnership parking lots in town centers to better manage limited parking supply during high demand. Jurisdictions may also reduce parking requirements for mixed-use development in town centers where people are more likely to be able to walk, bike, or take transit from their hotel or home to retail locations, restaurants, and other destinations. Dynamic

parking pricing with enforced time limits also encourage the use of transit and active transportation.

Transit Priority Access

Making transit faster and more convenient is key to increasing ridership and reducing VMT and associated greenhouse gas emissions. Several approaches make transit a more favorable transportation choice, including allowing transit, bike, emergency vehicle, and local traffic in targeted locations during peak periods; transit signal priority for buses to move through signalized intersections before cars, which keeps transit running on-time; and transit only lanes which make transit more reliably on time.

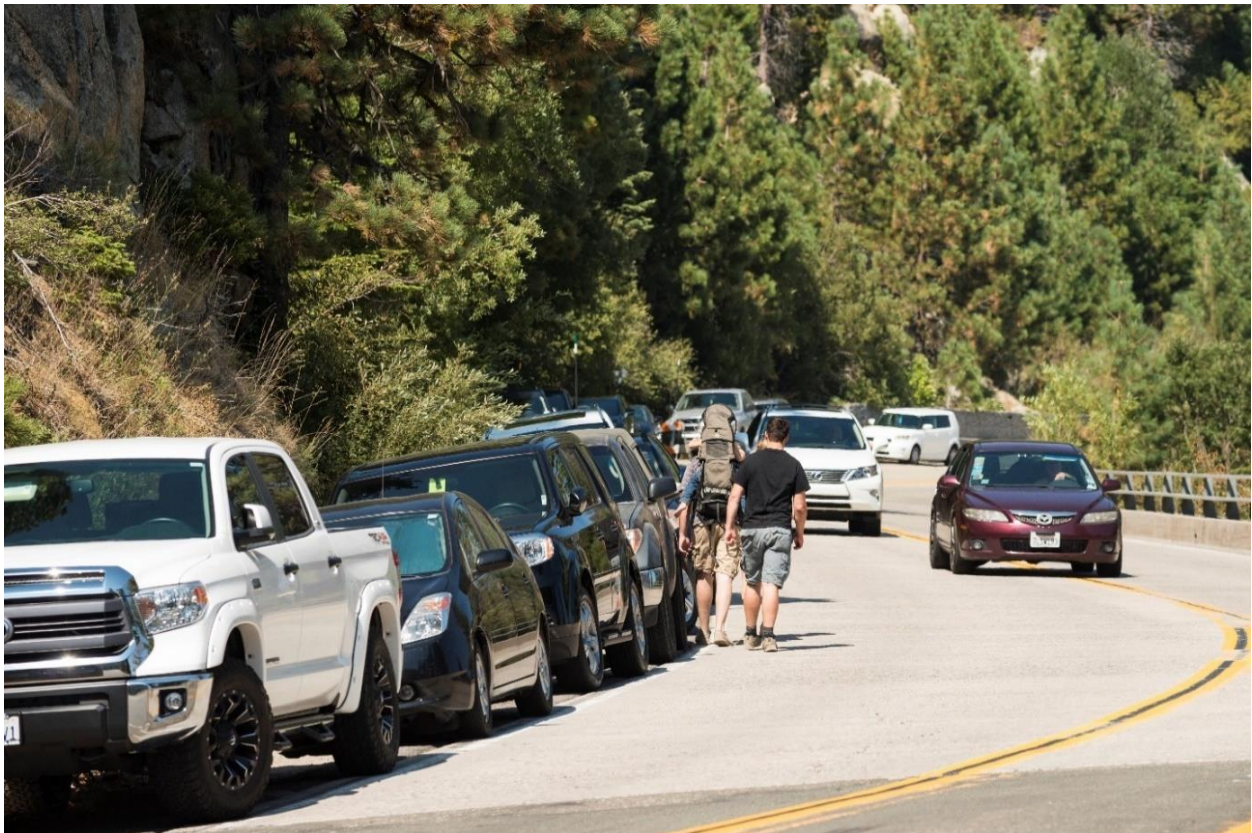


Figure 35: State Route 89 at Emerald Bay on a Typical Summer Day

TRANSPORTATION SYSTEM MANAGEMENT

Transportation system management uses infrastructure projects, transportation services, and system operations to enhance traveler safety, improve traffic flow, and provide more travel options. Coupling these projects with TDM strategies will more efficiently use the existing system and manage roadway congestion.

The transportation system management projects were identified through coordination with implementing partners and a thorough analysis of the existing transportation system.

A Layered Approach

The plan will build a transportation system that meets not only the needs of Tahoe's residents and commuters, especially our most vulnerable who live in identified Community Priority Zones, but also the growing numbers of day and overnight recreation visitors.

As a result, every traveler will be able to leave their car parked as they move about and explore the region.

The plan, however, must be implemented in phases for the system to function as intended and because there is not currently adequate funding available to pay for everything to be implemented today.

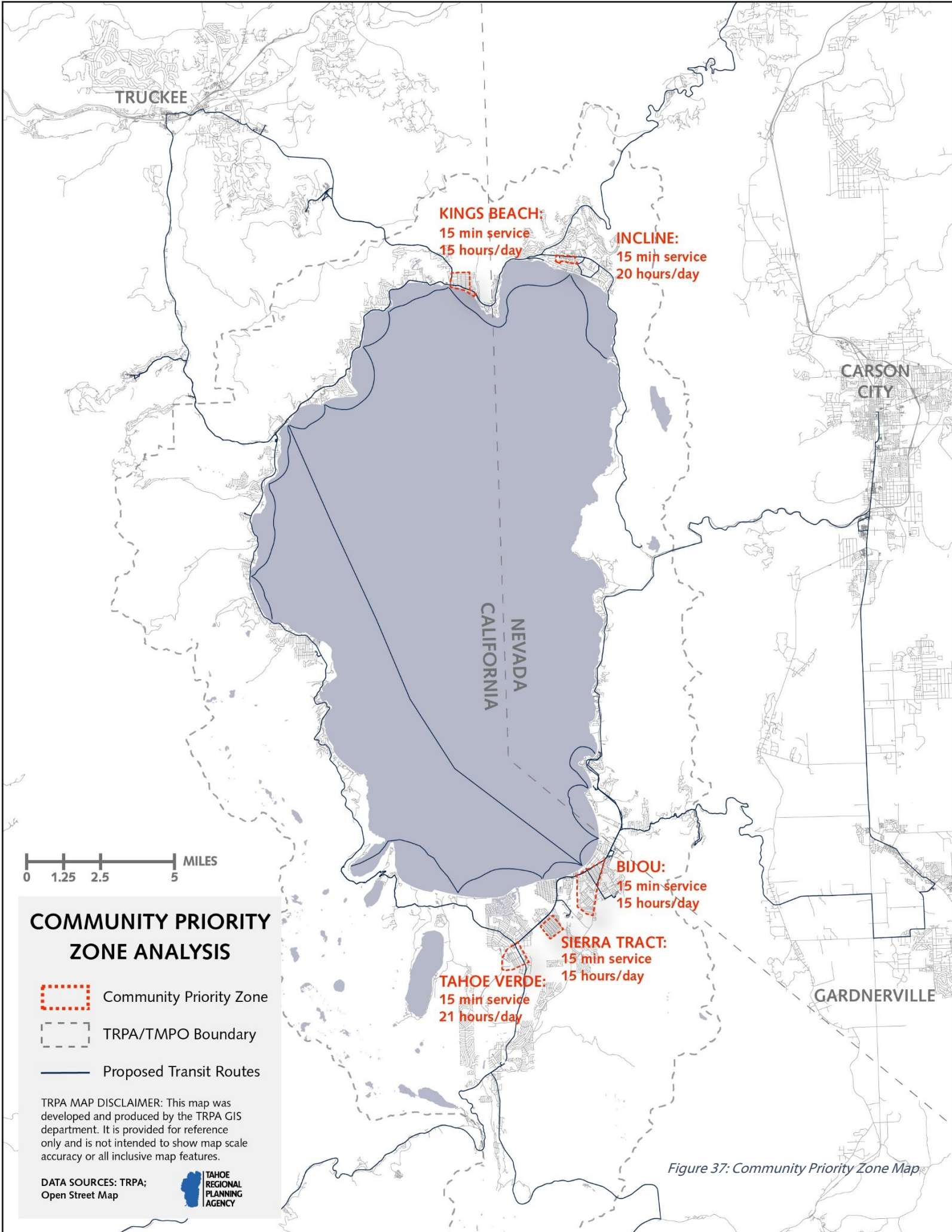
The plan and its phases are built to flex and adapt, such as for the accelerated implementation envisioned in the Bi-State Consultation or to accommodate pilot projects that advance the plan to its goals. For example, the plan envisions inter-regional transit service between nearby cities and Tahoe be fully in place by 2045. However, inter-regional partnerships between TRPA and the Regional Transportation Commission of Washoe County, Nevada will pilot transit service between Reno and Sparks to Incline Village and Sand Harbor State Park, anticipated to start in summer 2021, implementing the first step towards the plan's larger transit vision.

Policy Highlight

Policy 5.2: Ensure access to public transit is compatible with the neighborhood in identified Priority Communities

Figure 36: Tahoe Transportation District Bus in South Shore Credit: Tahoe Transportation District





TRUCKEE

KINGS BEACH:
15 min service
15 hours/day




INCLINE:
15 min service
20 hours/day

CARSON CITY

NEVADA
CALIFORNIA

0 1.25 2.5 5 MILES

COMMUNITY PRIORITY ZONE ANALYSIS

-  Community Priority Zone
-  TRPA/TMPO Boundary
-  Proposed Transit Routes

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;
Open Street Map



Figure 37: Community Priority Zone Map

TRANSIT

Transit in Tahoe will be frequent and coordinated through public-private partnerships and advancements in technology to serve local, community, and regional needs.

Policy Highlight

Policy 2.13: Coordinate public and private transit service, where feasible, to reduce service costs and avoid service duplication.

The plan envisions frequent transit service to connect town centers and major recreation destinations with 15-minute fixed routes; local services arrive every 30 to 60-minutes in some neighborhoods. Community transit routes provide on-demand service within neighborhoods and town centers, link to frequent transit routes, and provide service to some recreation destinations. Regional service provides routes to Tahoe for commuters and visitors from neighboring regions such as Stockton, Sacramento, Reno, and Carson City. A ferry service provides a critical link between the North and South shores, and water taxis will ferry passengers between popular beaches and marinas during the peak summer months. A series of mobility hubs built at major intersections and town centers provide electric vehicle charging for an electric transit fleet and connect passengers with first and last mile trip options like shared mobility services and park-and-ride lots.

To achieve this vision, transit services will be added incrementally over the next 25 years, with frequent, local, and community routes implemented in the short-term to provide the foundational service every traveler in Tahoe needs, especially those living in identified Community Priority Zones.

Recreation and seasonal services are prioritized next to provide more travel options for everyone, including travelers who choose not to use their cars. Achieving the long-term vision of public and private water transit and regional and inter-regional transit services will be implemented incrementally as partnerships and funding opportunities arise, providing options for commuters and visitors to leave their cars behind.

Transit Goals and Policies

Goals

A transit system that is modern, zero emission, and connected to town centers, jobs, recreation sites, neighborhoods, and surrounding areas. As a result, visitors and residents will choose the fast, frequent, and fun transit system over their personal vehicles, reducing congestion on local roadways and environmental impacts through lower GHG emissions.

Policies

Targeted transit policies focus on regional connectivity, operations and congestion management, and economic vitality and quality of life.



Policies will guide the existing transit system towards greater frequency, efficiency, and regional and mega-regional coordination by clarifying public and private operator roles, reaffirming seasonal service needs to recreation areas and neighboring regions, recognizing new and updated transit plans and technologies, such as microtransit, and ensuring that increased transit service and asset management is a regional priority over the life of the plan.

Policy Highlight

Policy 6.2: Improve winter transit access by providing shelters, cleared sidewalks and paths around stops, winter accessible bike racks, and warm shelters at mobility hubs and major transit stops.

Supporting Plans

Transit is shaped by projects identified in Short- and Long-Range Transit Plans for the region's transit operators, which identify service and capital needs to expand service, add new routes and service types, purchasing replacement buses, and upgrades to maintenance facilities.

Transit for the most vulnerable transit users is informed by the 2019 Coordinated Human Services Plan, which focuses on projects and transportation services that enhance mobility for seniors and individuals with disabilities traveling within Lake Tahoe.

Existing Transit System

Two operators provide local and regional public transit service in the Tahoe Region. The Tahoe Transportation District (TTD) operates on the South and East shores. Tahoe Truckee Area Regional Transit (TART), jointly operated by Placer County and the Town of Truckee, provides services on the North and West Shores, and Incline Village. Service tiers are defined as:

Frequent Service are fixed routes that operate on the main thoroughfare through urban cores and provide high-frequency service of 20 minutes or less between buses.

Local Service are fixed routes that provide service to and through some neighborhoods and to the urban cores within the basin. Service is typically offered every 30 to 60 minutes.

Community Service are either fixed route or circulator services that operate within a small zone and provide on-demand microtransit service to recreation hot spots and urban centers. Time between buses varies from 5 to 30 minutes, depending on the level of demand.

Microtransit is defined as on-demand, technology-enabled, multi-passenger transportation service that serve passengers using dynamically generated routes. Vehicles can range from large SUVs to vans to shuttles.¹

Regional Service are fixed route express or commuter routes that provide service from neighboring cities to Tahoe. Regional service typically operates every 60 minutes throughout the day or during peak commute times.

Frequent and Local Services

On the South Shore, TTD operates 30-minute service along Highway 50 from 6:30 a.m. to 8:30 p.m. Another fixed route runs hourly along Highway 50 and into some neighborhoods from 6 a.m. to 7 p.m. TTD also operates hourly local service between Stateline and Daggett Summit along Kingsbury Grade. Complementary paratransit services are provided within one mile of these routes and to Meyers.

On the North Shore, TART operates 30-minute service along SR-28 between Tahoma and Incline Village. TART also provides hourly service along SR-89 and SR-267 between North Lake Tahoe and Truckee with connections to Squaw Valley and Northstar Village. All local service operates between 7 a.m. and 7 p.m. and separate night service runs from 7 p.m. to 2 a.m. along SR-28 and to Squaw Valley and Northstar Village.

¹Federal Transit Administration shared mobility definitions:

<https://www.transit.dot.gov/regulations-and-guidance/shared-mobility-definitions>

Community Services

Existing community services are operated by private transit providers across the region. On the North Shore, microtransit company, Downtowner, operates free microtransit within Squaw Valley with coordinated connections to local TART service along SR-89. Although outside the Tahoe Region boundary, the success of this service serves as a model for the region. On the South Shore, Heavenly Mountain Resort provides free, frequent, and public winter shuttle service between its base lodges.

Regional Services

TTD currently provides regional commuter service between South Lake Tahoe, Minden/Gardnerville, and Carson City. The hourly service operates during peak commute hours in the mornings and evenings.

Amtrak and Greyhound provide connections to Lake Tahoe from surrounding areas of California and Nevada; including Sacramento, San Francisco, Sparks, and Reno. These services run between the Bay Area, Sacramento, and the Town of Truckee three times daily, and South Lake Tahoe one time daily. Trips may require transfers to regional rail or bus service to reach the final destination.

Private operators, such as Tahoe Convoy, provide regional service on weekends during summer and winter peak seasons from the San Francisco Bay Area and the Central Valley to North Lake Tahoe, Truckee, and Squaw Valley.

Shuttles from the Reno/Tahoe airport to both the North and South Shores are provided by public-private partnership between the region's transit operators and private shuttle operators. The North Lake Tahoe Express is managed by the Truckee North Tahoe Transportation Management Association (TNT/TMA) and the South Tahoe Airporter is a public/private partnership between the

South Tahoe Alliance of Resorts and Amador Stage Lines.

Policy Highlight

Policy 2.7: Provide specialized and subsidized public transportation public transportation services and programs for individuals with disabilities that is consistent with Coordinated Human Services Transportation plans.

Specialized and ADA Services

Meeting the needs of the most vulnerable transportation users is where transit access begins. Community Priority Zones are neighborhoods where connecting residents and transit-dependent users to their jobs and shopping centers are essential, based on analysis that included visualizing population centers and employment density.

Under the Americans with Disabilities Act (ADA), TTD and TART must provide on-demand paratransit services to eligible riders over 65 years of age, veterans with a service-connected disability, and persons with disabilities who meet Act established eligibility criteria.

TTD operates an extensive paratransit program in South Lake Tahoe which provides shared, origin to destination, curb-to-curb transportation service to eligible riders. TTD's paratransit service is split into two zones.

Baseline Zone: Baseline paratransit services are available at no cost to eligible ADA riders within a one-mile radius of existing fixed routes.

Extended Zone: Extended paratransit services are available to eligible ADA riders beyond a one-mile radius of existing fixed routes.

TART provides on-demand paratransit services within three-quarters of a mile from existing fixed routes. Placer County also

partners with the Town of Truckee to provide daily trips between North Lake Tahoe and the Choices for Children center in Truckee for Choices' program participants.

Proposed Transit Services

Proposed transit services build on existing routes operated by TTD and TART and improve frequency, the duration of service, and provide more and more types of service to recreation hot spots. Private transit providers will help fill gaps in local service to recreation sites and neighborhoods and offer regional services. TART and TTD will continue to provide free-to-the-user service for frequent, local, and community public transit through 2045. Ferry services and inter-regional transit will generate operations revenue through reasonable fares. As technology advances the transit fleet will utilize zero-emission technology. Public and private partners will implement the proposed transit services using the following framework.

Foundation Riders (Everyday Tahoe)

Frequent, local, and community routes will be prioritized in the short-term and provide necessary services for everyone, and especially for transit-dependent populations.

Persons without Private Transportation (Zero Vehicle Households): Lack of a personal vehicle is a significant factor for transit need. In 2018, 72 percent of TART riders and 61 percent of TTD riders did not have access to a personal vehicle.²

Elderly (individuals 65 years and older): Elderly individuals may choose not to drive or can no longer drive due to age.

Persons Below Poverty or Median Income Levels: Purchasing and maintaining a personal vehicle might be difficult for households with lower income.

Individuals with a Disability: Disability status may impact an individual's ability to live independently, including driving a personal vehicle.

Minorities (Latinx/Hispanic, Black, Asian, American Indian, Pacific Islander, Other, Two or More Races): Minority groups are more likely to live in densely populated areas, are less likely to have access to a car, and are more likely to use public transportation to commute to work.³

Choice Riders (Discover Tahoe)

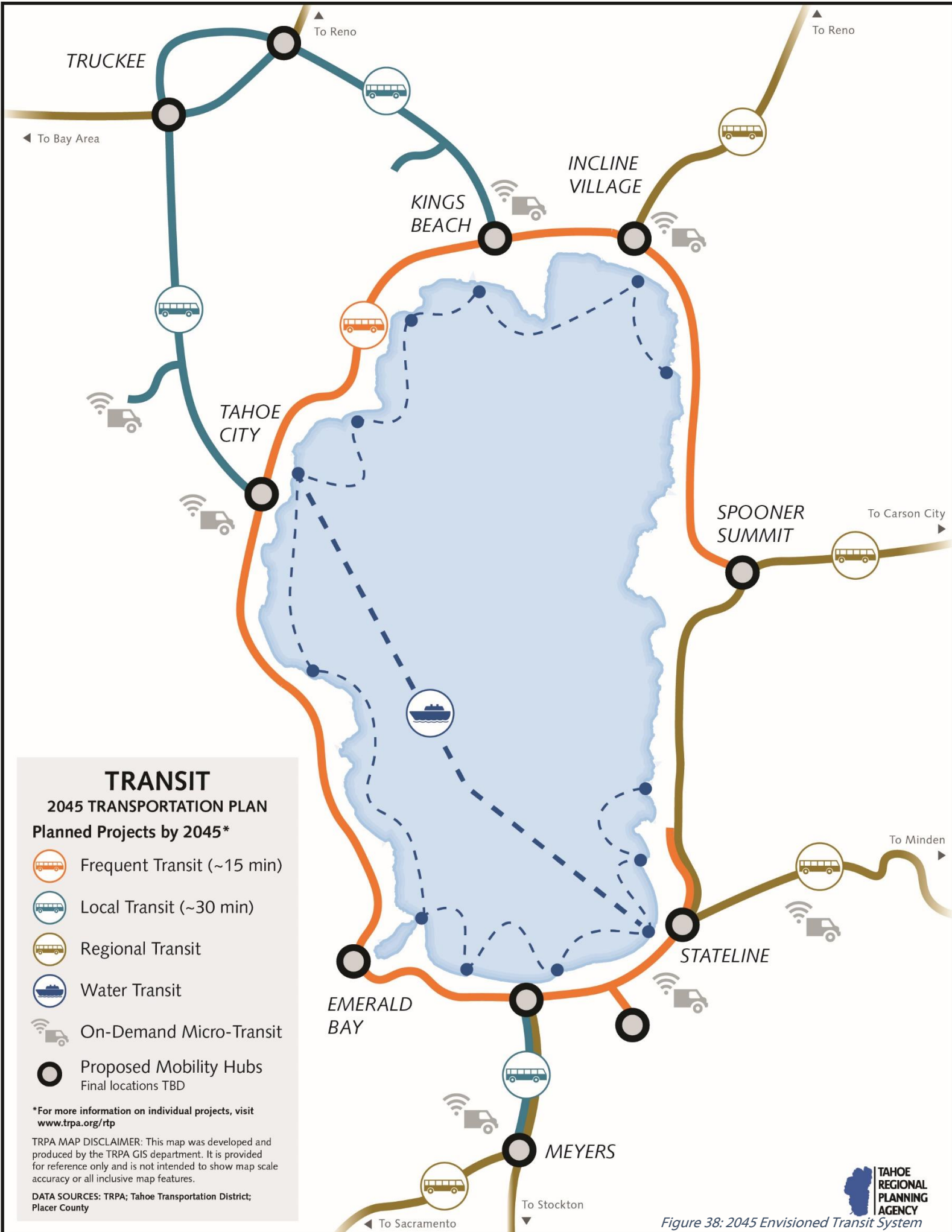
Choice riders might have access to a car or other means of personal transportation but choose to take transit if it is a better and more convenient option than driving. Frequent transit service to seasonal recreation hot spots, such as beaches, trailheads, and ski resorts, coupled with parking management programs that include paid parking, will help residents and visitors recreate without driving, and will attract choice riders, particularly where parking options are limited or costly.

Regional Riders (Visit Tahoe)

Regional riders are primarily visitors traveling to Tahoe from outside the region. Frequent transit options to and from neighboring cities like Sacramento, Stockton, Reno, and Carson City, combined with park-and-ride and intercept lots. Paired with existing water transit and regional services it will provide more options for commuters and visitors to travel to Tahoe and leave their cars behind.

² 2018 passenger survey report:
<https://monitoring.laketahoeinfo.org/FileResource>

e/DisplayResource/137d250d-1271-4071-b47c-349b84d92f65
³ dependent



Frequent and Local Services

By 2025, TTD will increase frequency on Highway 50 routes to every 30 minutes and extend hours to serve late-night riders. Private transit operators will provide service every 20-30 minutes along the SR-89 recreation corridor between Pope Beach and Emerald Bay for South Shore Riders. TART will continue increasing frequency to 30-minute headways on all core routes along SR-89, SR-267, and SR-28 for North Shore Riders.

By 2035, core service on Highway 50 on the South Shore and SR-28 on the North Shore will be provided every 15 minutes and 20 minutes, respectively. Existing seasonal service to popular recreation sites, like Emerald Bay and Sand Harbor, will become more frequent, and additional transit will

be added to ski resorts, Spooner Summit, and Zephyr Cove Resort.

Express bus routes and water taxis will provide additional travel options to Emerald Bay from Tahoe City on the North Shore and Stateline, Nevada on the South Shore, and local service will expand to Meyers.

By 2045, the envisioned transit system will be entirely built with frequent service operating every 15-minutes and local service in place to major hubs and town centers. On the North Shore, service between North Tahoe and Truckee along SR-89 and SR-267 will be offered every 30 minutes or less. On the South Shore, service to Meyers and the top of Kingsbury Grade will be offered every 30 minutes.

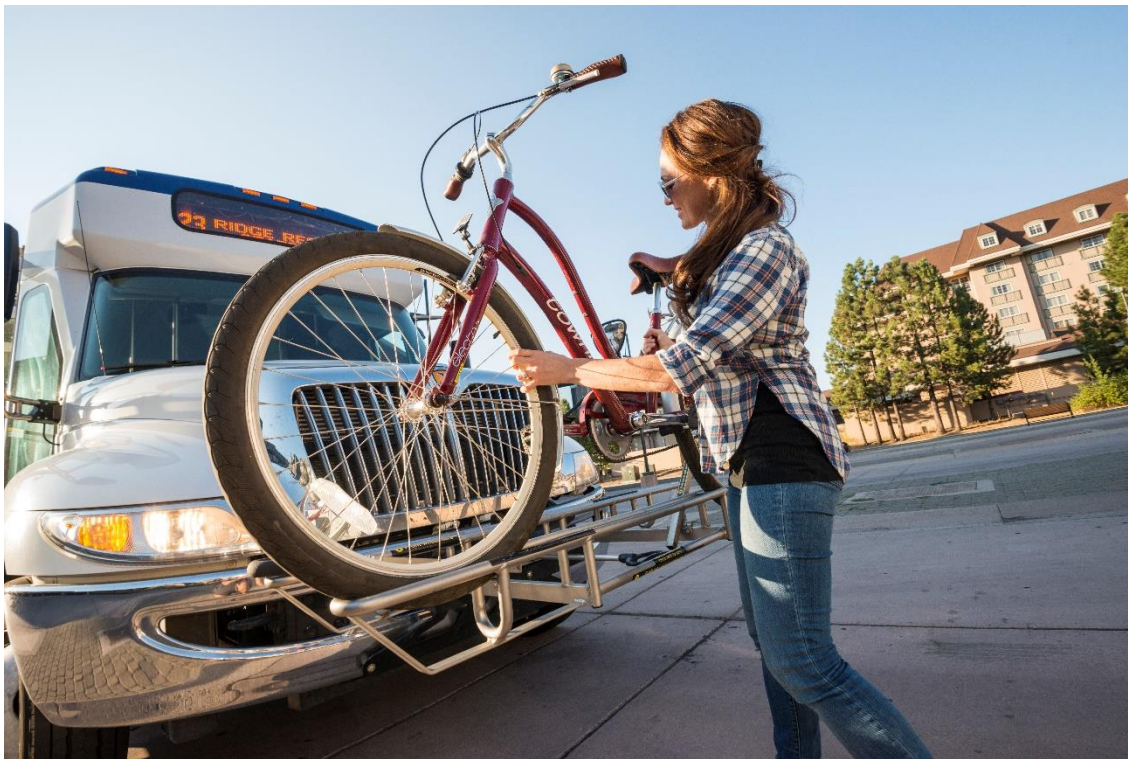


Figure 39: Multi-Modal Transit Credit: Rachid, Aurora Novus

Community Services

In 2020, the TRPA Governing Board approved plans for the 6,000-person Tahoe South Events Center in the core of Stateline, Nevada. The Events Center will provide a combination of free fixed route and on-demand microtransit service to the center from Round Hill in Nevada to the Bijou neighborhood in South Lake Tahoe, beginning summer 2022. The service will expand from seasonal to year-round service over a six-year period. Add on areas could further expand service to South Lake Tahoe's Sierra Tract Neighborhood.

By 2025, evening microtransit service will operate on the North Shore throughout Incline Village and Crystal Bay, filling a critical transit gap to the area.

Policy Highlight

Policy 2.14: Support, where feasible, the implementation of on-demand, dynamically routed transit shuttles.

By 2035, free-to-the-user microtransit pilots will expand to Tahoe City and to the West Shore, Kings Beach, Tramway and Upper Kingsbury, and Meyers.

By 2045, every microtransit pilot in Tahoe will become permanent, year-round, and free.

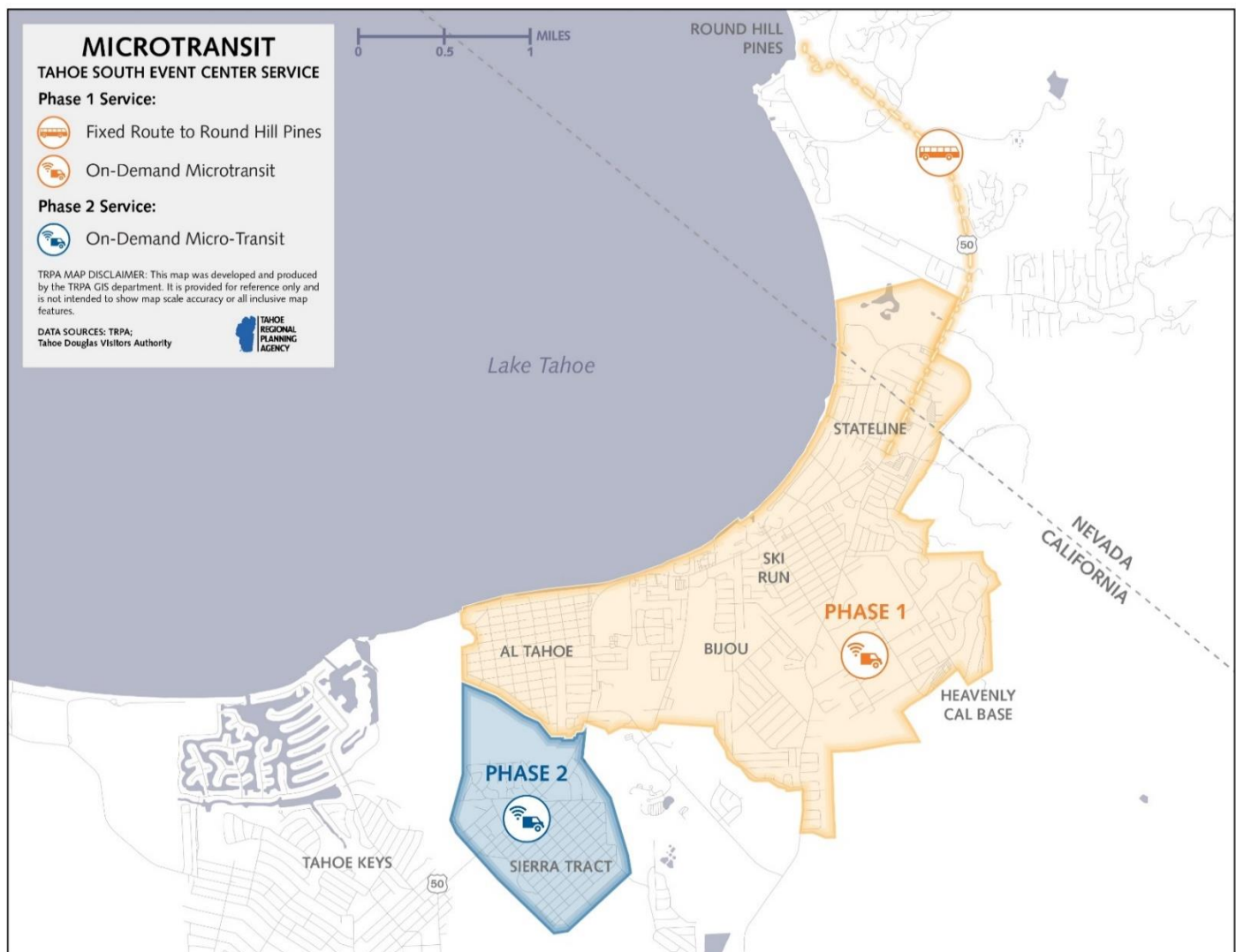


Figure 40: Map of South Tahoe Events Center Microtransit

Inter-Regional Services

By 2025, 24-hour in advance reservable transit service between Reno/Sparks and Tahoe's East Shore will be in place, adding to existing mega-regional routes.

By 2035, TTD will revive Route 21x, via Highway 50, and improve the 19x route, via Kingsbury Grade, to Carson City, and improve route 22 to Minden/Gardnerville, via Kingsbury Grade to serve commuters and day-visitors to Tahoe.

By 2045, hourly transit service from Sacramento, Stockton, Reno, and Carson City will be in place to meet the travel needs of recreationists who visit Tahoe for the day and visitors to the region from the larger cities and connecting airports for a modest fare. These services will be coupled with park-and-ride and intercept lots.

Specialized and ADA Services

By 2025, TTD and TART will ramp up paratransit services to meet increased rider demand and specialized medical transit services will return from both the North and South shores to California medical centers.

Capital Investments

Implementing the proposed transit services is critical to achieving the region's GHG goals and reducing reliance on the personal automobile. The existing public transit fleet is nearing the end of its useful life and will require significant capital investments to continue operating baseline services. Enhancing services will require additional investments to expand public and private transit fleets and make necessary improvements to transit facilities.

By 2030, TTD will construct a new maintenance and administration facility with space to store a large fleet of transit vehicles, charge electric vehicles, and make repairs to vehicles and other capital assets. The facility will also include on-site affordable housing for TTD employees.

Making Transit a More Attractive Option

Incentive strategies, such as real-time transit information, transit schedule coordination, free-to-the-user transit, and transit signal priority, combined with improved transit service, will shift Tahoe's culture from car-centric to pro-transit over the next 25 years.

As a result, more travelers in Tahoe will opt in for transit and out of driving.

By 2025, parking management strategies and transit enhancements will be implemented simultaneously to encourage transit use. For example, the Tahoe South Events Center microtransit service will operate in tandem with a new parking management program that includes paid parking.

By 2035, SR-89 and SR-267 on the North Shore will modify the existing roadway to convert existing space for bus only lanes during peak congestion periods to improve transit reliability and boost its competitiveness with the personal automobile.

By 2045, signals on Highway 50 on the South Shore will have technology that prioritizes buses to let them pass through before vehicles, ensuring transit is on-time more often and competitive to the personal automobile.

Tracking Transit Efficiency and Effectiveness

In 2018, TRPA adopted the Lake Tahoe Region Transit Monitoring Protocol to establish methods for collecting and analyzing public transit data. Data analysis helps inform transit planning and ensures the transit system is effective and operating efficiently.

See the Measuring & Managing for Success chapter and Appendix I for more information on the Transit Monitoring Protocol.

TRAILS

With limited capacity on roadways, transportation by foot, bicycle, or skateboard is essential for travel in Tahoe because some users may not have a car while others prefer other ways to enjoy the Tahoe landscape, trail access to beaches, and other popular recreation destinations.

Tahoe's active transportation network is a robust system of shared-use paths, sidewalks, bicycle lanes, pedestrian crossings, and ADA facilities that accommodates newer modes of active transport, such as e-scooters and e-bikes.

Local jurisdictions have invested in safe, year-round maintenance by sweeping paths in summer and plowing them in the winters.

The network links people to critical community resources and recreation and so

must be accessible and serve the needs of all users and their varying levels of comfort traveling by foot.

The network links people to critical community resources and recreation and so must be accessible and serve the needs of all users and their varying levels of comfort traveling by foot or bike, including the region's Priority Communities comprised of the elderly, individuals with a disability, and those without access to a car.

Between 2018 and 2019, bike paths and sidewalks at Tahoe that have monitoring stations recorded a 15 percent increase in summertime use. This increase speaks to the importance of constructing and maintaining paths and to continued investments in Tahoe's active transportation network.

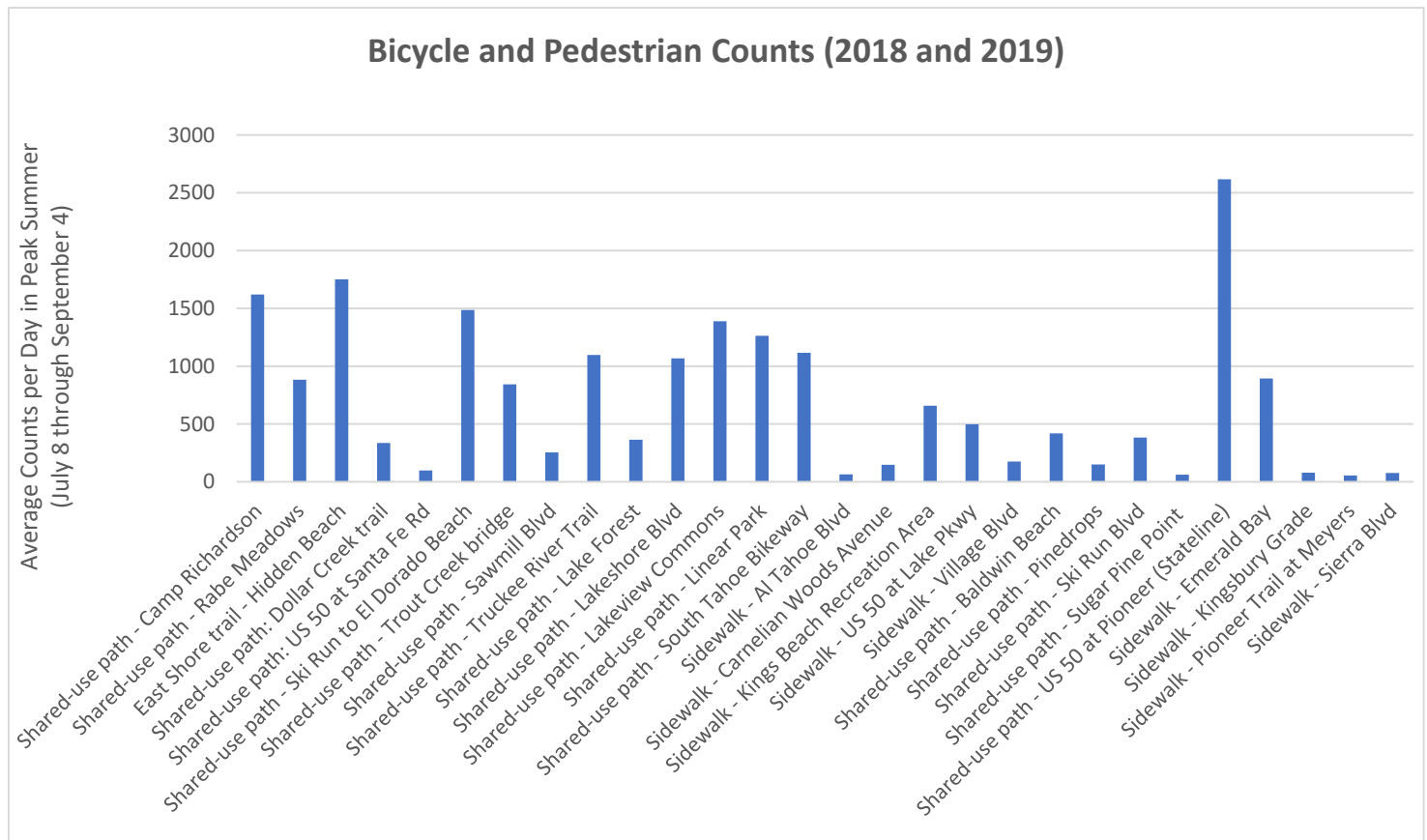


Figure 41: Bicycle and Pedestrian Counts by Location (2018 and 2019)

Trails Goals and Policies

Goals

A well-connected active transportation network of shared-use paths, sidewalks, bike lanes, complete streets, pedestrian crossings, and other facilities that conveniently and safely connect all travelers to work, home, school, town centers, and recreation sites by foot or bike year-round. When implemented, bicycling and walking will help protect Lake Tahoe's environment.

Policies



Trails policies ensure active transportation priorities are regularly updated and projects are included in regional plans, including the Active Transportation Plan. Projects emphasize safety planning for intersections and high conflict points, give priority to Safe Routes to School improvements, year-round maintenance, and support newer active transportation modes, such as low speed electric scooters and bikes.

Policy Highlight

Policy 2.12: Develop and maintain an Active Transportation Plan as part of the regional transportation plan. Include policies, a project list of existing and proposed bicycle and pedestrian facilities, and strategies for implementation in the Active Transportation Plan.

Supporting Plans

Trails is shaped by projects and programs identified in supporting plans, including Safe Routes to School plans adopted by school districts in Tahoe and the 2016 Active Transportation Plan, which plans for a network of sidewalks, bike lanes, shared-use paths, pedestrian crossings, and traffic calming (such as roundabouts) to provide connectivity, improve safety, and advance project implementation. The ATP will be updated in 2021 and will include a new focus on natural surface trails as a means of transportation and sustainable recreation.

Shared Mobility

Bike and scooter-share companies, such as Lime, have expanded operations to cities across the world and over the last four years operated in South Lake Tahoe. Since launching in 2017, Lime bikes and scooters have been used to make over 430,000 trips in South Lake Tahoe. Ensuring the active transportation network is suitable for emerging modes is a key objective of the plan.



Figure 42: Lime Scooters in South Lake Tahoe

Existing Trails Network

State, local, and regional agencies, such as departments of transportation, local jurisdictions, public utility districts, school districts, and transportation districts, build and maintain the active transportation network of roughly 60 miles of shared-use paths, 46 miles of bicycle lanes, 10 miles of bicycle routes, 25 miles of sidewalks, and 17 enhanced pedestrian crossings. Partners work together to ensure consistency in design standards, and to coordinate maintenance, such as snow removal procedures.

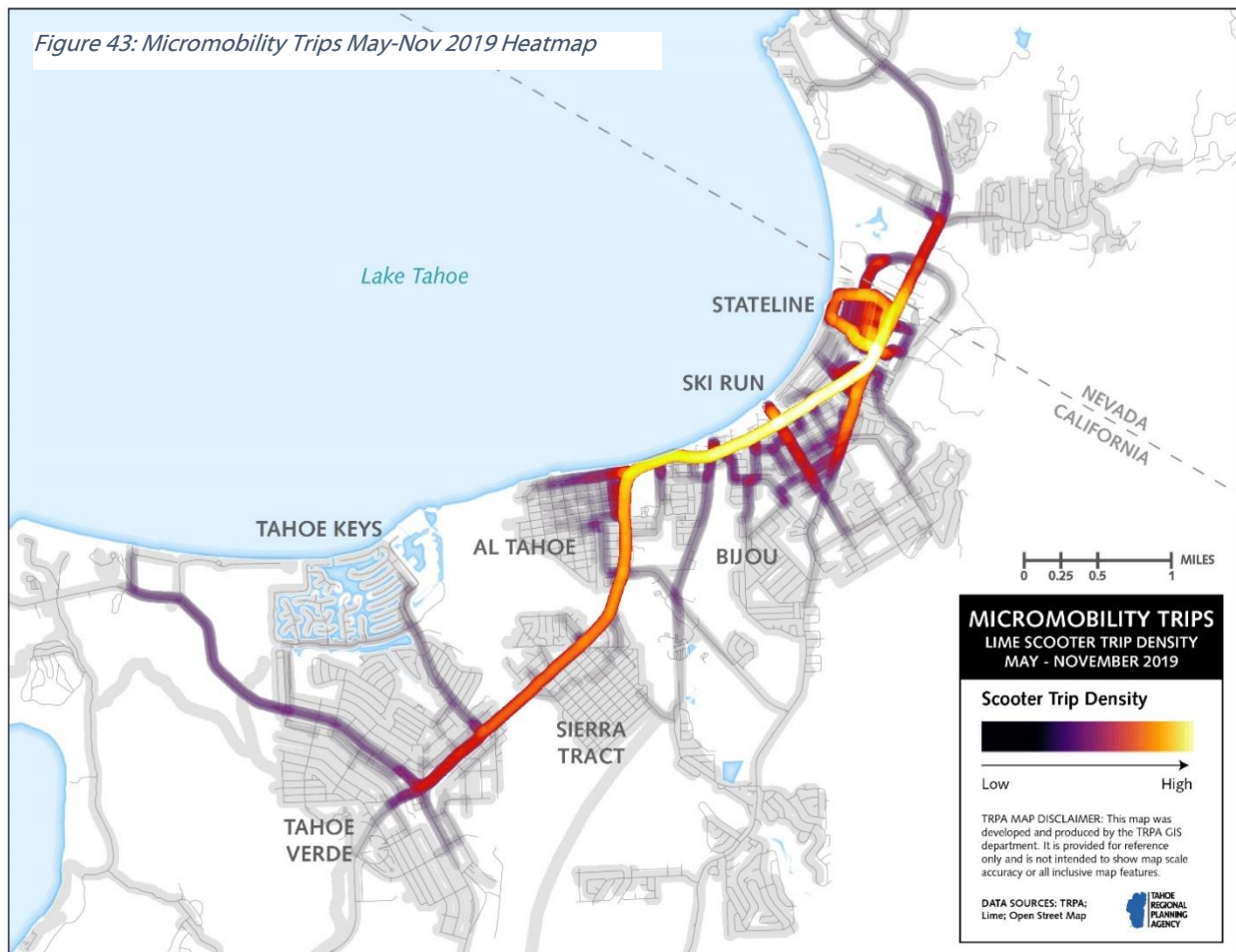
Pathway Partnership

The Pathway Partnership is a dedicated group of government agencies, nonprofits, and advocacy representatives who work together to build partnerships, leverage funding opportunities, align messaging and policies, and share best practices to achieve regional transportation goals. The Pathway Partnership is working to develop education messaging for the region with a focus on path etiquette and e-bike usage. As e-bikes and e-scooters grow in popularity, the Pathway Partnership seeks to provide guidance toward developing a unified regional policy on e-bike and e-scooter usage on paths.

Year-Round Access

Local jurisdictions remove snow on 32 miles of shared-use paths throughout the winter. These paths see an average of 55,160 users per month when there is snow on the ground, demonstrating the importance of year-round maintenance to keep paths cleared for use.

Figure 43: Micromobility Trips May-Nov 2019 Heatmap





Shared-Use Paths (Class I)



On-Street Bikeway (Class II)



Separated Bikeway (Class IV)



Signed Shared Roadway (Class III)



Signed Shared Roadway with Pavement Markings (Class III)

Figure 44: Types of Pedestrian and Bicycle Facilities

Policy Highlight

Policy 6.1: Preserve the condition of sidewalks and bicycle facilities and maintain them, where feasible, for year-round use.

Off-Street Infrastructure: Separated Paths and Sidewalks

Separated bike paths and sidewalks provide safe, off-street infrastructure for pedestrians and bicyclists to travel. There are presently 60 miles of separated (Class I) shared-use paths in the Lake Tahoe Region and 25 miles of sidewalks.

In the last four years partners have planned, designed, and constructed critical paths and sidewalks providing safer and essential travel options, including along U.S. 50 in South Lake Tahoe, one of the most traveled corridors in the region. Four major sections of the Tahoe Trail around the lake have been constructed including the El Dorado Beach to Ski Run Boulevard segment, the Dollar Creek segment, the Tahoma to Meeks Bay segment, and the Incline to Sand Harbor segment. Other sections of the Tahoe Trail are undergoing planning and design. These include the Sand Harbor to Spooner Summit segment, the North Tahoe Regional Trail, and the proposed path around Emerald Bay.

On-Street Infrastructure: Bike Lanes and Bike Routes

Bicyclists who are comfortable sharing the roadway with vehicles often take the most direct route by using on-street bike lanes and bike routes. The state highway system in Tahoe has dedicated bike lanes, where space allows. In some locations, such as the ascent to Emerald Bay or along the East Shore of U.S. Highway 50, bicyclists may need to use the full vehicle lane for safety because shoulder space and bike lanes are non-existent. On local, low-volume and low-speed roads, bike routes help keep the on- and off-street systems connected. Examples include Eloise Avenue in the City of South Lake Tahoe and Sequoia Avenue in Sunnyside on the West Shore.

In 2019, the City of South Lake Tahoe created a new bicycle route along Venice Dr. and added bike lanes to Sierra Blvd as part of the complete streets project. Each of these

additions help direct and connect bicyclists to the network of separated paths.

Connecting Off-Street to On-Street: Intersection Improvements

Accessing destinations on foot or bike can be severely hindered by the inability to safely cross the street. Enhancing safety at intersections and bike crossings, especially near schools, is a top priority for the region with partners installing safer crossings at several intersections over the last four years.

In 2019, Lodi Avenue at Highway 50 in South Lake Tahoe was upgraded with a signal and four-way pedestrian crossings. On the North Shore, the U.S. Federal Highways Administrations, Placer County, and the Tahoe Transportation District completed phase one of the Tahoe City Community Revitalization Project which installed two roundabouts and new bridge over the Truckee River. Phase two will build a final roundabout at the Tahoe City Wye intersection and improve connectivity, traffic flow, and pedestrian safety through the area.



Figure 45: Tahoe City Roundabout Credit: Tahoe Daily Tribune

Proposed Trails Network

The regional transportation plan projects will close connectivity gaps and increase safety on the existing active transportation network and provide all users more of the facilities they need to recreate and travel to their destinations.

Off-Street Infrastructure: Separated Paths and Sidewalks

The plan proposes 83 additional miles of Class I bike paths plus bike routes and additional sidewalks through Safe Routes to Schools improvements near each of the region's public schools and complete streets projects in local neighborhoods.

By 2025, two sections of the South Tahoe Greenway will be completed to connect two neighborhoods, Sierra Tract and Bijou, through Bijou Meadow; and the second major segment of the Tahoe Trail on the North Shore will connect the Dollar Creek path to the North Tahoe Regional Park, closing a four-mile gap near Kings Beach and Tahoe Vista.

By 2035, the next eight-miles of the East Shore Tahoe Trail, from Sand Harbor State Park to Spooner Summit, will be constructed; key segments of the West Shore Tahoe Trail will be constructed closing a considerable gap between Spring Creek Rd and Meeks Bay; the preferred Class I path alignment from the SR 89 Trail Feasibility study will be advanced to construction; and several more bike paths and sidewalks will be constructed around the region, including the final sections of the South Tahoe Greenway, connecting Meyers to Van Sickle Bi-State Park.

By 2045, the Tahoe Trail will be completed, providing a safe, separated, and fully connected bicycle and pedestrian route around the Lake, marking a significant milestone for regional partners.

On-Street Infrastructure: Bike Lanes and Bike Routes

Regional partners are working to add bike lanes and bicycle routes around the region on residential streets and highways through roadway reconstruction and off-street path construction projects which will provide better connections for bicyclists traveling between shared-use paths.

By 2025, El Dorado County will add new bicycle routes on East and West San Bernardino Avenue to connect to the Upper Truckee River path in Meyers to designated bicycle routes between North Upper Truckee and the Lake Tahoe Environmental Magnet School in Meyers.

By 2035, bike lanes will be in place along the new Main Street in the South Lake Tahoe - Stateline corridor and Washoe County will significantly expand their on-street bike infrastructure with new bike lanes and bike routes in Incline Village.

By 2045, bike lanes and routes will connect many neighborhoods to the Tahoe Trail around the lake, to schools, and to commercial centers.



Figure 46: 2045 Envisioned Trail System

TRAILS

2045 TRANSPORTATION PLAN

 Existing Bike Paths

Planned Projects by 2045*

 Proposed Bike Paths

 Proposed Mobility Hubs
Final locations TBD

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

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DATA SOURCES: TRPA

Connecting Off-Street to On-Street: Intersection Improvements

In February 2019, TRPA adopted the Lake Tahoe Region Safety Strategy to identify opportunities to reduce the likelihood and risk of crashes on Tahoe roads. Adopted strategies include high visibility markings, pedestrian refuge islands, pedestrian signals, pedestrian scale lighting, vehicle speed feedback signs, and enhanced marked crosswalks at identified intersections in the region.

Policy Highlight

Policy 3.6: Design projects to maximize visibility at vehicular, bicycle, and pedestrian conflict points. Consider increased safety signage, site distance, and other design features, as appropriate.

By 2025, two new roundabouts at SR 28 and SR 267 in Kings Beach, and at Pioneer Trail and Highway 50 in Meyers; a new traffic signal at Highway 50 and Warrior Way in Zephyr Cove; and intersection enhancements at Kahle Drive and Highway 50 in Stateline will provide much needed intersection safety improvements.

By 2035, the Cal Trans US 50 Corridor Collision Reduction project, including crossing improvements and green bike lanes.

By 2045, several more intersections will be enhanced or reconstructed to improve safety for bicyclists, pedestrians, and vehicles.

Making Trails a More Attractive Option

In addition to infrastructure improvements, incentive strategies will encourage more travelers to bike and walk. Commute Tahoe and the Lake Tahoe Bike Challenge motivate Everyday Tahoe travelers to bike and walk more often by working with employers to install end-of-trip facilities for bike commuters, offering incentives for participants, and celebrating those who do switch some of their trips. Safe Routes to School programs, like bicycle safety rodeos and bike to school weeks, will also encourage more school kids to bike and walk to school. Local partners are actively working to expand Safe Routes to School programs to North Lake Tahoe schools.

Transit and parking management strategies also incentivize people to bike and walk more often. When buses have bike racks riders can make longer trips by combining the two. Paid car parking and safe bike parking at recreation sites and commercial centers provide economic and convenience incentives to walk or bike rather than drive. The Lake Tahoe Bicycle Coalition has worked with local businesses and employers over the last few years to install hundreds of bike racks in town centers, at recreation sites, near schools, and at local businesses to provide safe parking for bicyclists.

Figure 47: Lake Tahoe Boulevard to Sawmill Bike Path



Tracking Trails Efficiency and Effectiveness

In 2015, TRPA adopted the Lake Tahoe Region Bicycle and Pedestrian Monitoring Protocol to consistently track changes in bicycle and pedestrian volumes through the region's 10 permanent and 36 temporary bicycle and pedestrian counters on bike paths and sidewalks around the region.

Count data is collected monthly and uploaded to www.monitoring.laketahoeinfo.org/BikePed.

See the Measuring & Managing for Success chapter and Appendix I for more information about the Bicycle and Pedestrian Monitoring Protocol.

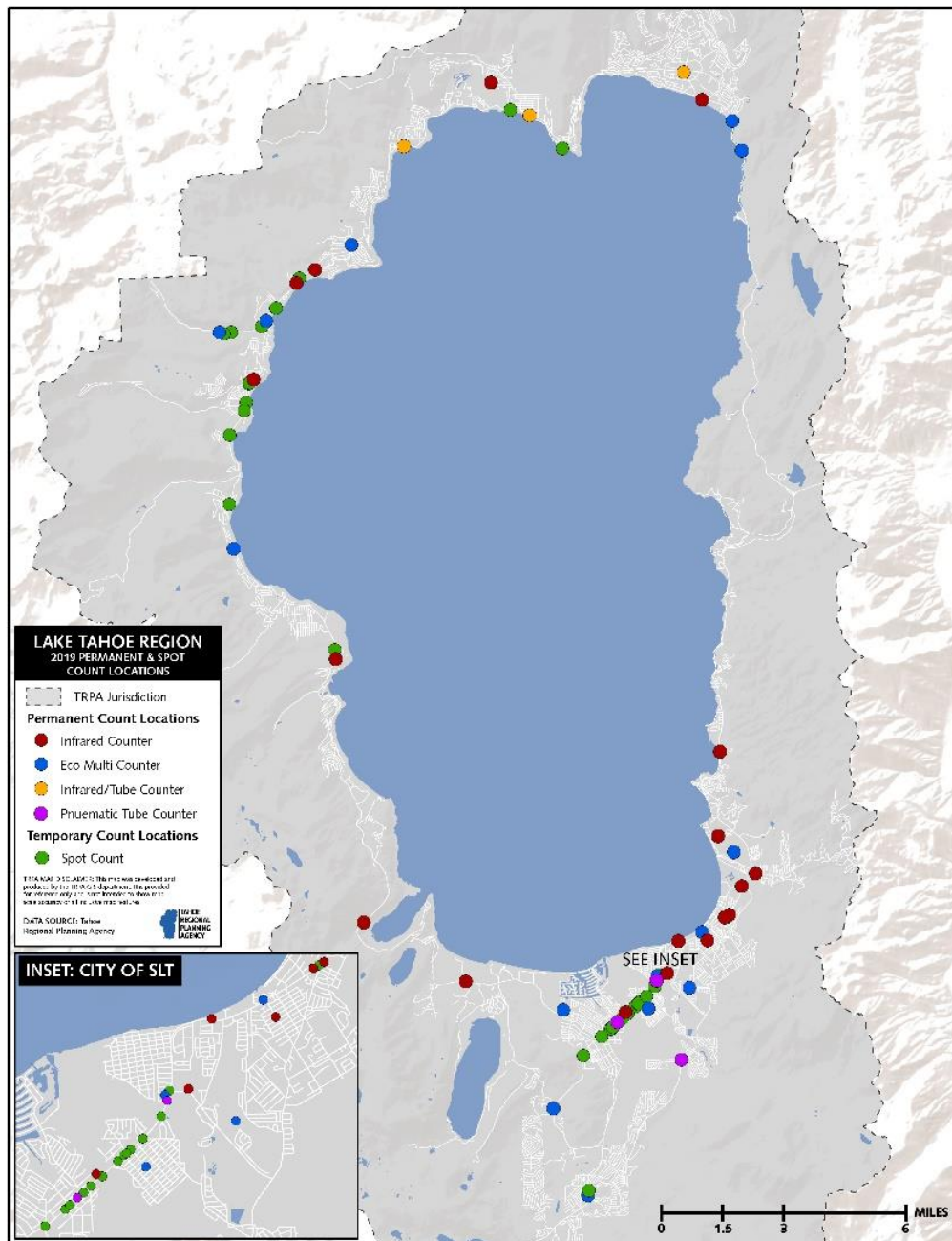


Figure 48: Map of Bicycle and Pedestrian Counters

TECHNOLOGY

Transportation technologies are rapidly advancing, and the RTP leverages these changes to better connect people with information about the many ways to travel around Tahoe, to provide planners with new insights into the number of people visiting the region, to ensure zero emission vehicle infrastructure is widespread, and that the needed fiber optic infrastructure is in place to support these advances.

Technology Goals and Policies

Goals

Technology will catalyze achievement of Tahoe's mobility and environmental goals by connecting people to real-time travel information, transportation options, and alternative fueling stations, self-driving cars, and other advances in transportation.

Policies



Existing and revised technology policies facilitate improvements in communications systems, intersection functionality, electric vehicle use, and emerging mobility services.

Policy Highlight

Policy 1.5: Facilitate and promote the use of zero emission vehicle transit, fleet, and personal vehicles through implementation of the Tahoe-Truckee Plug-in Electric Vehicle Readiness Plan, education, incentives, funding, and permit streamlining.

Policies support data collection and analysis and data sharing between public jurisdictions and private transportation operators to support collaboration and to promote innovation.

Supporting Plans

Technology is informed by the 2015 Tahoe Basin Intelligent Transportation Systems Strategic Plan, which advances implementation of transportation technology to address the needs and challenges around tourism, adverse weather and road conditions, safety, and environmental concerns, and the 2017 Tahoe Truckee Plug-In Electric Vehicle Readiness Plan, which outlines infrastructure, programs, and incentives that support widespread adoption and use of zero-emission vehicles, consistent with goals by both California and Nevada.

Existing Technology Systems

The Tahoe Region implements technology improvements to benefit all users and to help facilitate the mission of public agencies in three ways: the user experience, transportation infrastructure, and coordination and communication.

Technology for the User

Real-time transit information allows riders to use a smartphone to check when a bus is arriving, see its location on a map, and receive convenient notifications when it is time to leave home to catch the bus.

Policy Highlight

Policy 4.2: Enable growth of shared and on-demand shared ride mobility services (i.e., ride-, car-, and bike-sharing, e-hailing, etc.).

California and Nevada departments of transportation provide live video feeds of major roadways in and to Tahoe so that drivers have all of the information they need to plan ahead to avoid construction delays or winter snow conditions.

New mobility services, such as e-scooters and microtransit, are reservable through app-

based technology and use vehicle and smart phone geo-location to link users to the scooter or shuttle.

Technology for Infrastructure

Recent improvements in infrastructure technology at Tahoe include automatic vehicle location technology for transit buses, changeable message signs along highways, and the installation of electric vehicle charging stations around the lake. Better transit scheduling and coordination is now possible with new software systems that provide transit operators information on bus operations to deliver services more efficiently.



Figure 49: Real-Time Changeable Message Sign

Real-time changeable message signs along key travel corridors in the region, such as U.S. 50 in South Lake Tahoe, relay road condition and travel time information to help drivers make more informed decisions and keep the system moving safely and efficiently.

The region is rapidly deploying public charging infrastructure and converting public transportation fleets to zero-emission vehicles. Since development of the Tahoe-Truckee PEV Plan, over 65 public charging stations have been installed. The North Shore and South Shore transit operators have purchased electric buses and are adding charging stations at mobility hubs around the region. Lake Tahoe Unified School District was also awarded grant funding to begin converting its school bus fleet to electric buses.

In 2018 the Tahoe Prosperity Center, with funding from the U.S. Economic Development Administration, completed a broadband feasibility study. The study noted how important improvements in broadband services are for the environment (telecommuting reduces VMT and GHG emissions) and public safety (first responders can coordinate faster during catastrophic events). Broadband also supports real-time transit, travel time, and parking availability information sharing. The study promotes dig once policies to lower the cost of broadband deployment by providing internet providers access to public right of way. The region furthers this by the mandatory installation of conduit for fiber-optic cable during road construction (or similar excavation projects), and by allowing broadband deployments to be installed during construction projects.

Policy Highlight

Policy 6.4: Make “dig once” the basin-wide standard, requiring public and private roadway projects to include the installation of conduit to support community needs. (e.g.: fiber optic, broadband, lighting, etc.).

This infrastructure helps to prepare for emerging technologies, such as autonomous vehicles. Autonomous vehicles (AVs) use information from radar, laser, Global Positioning Systems, odometry, and computer vision to detect their surroundings. One of the big challenges to AV use in Tahoe is how they perform in inclement weather, such as rain and snow. While AVs have not been tested in Tahoe yet, Nevada has adopted policies and focused economic development towards the advancement of AVs in the state. States oversee testing each have different approaches, and so TRPA will coordinate with each to advance AVs in the region.

See Appendix D for more information and recommendations on autonomous transit.

Technology for Coordination and Communication

Data sourced from smart phones and vehicle navigation devices provide TRPA new data sources to analyze travel and season or annual fluctuations. This data helps improve and validate the forecasts of the

TRPA Travel Demand Model, and provides a better understanding of Everyday, Discover, and Visit Tahoe travel patterns.

Technology plays an important role in tracking and sharing emergency management information to the region's

partners and public. The Department of Homeland Security, and state and local emergency response convened to study the need for and the feasibility of a coordinated dispatch system for Tahoe. Today, the group is assessing possible locations to house this system. In addition to providing an important safety benefit to the region, this system will also create a coordinated transportation management center that will support congestion management of the region's roadways. The center would also be useful during emergency evacuation events, such as wildfires.



Figure 50: Electric Vehicle Charging Station

Proposed Technology Improvements

Technology projects proposed in the RTP will improve real-time travel information, optimize traffic signals, increase data collection and transparency, support expansion of zero emission vehicles in public and private fleets, and optimize transit services. Additional technological improvements, such as message feedback signs, a region-wide transportation trip planning tool, and informational kiosks at activity centers will be possible only with new sources of funding. See appendices B and C for more information.

Policy Highlight

Policy 4.15: Establish a uniform method of data collection and forecasting for resident and visitor travel behavior and demographics.

Technology for the User

By 2025, partners will invest in a regional trip planning tool that promotes transit, biking, and walking and helps manage visitation to major recreation destinations. The trip planning tool will be incorporated into TRPA's Linking Tahoe webpage to provide one site for trip planning information, including managed parking at the East Shore Trail.

By 2035, more highway message signs will be in place on major roadways in and to Tahoe, providing real time information on travel time and road conditions.

By 2045, app-based on-demand microtransit services will fill gaps in the transit system, connecting more riders to more frequent transit services directly from their front doors.

Technology for Infrastructure

As zero emission vehicle technologies advance, local partners and private businesses will continue to expand the availability of charging and fueling infrastructure. Tahoe will also serve as a testing ground for emerging electric and hydrogen powered watercraft technology.

By 2025, Liberty Utilities will install up to nine DCFC direct current fast charging stations across the Region, and electric bicycles and scooter charging stations will be in place to better support these rapidly growing modes.

By 2035, public transit vehicles throughout the region will have automatic passenger counters to capture the number of people getting on and off the bus by stop to improve analysis of ridership trends and to measure transit success.

By 2045, with additional funding, the planned cross-lake Ferry will be operating, possibly on hydrogen fuel.



Figure 51: Technology Transpiration System in 2045

TECHNOLOGY

2045 TRANSPORTATION PLAN

Planned Projects by 2045*

-  Transit Improvements
-  Traffic Monitoring
-  Smartphone App
-  Parking Management
-  Proposed Mobility Hubs
Final locations TBD

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

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DATA SOURCES: TRPA; Tahoe Transportation District; Placer County

Technology Coordination

By 2025, Caltrans will coordinate traffic signals along U.S. 50 in South Lake Tahoe and incorporate transit, pedestrian, and bicycle detection and prioritization. These improvements will prioritize the most vulnerable roadway users, keep buses running on time, improve safety for all travelers, and aid in congestion management.

By 2035, Placer County, California will implement transit signal prioritization at intersections along State routes 89 and 267 in the Resort Triangle to provide better travel options during congested travel times; and the Nevada Department of Transportation will invest in AV and vehicle to everything communication infrastructure along its state routes in the region.

By 2045, the Department of Homeland Security, the states, and local jurisdictions will fund and collaboratively operate an Intelligent Mobile Observation System. The system will remotely monitor roadway conditions, work zone activities, and operate integrated dynamic messaging signs, Highway Advisory Radio (HAR) messages, and roadway gates and barriers using wireless communications.

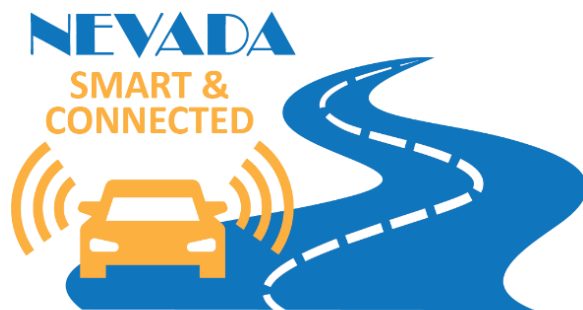


Figure 52: Nevada Smart & Connected Initiative

Making Travel Options More Attractive with Technology

Transportation technology allows for everyone traveling — whether for a day visit, the weekend, or simply trying to get to work or home — to access real-time information that can make travel safer and more efficient. Providing information about the availability of parking and the many travel options to popular town centers and recreation hot spots help people make better choices that also reduce congestion on the roadways and are better for the environment.

Policy Highlight

Policy 4.17: Establish regional and inter-regional cooperation and cost-sharing to obtain a uniform method of transportation data collection and sharing.

Tracking Technology Efficiency and Efficacy

To ensure Technology implementation is effective, TRPA will track the number of alternative fuel charging stations, number of parking lots with real-time capacity and pricing information, changeable message signs, and commitments to dig once policies.

COMMUNITIES

Communities is where the elements of transit, trails, and technology combine to provide safe, secure, and efficient transportation and sustainable communities.

Creating vibrant communities requires collaboration with local, state, and federal jurisdictions, the Washoe Tribe of Nevada and California, transit providers, and partners outside of the basin, such as neighboring metropolitan planning organizations.

Through corridor planning, land use and transportation are closely linked, and the region's economic vitality and environmental sustainability are supported by better connecting people to their travel destinations. The connections link workers to homes and jobs, freight and customers to businesses, and people — residents and visitors alike — to recreation sites and town centers.

Policy Highlight

Policy 1.1: Support mixed-use, transit-oriented development and community revitalization projects that encourage walking, bicycling, and easy access to existing and planned transit stops in town centers.

Communities ensures affordable and achievable housing connects residents to where they need and want to go through a connected transportation system that is well-maintained and operated, and helps communities become more resilient in the face of climate change. This approach elevates the transportation needs of Priority Communities, including those living below the federal poverty line.



Figure 53: DOMUS Affordable Housing in Kings Beach

Policy Highlight

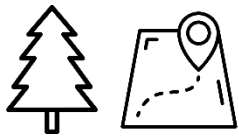
Policy 2.8: Ensure all transportation projects, programs, and policies meet the transportation needs and minimize negative impacts for all communities, particularly disadvantaged communities and people with special needs.

Communities Goals & Policies

Goals

A seamless transportation system that provides dynamic and safe travel to all users, agency operators, freight delivery (truck and plane), and emergency response.

Policies



Vibrant, healthy communities are achieved through multiple policies. Some policies focus on creating or strengthening the links between land use and transportation through mixed-use, transit-oriented development, as well as empowering developers to mitigate project impacts to the transportation system and advancing strategies to manage parking.

Policy Highlight

Policy 1.4: Develop and implement project impact analysis, mitigation strategies, and fee programs to reduce per capita Vehicle Miles Travelled and auto trips.

Other policies seek to address traffic congestion through travel demand management programs that encourage more people to walk, bike, or use transit. Additional policies ensure that roadway and transit projects in the region are built for all travel modes and not designed to meet highway standards, which balances road and intersection performance with safety benefits for pedestrians and bicyclists.

To improve safety and security, policies call for traffic calming and safety considerations in project designs, safety awareness campaigns, wayfinding measures so travelers can move around confidently, and ensuring that emergency response measures are in place and public safety and transportation agencies are coordinating.

Policy Highlight

Policy 4.8: Invest resources in marketing and outreach campaigns to promote the use of non-auto travel options.

Policies seek to ensure that transportation projects and programs benefit the most vulnerable people in our communities, benefit the environment by helping achieve and maintain the region's environmental thresholds, preserve and maintain roadway pavement conditions, and accelerate transportation and community improvements through collaboration and the development of a regional revenue source.

Policy Highlight

Policy 6.3: Maintain and preserve pavement condition to a level that supports the safety of the traveling public and protects water quality.

Supporting Plans

The Communities focus area is supported by multiple plans that coalesce regional and local land use and transportation policies and strategies at a community scale, including area plans (2018 Meyers Area Plan, 2017 Placer County Tahoe Basin Area Plan, 2015 Tahoe Valley Area Plan, 2013 Tourist Core Area Plan, and the 2013 South Shore Area Plan) and plans that provide broad community benefits, such as the 2017 Lake Tahoe Airport Master Plan, 2019 Lake Tahoe Region Safety Strategy, and 2019 Kahle Community Vision Plan.

Existing Communities Approach

Environmentally beneficial re-development projects help transform and connect local communities. TRPA and local jurisdictions review proposed projects and their impacts to the transportation system to determine if

they will significantly impact the region's vehicle miles traveled (VMT) threshold. Projects with a significant impact must include design and transportation improvements to offset the impacts. All projects, large and small, mitigate their impacts to transportation through the mobility mitigation fees.

The North and South shore transportation management associations connect transportation and transit service providers with the business community in a collaborative, solution-oriented forum. This helps forge public-private solutions to the region's transportation challenges.

TRPA advances land use and transportation connections through regional housing plans and with incentivizes for affordable, moderate, and achievable housing in town centers and near transit.

Corridor planning connects transportation and land use through collaborations that accelerate implementation of transportation, infrastructure, and recreation projects.

Serving Everyone

TRPA seeks out and considers the needs of Priority Zone Communities, such as low-income, disadvantaged, and minority households. The plan works to address the challenges they face, including accessing affordable housing, education, employment, services, and recreation access.

Transportation is critical to economic vitality and quality of life

Land Use and Transportation

Integrating land use and transportation planning is powerful. It can reduce traffic congestion on the roads, reduce transportation's impacts to the environment, and maintain the quality of life for communities. The TRPA is unique among the nation's metropolitan planning organizations with its direct authority over land use and transportation regulations through the Lake Tahoe Bi-State Compact. This connection is forged through the Regional Plan, which prioritizes compact mixed-use development in town centers, and connected to the transportation system by the RTP.

To incentivize town center development, the Regional Plan provides up to six units of development for every one transferred from environmentally sensitive and remote areas not served by transportation to town centers. The Regional Plan also identifies the need to prioritize transit-oriented housing developments across the region.

These incentives are intended to gradually change the development footprint in the region to reduce impacts to the environment and the transportation system. Incentives for locating projects in town and regional centers are furthered through TRPA's project impact assessment, which recognizes development in these centers produces lower VMT than elsewhere in the region.



Figure 54: Transfer of Development Rights Transfer Ratio Map

TRANSFER RATIOS

TRANSFER OF RESIDENTIAL DEVELOPMENT RIGHTS

Transfer Ratios

(Sending : Receiving)

	1:1
	1:1.25
	1:1.5
	1:1.75
	1:2
	1:2.25
	1:2.5
	1:3

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DATA SOURCES: TRPA



0 1.25 2.5 5 MILES

Basemap: Esri, Airbus DS, USGS, NGA, NASA, CGIAR, N Robinson, NCEAS, NLS, OS, NMA, Geodatastyrelsen, Rijkswaterstaat, GSA, Geoland, FEMA, Intermap and the GIS user community

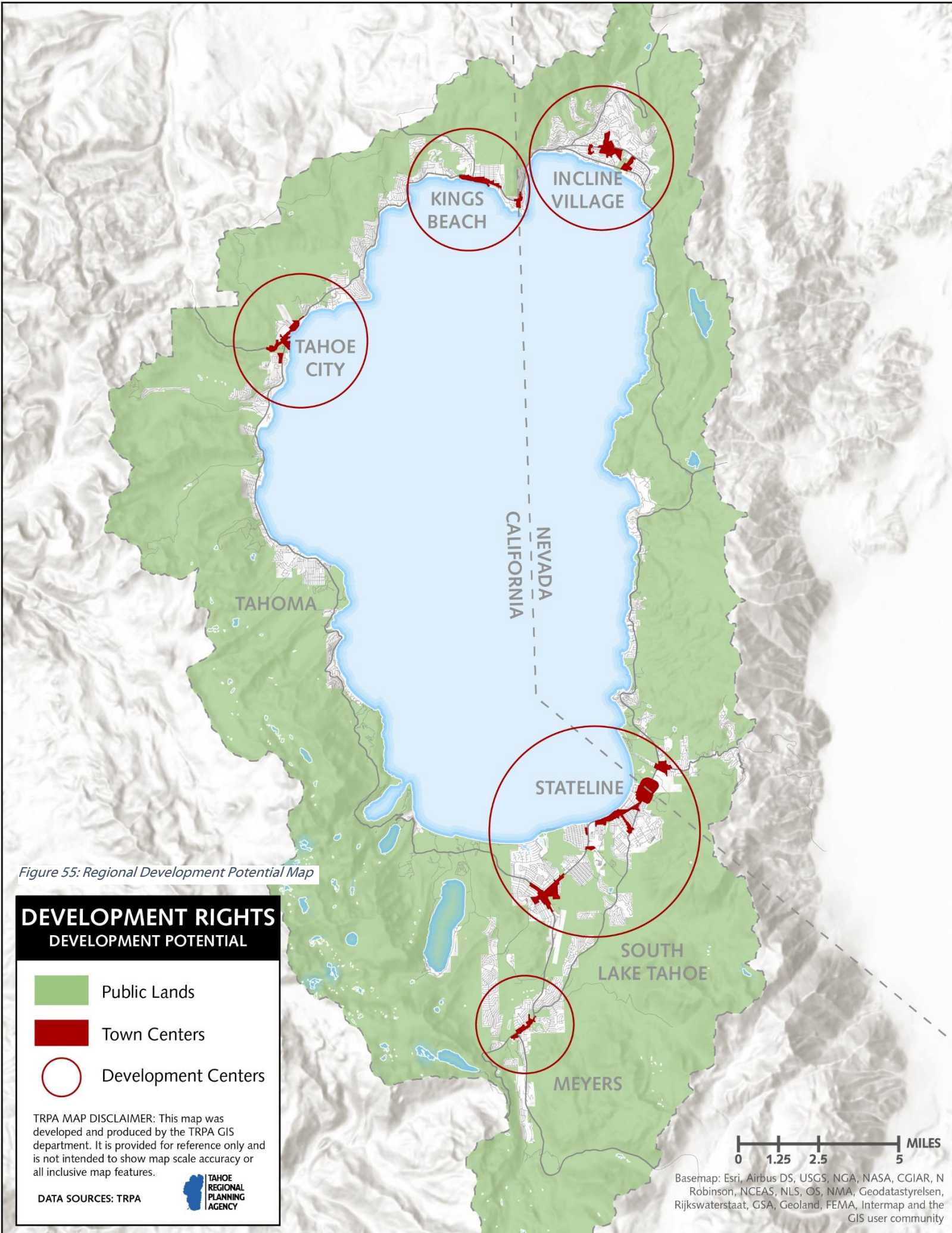


Figure 55: Regional Development Potential Map

DEVELOPMENT RIGHTS
DEVELOPMENT POTENTIAL

-  Public Lands
-  Town Centers
-  Development Centers

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DATA SOURCES: TRPA



0 1.25 2.5 5 MILES

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A Community System

Safety & Aviation

The 2019 Lake Tahoe Region Safety Strategy was developed in collaboration with transportation partner agencies and stakeholder organizations to collectively reduce crashes on Tahoe roadways. The report analyzed data and made recommendations to change how transportation projects are developed. The recommendations are incorporated into the plan.

Policy Highlight

Policy 3.4: Support emergency preparedness and response planning, including the development of regional evacuation plans.

Multiple agencies provide broad emergency response services in the Tahoe Region. The importance of emergency evacuation planning is clear and collaboration with multi-jurisdictional partners, including first responders, is needed. The South Lake Tahoe Airport is a crucial partner and vital transportation resource for public safety agencies, providing support for air ambulance and firefighting operations. The City of South Lake Tahoe, counties, state departments of transportation, public safety agencies, and local organizations, such as the Lake Tahoe Community College, all have incident command systems in place for rapid law enforcement and safety response.

At the state level, California has developed the Standardized Emergency Management System as the framework for procedures to be used in response to disasters by the state and all levels of government. Nevada has the Division of Emergency Management to assist and coordinate during large-scale emergency events. Each county and the City of South Lake Tahoe have an Operational Area Emergency Operations Plan.

Passenger air service to the Tahoe Region comes primarily from the Reno-Tahoe

International Airport, followed by Sacramento International Airport. The South Lake Tahoe Airport serves general aviation activities including emergency services, private flights, and air taxi operations. Based on marketing efforts of the South Lake Tahoe community and the forecasted growth of the aviation industry, general aviation operations at the Lake Tahoe Airport are projected to increase by 17.9 percent through 2023. The Tahoe-Truckee Airport is located just North of the Tahoe Basin and serves a high volume of private and charter jets in addition to general aviation activity. Part of the Tahoe-Truckee Airport service area extends into the Tahoe Basin, including Kings Beach.

The RTP continues to recognize the importance of the airport's role in providing critical emergency services in the region. TRPA will coordinate with the City of South Lake Tahoe to update its airport master plan.

Policy Highlight

Policy 1.7: Coordinate with the City of South Lake Tahoe to update and maintain an Airport Master Plan and limit aviation facilities within the Tahoe Region to existing facilities.

Asset Management and System Preservation

There are 110 miles of state and federal highways in the Tahoe Region. They form the backbone of the transportation system by connecting town centers, serving as main streets in some communities, and serving as entry and exit corridors for surrounding regions. These routes are managed by the state departments of transportation. Intersecting and expanding these regional roadways are 619 miles of local streets. Local streets vary in type, from urban arterials to rural county roads. Local jurisdictions are responsible for maintaining these streets.

Asset management is a critical part of maintaining and operating all roadways in a good and safe condition. Local jurisdictions and implementing agencies in the region

spend over 25 percent of their transportation funding on maintaining the local roadways. Maintenance includes striping, repaving, snow removal, street sweeping, and more. Placer County has been successful in implementing a benefit assessment district in Kings Beach to fund local roadway maintenance. The model may be expanded to other parts of the County and holds promise for the broader region. Ongoing maintenance of local roads is critical to reducing the amount of fine sediment and other pollutants that flow into Lake Tahoe via stormwater runoff.

Movement of Freight and Goods

The Tahoe Region is considered a final destination for goods. Most arrive by trucks on federal and state highways. The closest freight rail depot is in Truckee and is served by the Burlington Northern and Santa Fe Railway. Due to relatively low goods movement volume on the region's roadways, there are no projects planned to specifically address freight and goods movement in the plan. The current approach to freight planning recognizes most of the region's goods are delivered by truck. Projects that improve roadway access and mobility will also benefit trucks moving goods. For example, the complete streets approach to project design outlined in the plan includes accommodations for large vehicles to provide for the needs of transit, freight, and public safety vehicles.

New data from cell phones and geo-location navigation devices and forecasts from the updated TRPA travel demand model promise to provide improved understanding of freight and goods movement. That analysis will inform future transportation plans.

As the country's freight fleet is converted to zero emission vehicles, TRPA will continue to monitor the need for local alternative fueling infrastructure specifically for freight.

State & Local, Conservation and Historic Resources Consultation

TRPA analyzed the effects of the RTP/SCS on natural, cultural, and historic resources as required by the California Environmental Quality Act and TRPA pursuant to the requirements of Article VI of the TRPA Rules of Procedures and Chapter 3 of the TRPA Code of Ordinances. The Initial Study/Initial Environmental Checklist determined that there would be no significant impact to these resources provided mitigation measures are in place. TRPA notified the California Department of Fish and Wildlife and the Nevada Division of Environmental Protection to ensure measures to protect fish and wildlife species are adequate. For cultural resource protection, the California and Nevada state offices of Historic Preservation and the Washoe Tribe were consulted.

Interregional/Mega-Regional Planning

To realize the long-term vision of the plan, regional and mega-regional partnerships and collaboration are being developed to establish more and better travel options for every user. TRPA is working with these partners on strategies to expand passenger rail service to Truckee, expand and enhance park-and-ride and intercept lots located outside of the Tahoe Region, and plan for inter-regional transit service.

Proposed Communities Approach

Six components make up the Communities planning approach to transportation at Tahoe: compact mixed-use land use, complete streets, mobility hubs, operations and maintenance, meeting housing needs, and corridor planning.

Compact Mixed-Use Land Use

The Regional Plan prioritizes compact mixed-use land use in town centers that are connected by the regional transportation system. Incentives are in place to shift development from environmentally sensitive and remote areas in Tahoe to town centers that will be connected by the transit and trails projects discussed in those sections of the plan. The powerful combination of land-use and transportation will gradually change the region to reduce impacts development and transportation has to the environment. Affordable and attainable workforce housing that is connected to transit is a key component.

Complete Streets

Streets make up more than 80 percent of all public space in cities and have the potential to foster business activity, serve as a front yard for residents, and provide a safe place for people to travel, whether on foot, bicycle, car, or transit.

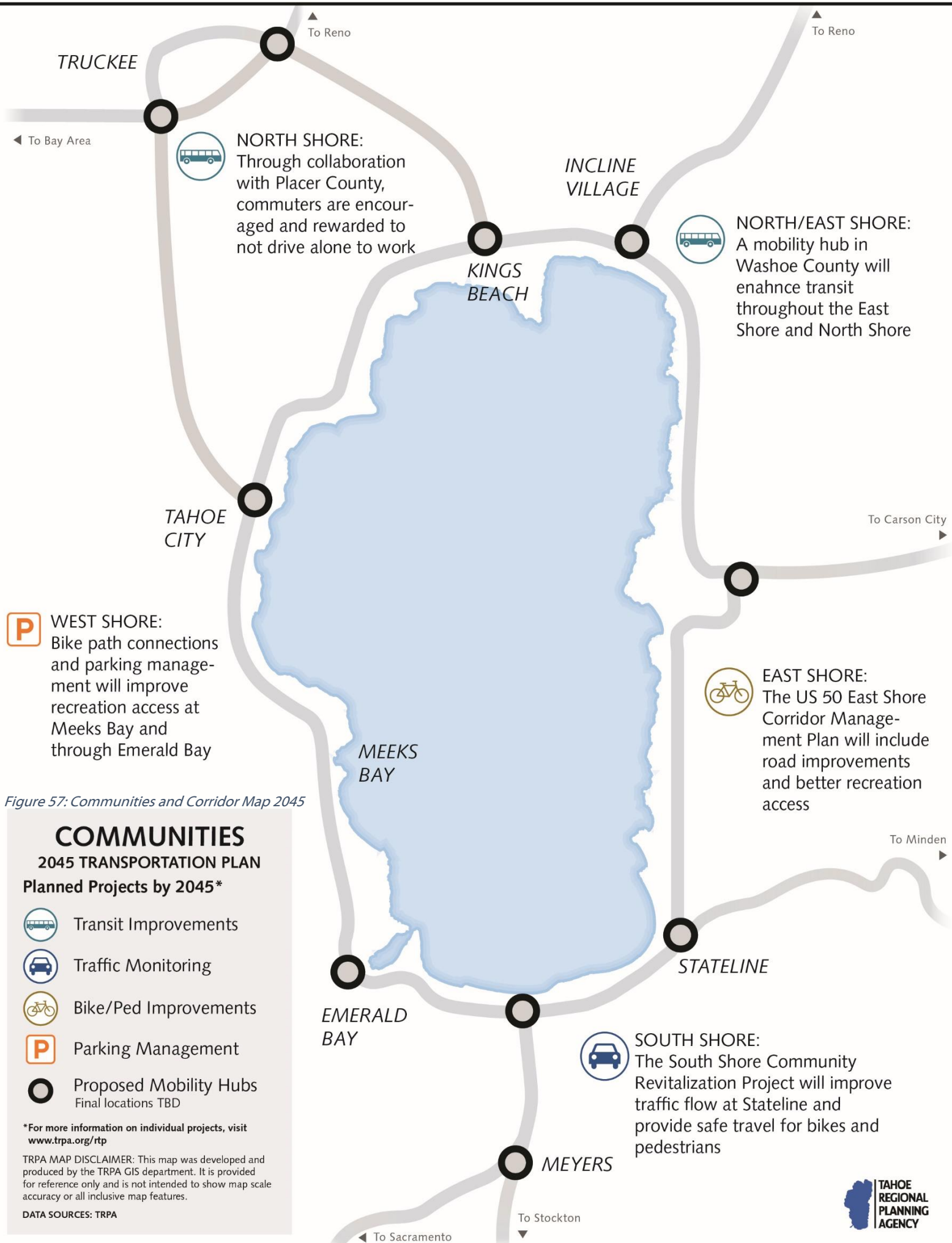
Complete streets are streets designed to serve all travelers by extending planning and infrastructure beyond the roadway to include things such as sidewalks, bike lanes, shared-use paths, and biking and walking amenities along the route, including landscaping, benches, and lighting. When incorporated comprehensively, complete streets encourage travel by foot, bike, and transit.

Recent complete street projects in Kings Beach and South Lake Tahoe have transformed the adjacent communities, increased the number of people biking and walking, reduced vehicle speeds, and increased safety.

Complete streets projects proposed in the plan include the Main Street Management Plan in South Lake Tahoe, which will add pedestrian, bicycle, and transit improvements to a busy commercial and residential travel corridor, and the Tahoe City Downtown Access Improvement Project on the North Shore, which will incorporate traffic calming, pedestrian amenities, and bicycle facilities.



*Figure 56: Sierra Blvd Complete Streets Project
Credit: City of South Lake Tahoe*



Mobility Hubs

Mobility Hubs are multi-faceted. They serve the region as transit centers, park and ride locations, active transportation connections, and zero emission vehicle facilities. Installing and linking these hubs by transit and trails creates the seamless transportation system the plan envisions.

Mobility hubs function best when they are built to provide travel options for working, living, shopping, and playing. Over the next 25 years, partners will construct 17 mobility hubs and transit centers in various locations around the Tahoe Region and in neighboring regions.

Hubs will vary in design and size based on location. Each hub may include the following design elements; pedestrian and bicycle path connections, parking spaces people can reserve online, safe and secure bicycle parking, charging options for e-bikes and zero emission vehicles-including transit vehicles, and frequent transit routes with buses equipped with storage and rack space allowing people to bring along their

recreation equipment and luggage. Mobility hubs will be sized appropriately for their locations. Larger hubs will be developed in town centers and smaller hubs at recreation facilities and other dispersed areas.

The plan proposes a series of mobility hubs around the region, including in Washoe County on the North Shore and at the southern and northern gateways to Tahoe's West Shore.

TRPA is working with the Carson Area MPO to plan for future park-and-ride and intercept lots outside of the region, and transit connections to the region, which, over time, could evolve into full mobility hubs for commuters and day visitors.

The region's newest mobility hub is located at the Lake Tahoe Community College in South Lake Tahoe. This mobility hub highlights the future of transportation electrification with overhead induction chargers for transit busses, DC and Level 2 chargers for light-duty vehicles and charging for electric bikes and scooters.



Figure 58: Tahoe City Mobility Hub

Operations and Maintenance



Operations and maintenance is the coordination around common goals of providing a high quality transportation system. Agencies throughout the region work together to ensure that all types of travel are connected, flow safely, accommodate goods movement (including through the region's airports). This supports Tahoe's economic vitality, quality of life, and environment.

TRPA continues to prioritize funding for operations and maintenance with local jurisdictions and state partners, though needs continue to outstrip available funding.

Policy Highlight

Policy 6.2: Maintain and preserve pavement condition to a level that supports the safety of the traveling public and protects water quality.

Over the next few years, Nevada Department of Transportation and Caltrans will repave critical state routes including SR-28 from Tahoe City to Incline Village, and U.S. 50 on the East Shore.

Implementation

By 2025, commuters will be encouraged and rewarded for not driving alone to and from work, every corridor in Tahoe will have a plan for providing more and safer transportation choices, and students can confidently and safely walk, bike, or ride transit to and from school.

By 2035, more people park their cars once and travel around the region by transit, walking, or biking and recreation access will be improved with new paths and parking management strategies at Meeks Bay.

By 2045, roads will be paved, potholes filled, and regular maintenance completed on all local roads at Tahoe, and U.S. 50 will be rerouted around popular gathering and recreation areas on the South Shore, and Main Street improvements on the South Shore will be completed, providing better walking, biking, and transit service in one of the most heavily visited areas at Tahoe.

Road to Blue

El Dorado is now on its third phase of improving Lake Tahoe pavement conditions to provide water quality benefits. Roads in poor condition can lead to more hazardous conditions for drivers and cyclists. Fine sediment from roadway runoff and increased wear and tear impacts lake clarity. El Dorado County is seeking funds to implement the Enhanced Stormwater Resource Plan with multi-benefit stormwater projects.



Figure 5: Elk's Club Drive prior to repaving. (R Wigart)



Figure 6: Elk's Club Drive after repaving. (A Buxton)

Meeting Housing Needs

The Tahoe Region faces a serious shortage of workforce housing. Tahoe's vast protected open space, growth caps, and limited development capacity has led to competition for Tahoe's scant housing stock. Rental and home prices climb while local residents that rely on seasonal and minimum wage salaries are priced out of the market. Between 2010 and 2018, the proportion of housing units occupied by local residents in the Tahoe Region has dropped from 46 percent to 42 percent. Recent home sales from both the North and South shores show that the vast majority of homes sold in recent years have been to second-home owners, meaning this percentage has likely dropped further over the last two years. Housing shortages, both regionally and at the state level, have led to several efforts to quantify and set goals for achieving housing needs.

The State of California sets housing targets for individual jurisdictions through its Regional Housing Needs Assessment (RHNA) process. El Dorado County, Placer County, and the City of South Lake Tahoe are required to show how they will meet these targets through their Housing Elements under RHNA. As the Metropolitan planning organization for the region, TRPA is also required to show in the RTP that it can accommodate the RHNA.

While TRPA can show that it has sufficient development rights to meet the RHNA, studies indicate that significant barriers remain to constructing affordable, moderate, and achievable housing in the region for its residents and workforce.

At the regional level, the Tahoe Prosperity Center on the South Shore and the Tahoe Truckee Community Foundation in the North Tahoe-Truckee area, as well as Placer County, have conducted workforce housing needs

assessments⁴ that, combined, cover most of the Tahoe Region, with the exception of Washoe County. Taken together, these assessments identify an affordable-achievable housing need of approximately 3,700 homes on the South Shore and in the Tahoe portion of Placer County.

TRPA is committed to working with local governments, agencies, and nonprofits to address Tahoe's housing needs. TRPA is also analyzing and updating its land use planning system to address items that prevent construction of affordable-achievable housing. Two initiatives are key to progress in this area, one which was completed in 2018, the Development Rights Strategic Initiative, and one which was launched in July 2020, the Tahoe Living: Housing and Community Revitalization Initiative.

Development Rights Strategic Initiative

The Development Rights Strategic Initiative made two key changes to the development rights system at Tahoe to better incentivize development of more affordable, moderate, and achievable housing. One change allows conversion of development rights among different types of development. A second change expands the availability of bonus units for affordable, moderate, and achievable housing when projects are sited within ½ mile of transit. These incentives provide development rights at little to no cost, reducing the overall cost of development. Increased options for housing developers to obtain development rights allows development rights to flow to the appropriate need as market demands shift. Regional partners are actively working to reduce other development related costs, such as sewer hook-up fees.

Tahoe Living: Housing and Community Revitalization Initiative

The Tahoe Living initiative aims to achieve RHNA and other local and regional housing

⁴ The Tahoe-Truckee Workforce Housing Needs Assessment was completed in 2016 and the South Shore Housing Needs Assessment was completed

in 2019. Placer County produced estimates of housing need in 2019.

goals through collaboration with partners. This approach will identify ways that TRPA policies and programs can complement local jurisdiction strategies to meet the overall housing need. Coordinated efforts could include modifying zoning standards to encourage and allow for a wider diversity of housing types, stronger incentives for deed-restricted workforce housing, simplifying permitting requirements, and other strategies yet to be identified by the Tahoe Living Working Group.

Corridor Planning

Corridor planning is the bridge between the plan's goals and policies, the implementation and long-term operation of multi-benefit projects, and the region's approach to comprehensively addressing its largest challenges. The Corridor Planning Framework was developed to increase collaboration and accelerate transportation improvements that often cross jurisdictional boundaries.

The Tahoe Region is divided into six corridors based on the unique transportation, recreation, and quality of life needs of each. Corridor planning allows TRPA to leverage its transportation and land use policies to create synergies and maximize the cost efficiencies and benefits of projects.

The approach to each corridor is adaptive to recognize and respond to localized needs, but planning always includes active transportation, sustainable recreation, housing, and development within and near to town and regional centers.

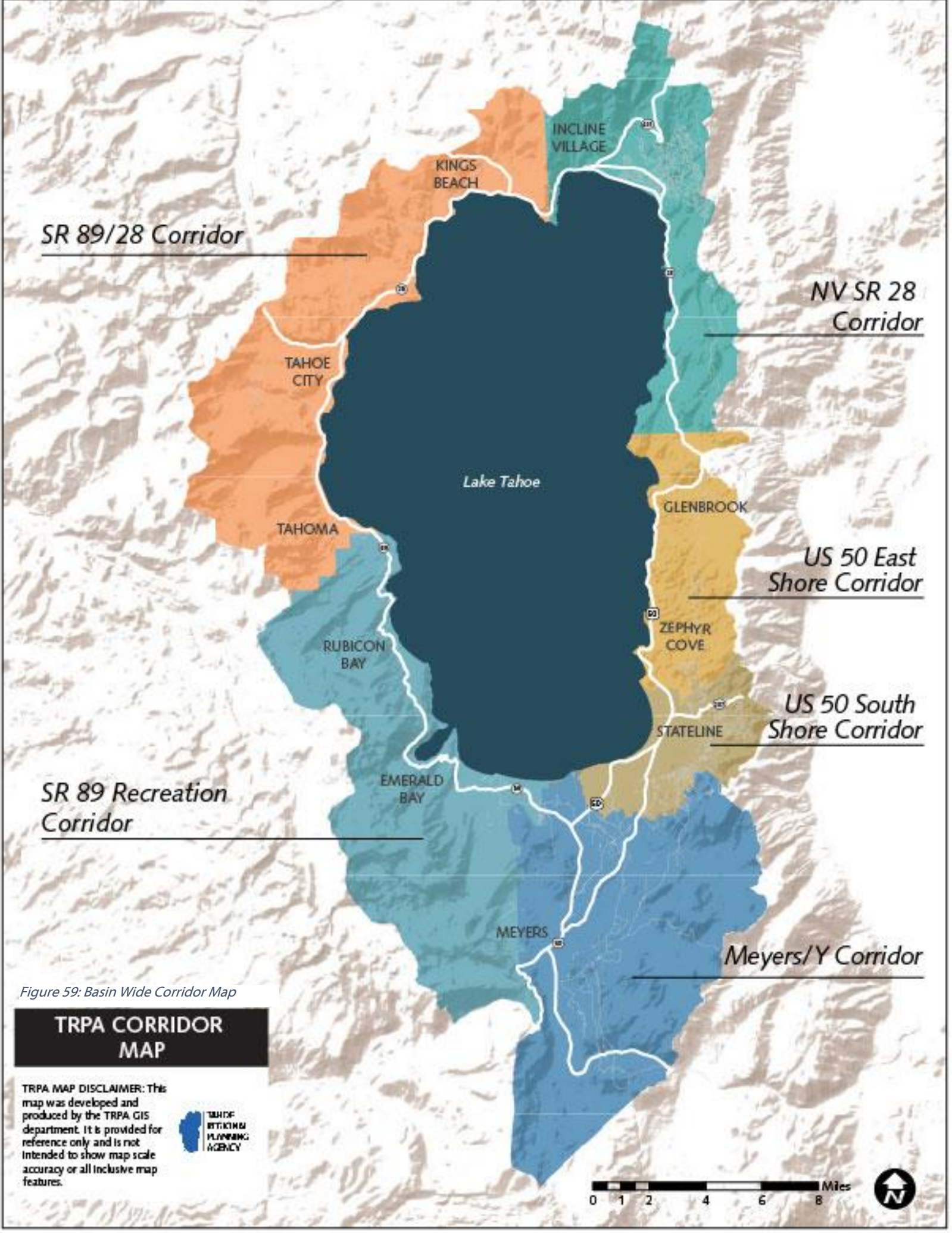
Corridor Plans

The Corridors approach to the plan is informed by the 2017 Linking Tahoe: Corridor Connection Plan and current corridor plans for the Tahoe Region, include the 2021 Draft US 50 East, 2020 SR 89 Recreation Corridor Management Plan, the 2020 Main Street Management Plan, and the 2014 Nevada State Route 28 Scenic Byway Corridor Plan.

Table 3: Housing, Recreation, and Land Use Patterns by Corridor

Housing, Recreation, and Land Use Patterns by Corridor

	SR 89/28	NV SR 28	US 50 East	US 50 South	Meyers/Y	SR 89 Rec
# Residential Units	11,264	7,375	2,088	11,272	9,921	2,562
% Single Family Units	84.8%	91.7%	93.4%	60.3%	78.4%	94.2%
% Multi-Family less than 20 du/bldg.	13.8%	6.9%	6.6%	31.2%	8.3%	5.8%
% Multi-Family 20+ du/bldg.	1.4%	1.4%	0%	8.5%	13.3%	0%
# Tourist Accommodation Units (TAUs)	1,217	817	110	7,916	494	113
% Backcountry, Wilderness, Conservation & Recreation Acres	87.8%	85.0%	91.6%	59.4%	86.8%	96.5%



SR 89/28 Corridor

NV SR 28 Corridor

Lake Tahoe

US 50 East Shore Corridor

US 50 South Shore Corridor

SR 89 Recreation Corridor

Meyers/Y Corridor

Figure 59: Basin Wide Corridor Map

**TRPA CORRIDOR
MAP**

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.



TAHOE
REGIONAL
PLANNING
AGENCY

0 1 2 4 6 8 Miles



Nevada SR 28 National Scenic Byway

Summary

This is the Lake Tahoe Region's first corridor plan, developed in 2014 to comprehensively address safety, environmental, and recreation access concerns on the East Shore. The corridor extends from Incline Village south to Sand Harbor and Spooner Lake state parks, passing through Tahoe's longest stretch of undeveloped shoreline--eleven miles from Lakeshore Drive in Incline Village to U.S. 50.

The Tahoe Transportation District and many partners created this corridor plan, as well as a framework for corridor planning throughout the region. Implementation has exceeded expectations.

Challenges

Recreation demand was double existing parking capacity. This resulted in a multitude of challenges. Perhaps the biggest is "shoulder-parking." The areas are narrow, often at the edge of steep inclines with limited sight distance.

Safety and erosion are important concerns. The number of vehicles parked along the shoulder has grown by almost 170% between 2000 and 2011 – and is projected to double again by 2038. Conflicts between parked cars and their passengers walking in the streets has led to an increase in fatalities along this corridor from 2006-2013, in contrast to the 50% average decrease statewide, per NDOT. Further, parking on shoulders contributes to runoff into the lake, an important environmental concern.

Vision

Create a platform for effective collaboration to protect and enhance this section of "America's Most Beautiful Drive."

Measuring Success

Many partners are working to improve travel options, parking, and to protect water quality and natural resources throughout this environmentally sensitive corridor. Partners recently completed a world-class, three-mile stretch of shared-use path paralleling Nevada State Route 28 from Incline Village to Sand Harbor State Park, coupled with parking and water quality improvements, and are now working to extend parking management and expand parking lots along SR 28.

Measuring Success

- Tahoe Trail: East Shore Pedestrian and Bicyclist Counts
- Transit Ridership: East Shore Express
- Travel Demand Management: Parking Management Compliance and Revenue

Future Focus

- Paid Parking
- Parking Management System and reservation
- Sand Harbor to Spooner Path

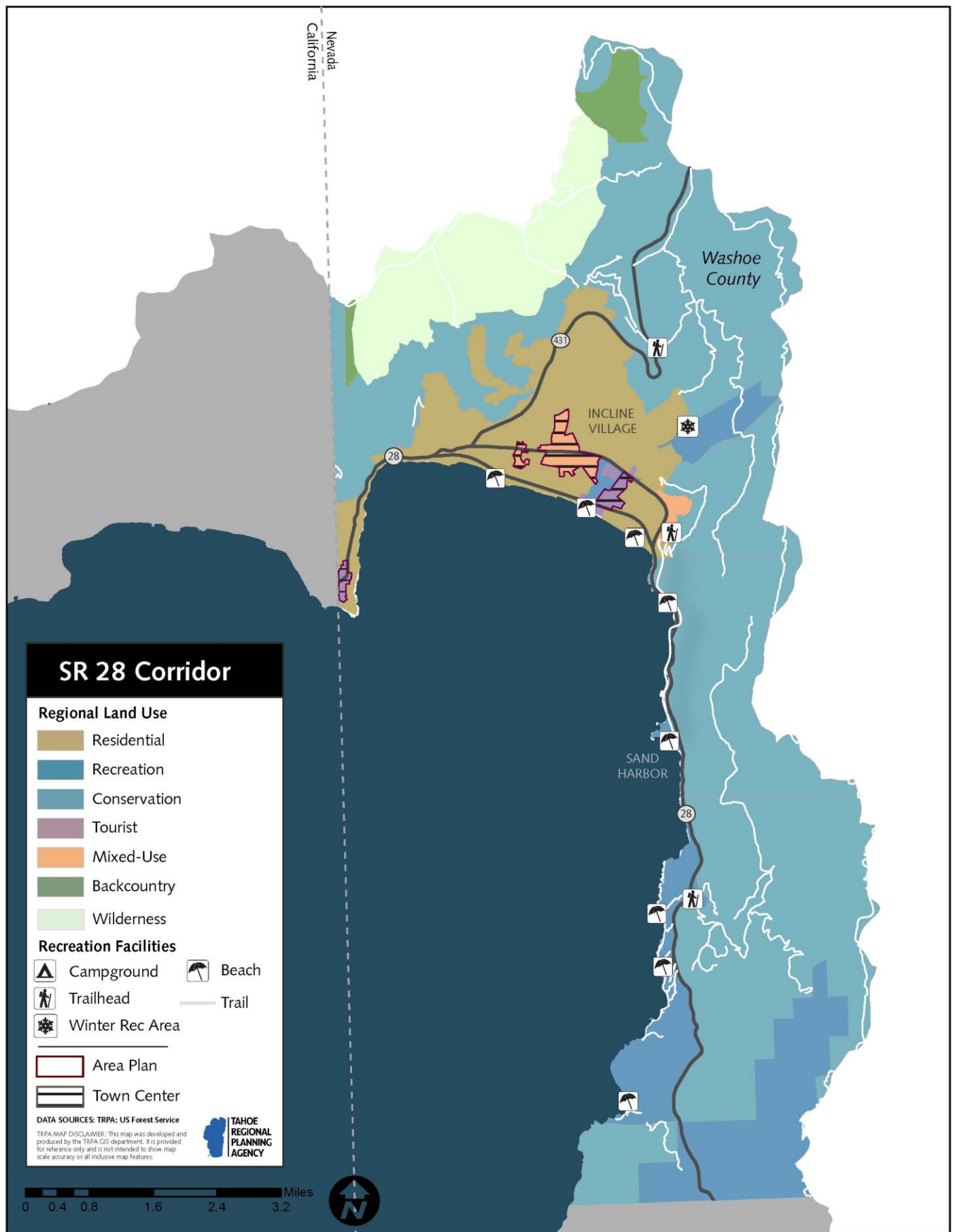
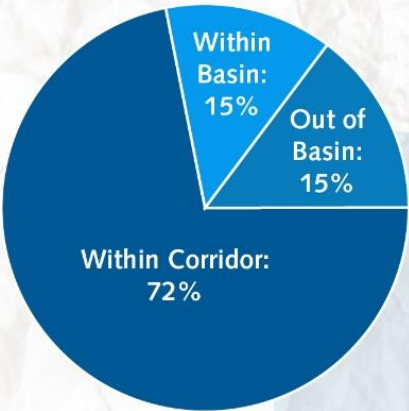


Figure 60: Nevada SR 28 Corridor

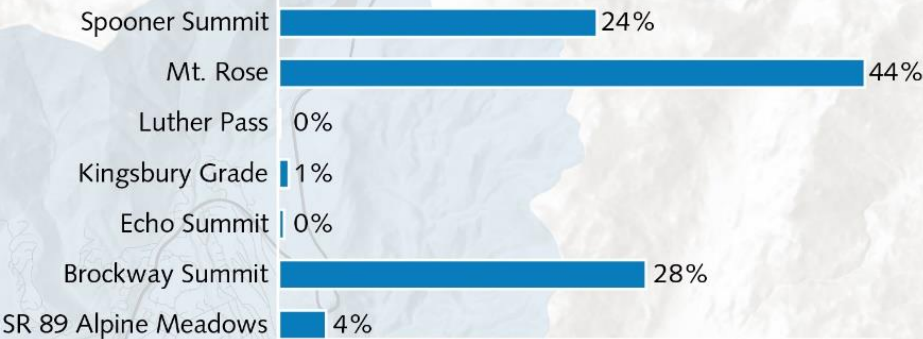
CORRIDOR PROFILE: NEVADA SR 28 SCENIC BYWAY

Source: StreetLight Data

Average Daily Trips:



Trips by Entry Corridor (Out of Basin):

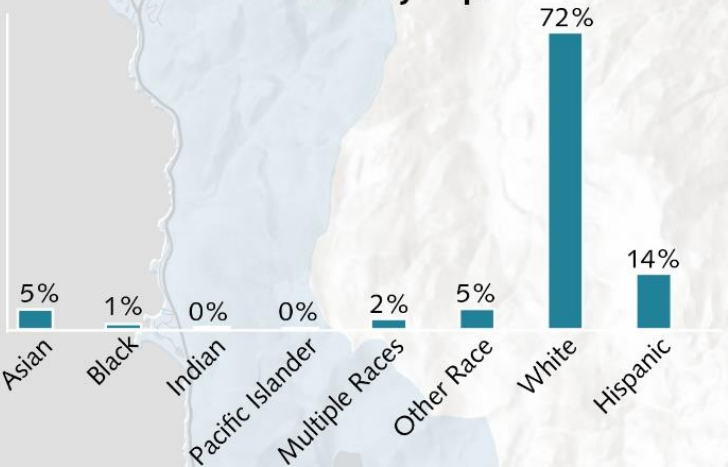


Within Corridor = trips that begin and end within the corridor
Within Basin = trips to or from the corridor that begin or end outside the corridor, but within the Tahoe Basin
Out of Basin = trips to or from the corridor that begin or end outside the Tahoe Basin

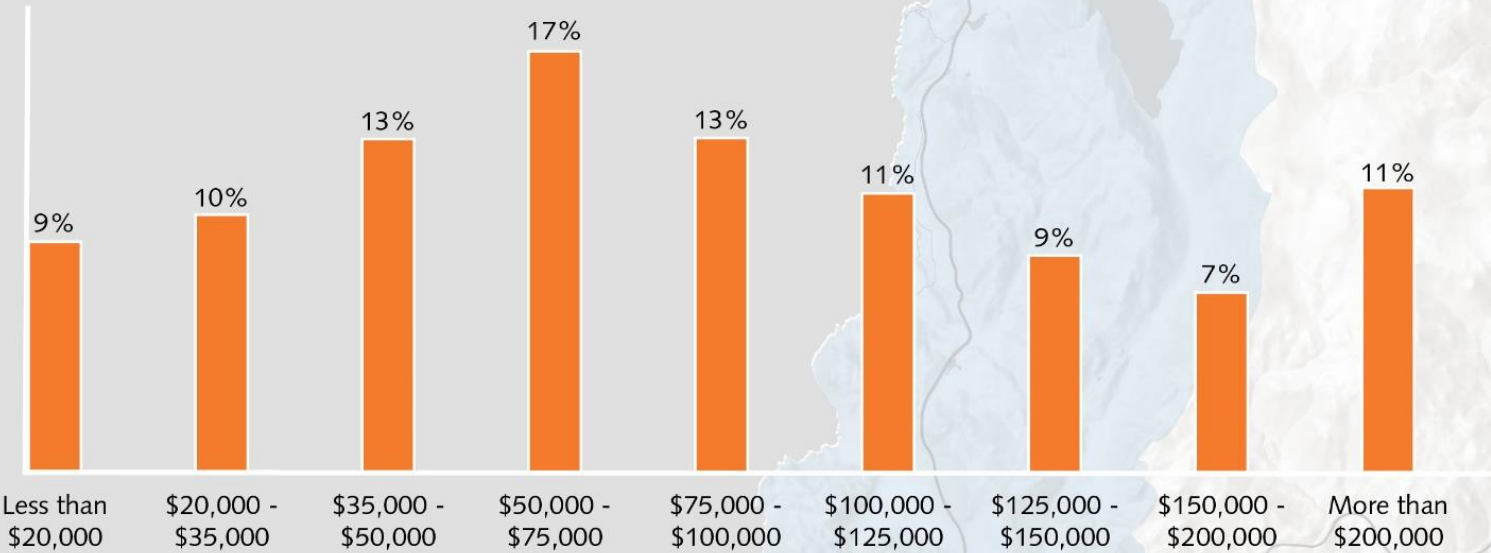
Education Level:



Race by Trip:



Trips by Annual Household Income:



California SR 89 Recreation Corridor

Summary

State Route Highway 89 Recreation Corridor (SR 89 Recreation Corridor) is a two-lane mountain roadway running from Meyers, California north along the West Shore of Lake Tahoe to the Placer County border. The SR 89 Recreation Corridor includes 17.5 miles of highway with adjacent recreation uses, extending from West Way in El Dorado County north to the El Dorado/Placer county line at Sugar Pine Point State Park.

The area features some of Lake Tahoe's most popular recreation sites, including beaches, the iconic Emerald Bay, and access to Fallen Leaf Lake and the Desolation Wilderness Area. The roadway serves almost 1.8 million visitors each year, which creates numerous transportation access and natural resources challenges.

Led by TRPA, the Tahoe Transportation District, and the U.S. Forest Service Lake Tahoe Basin Management Unit (LTBMU), planning for the State Route 89 Recreation Corridor Management Plan brought together 17 public agencies and stakeholder organizations to develop travel options and visitation management strategies that address challenges related to the corridor's extensive roadway and recreation demand.

Challenges

Demand for recreation in this corridor exceeds the available roadway capacity and recreation infrastructure during peak times of visitation to the region. This has caused impacts to the environment, heavy traffic congestion, and negative visitor and resident experiences.

Vision

Provide a safe and seamless travel experience that inspires every visitor and resident to walk, bike, or use transit to access the corridor's diverse recreation offerings to better manage congestion, enhance environmental resiliency, and allow people to focus on enjoying the special nature of Lake Tahoe's southwest shoreline.

Measuring Success

- Reduction of vehicles
- Transit mode share goals
- Improvement in natural resource conditions

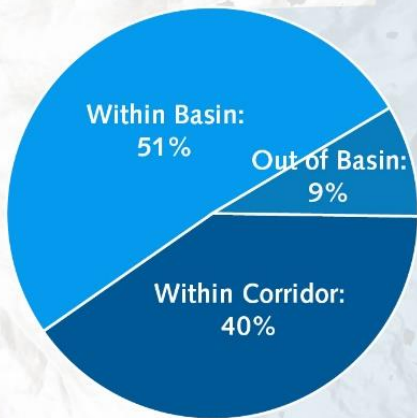
Future Focus

- Construction of Tahoe Trail
- Frequent transit services
- Parking management system
- Development of corridor implementation team

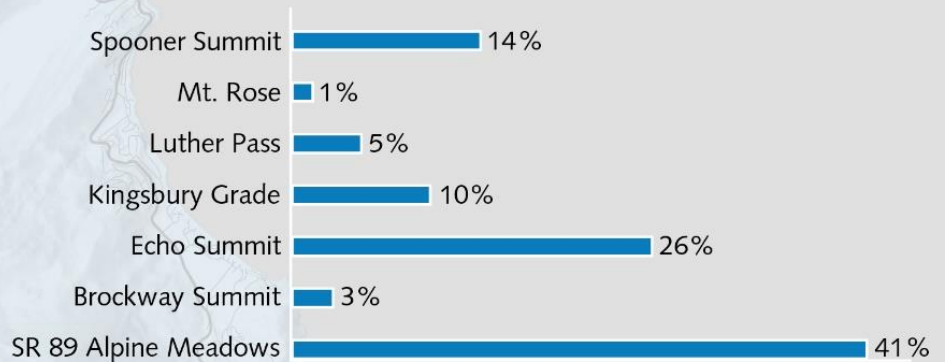
CORRIDOR PROFILE: SR 89 RECREATION

Source: StreetLight Data

Average Daily Trips:



Trips by Entry Corridor (Out of Basin):

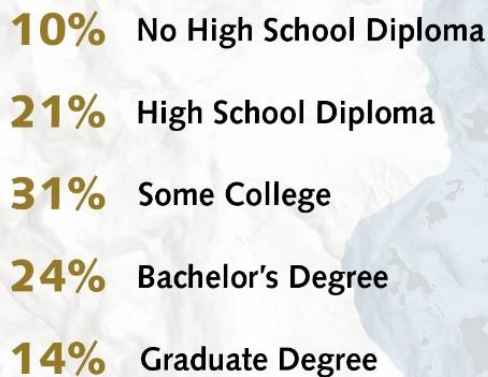


Within Corridor = trips that begin and end within the corridor

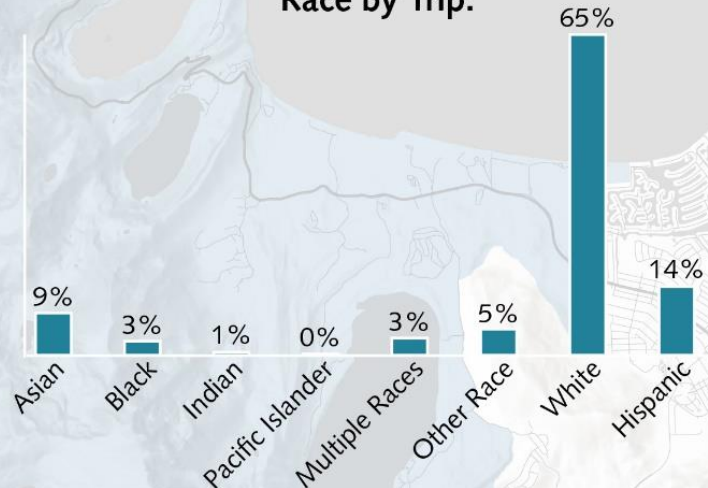
Within Basin = trips to or from the corridor that begin or end outside the corridor, but within the Tahoe Basin

Out of Basin = trips to or from the corridor that begin or end outside the Tahoe Basin

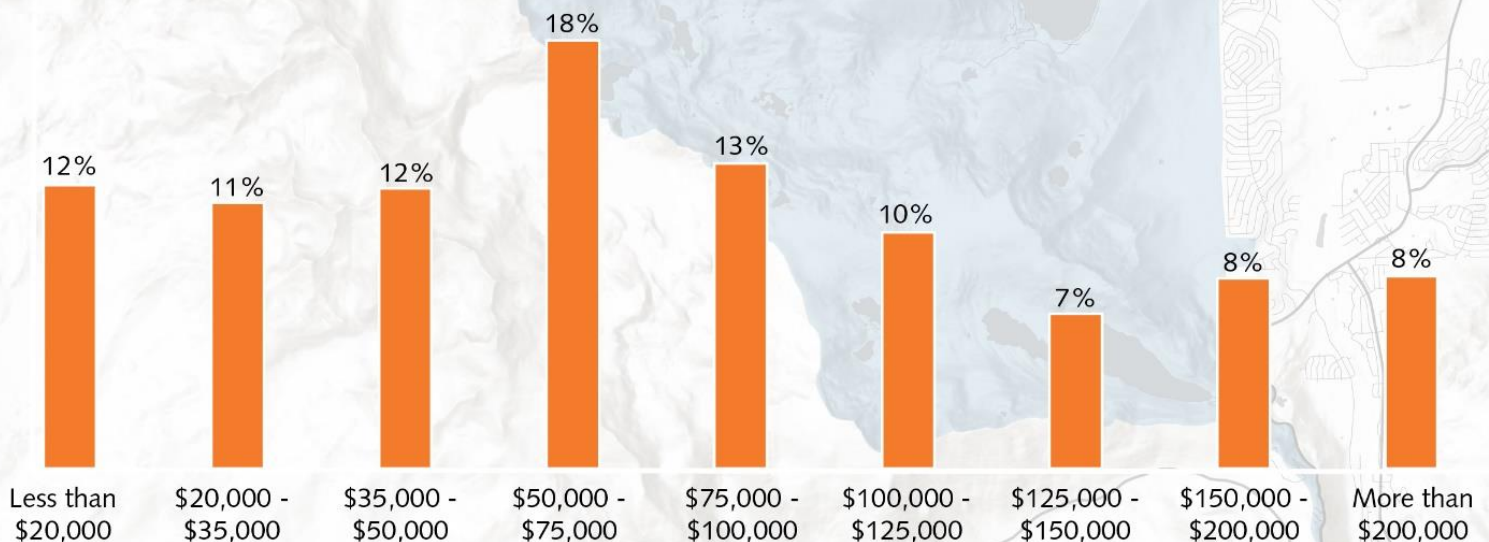
Education Level:



Race by Trip:



Trips by Annual Household Income:



California SR 89/28

Summary

The corridor includes the residential areas of Tahoma, Homewood, Tahoe City, Dollar Point, Carnelian Bay, Tahoe Vista, and Kings Beach. Recreational attractions are available year-round, skiing, hiking, biking, boating, off-roading, and more.

The corridor begins at Sugar Pine Point State Park and extends north and east to the California/Nevada state line in Crystal Bay, extending through both El Dorado and Placer counties and encompassing two town centers, Tahoe City and Kings Beach, and 11 miles of shoreline.

The Corridor also includes the Tahoe Basin of the Resort Triangle that connects SR89, SR28, and SR267 between Tahoe City, Kings Beach, and Truckee.

The Resort Triangle Transportation Plan (RTTP) focused on understanding and planning for future transportation development within proximity to the three primary corridors that connect the Tahoe Region to destinations inside and outside of the Basin, specifically, Tahoe City, Kings Beach, and Truckee, as well as resort areas and West Shore communities.

Challenges

Public parking is limited, which results in unsafe parking near popular recreation destinations. Transit service is free and becoming more frequent from Kings Beach to Tahoe City, but is less available and less frequent farther east to the Nevada state line and along the West Shore to Sunnyside, Homewood, and Tahoma. Residents and commuters can find it difficult to travel without the need for a personal vehicle.

Vision

The Resort Triangle Transportation Plan presents projects and programs that will provide more reliable and enjoyable ways to travel within the Resort Triangle improving the experience of recreating, shopping, dining, working, and living in North Lake Tahoe. The plan's mission is to create a transportation system for tomorrow which will make more efficient use of existing infrastructure, focus on improving mobility for all, reduce transportation impacts on the environment, improve congestion and travel delay, promote and enhance transit services, and provide linkage for non-motorized travel choices

Measuring Success

- Tahoe Trail: West Shore
- Transit Ridership
- Travel Demand Management

Future Focus

- Pedestrian Crossing Enhancements: Tahoe City
- Fanny Bridge Revitalization Project
- Kings Beach Western Approach

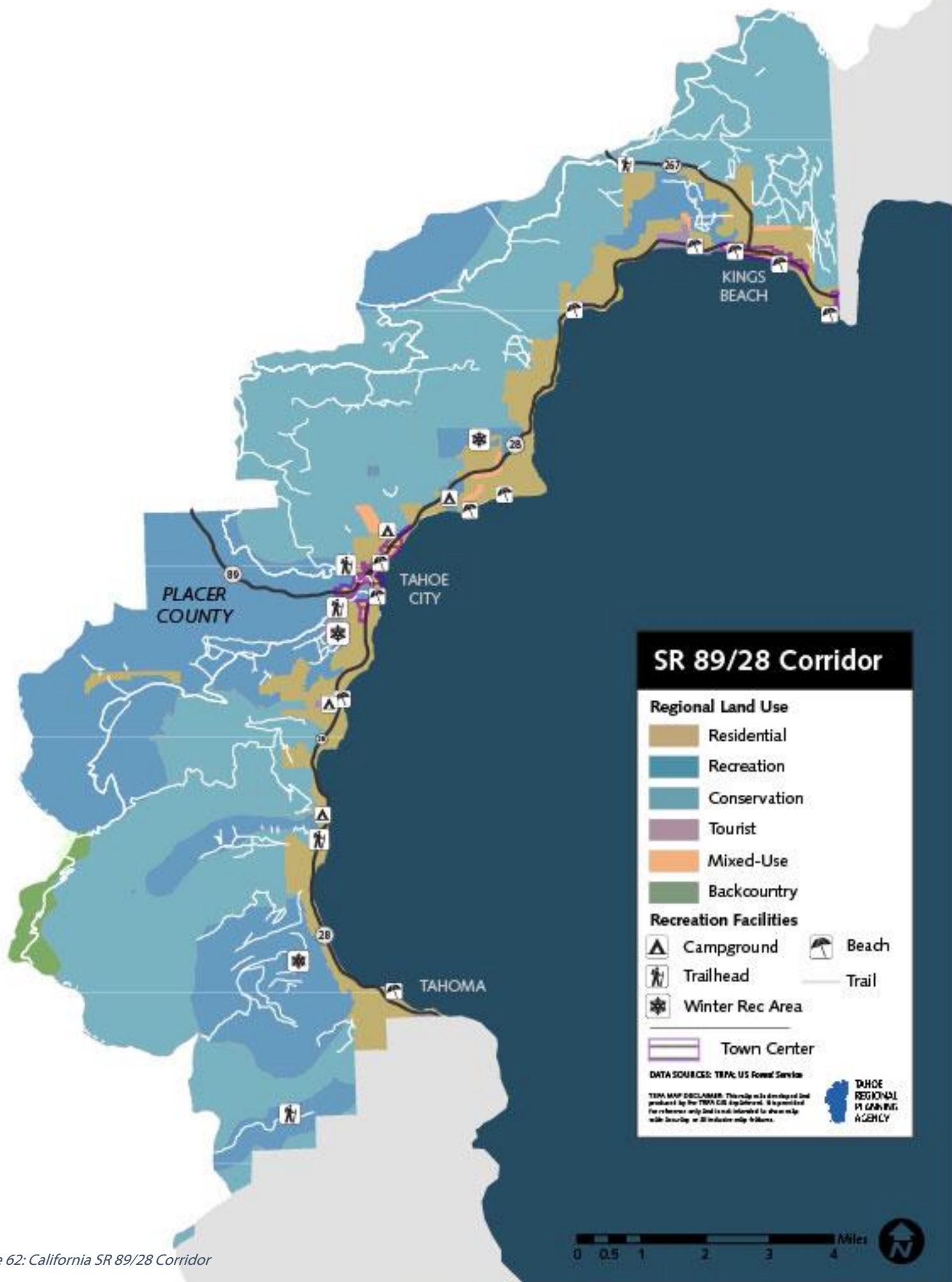
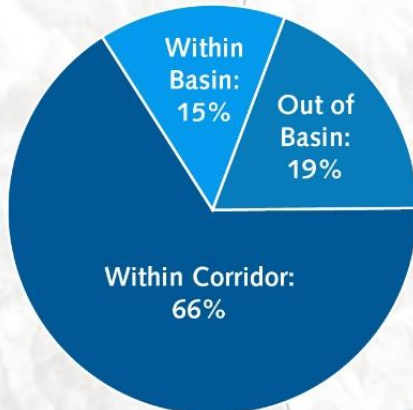


Figure 62: California SR 89/28 Corridor

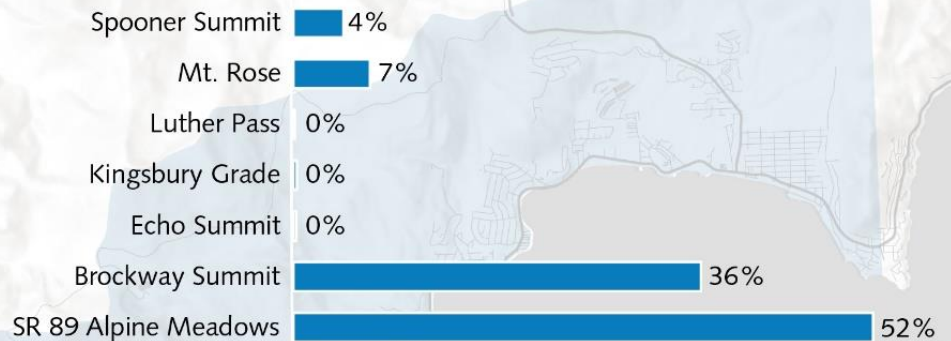
CORRIDOR PROFILE: CALIFORNIA SR 28/89

Source: StreetLight Data

Average Daily Trips:



Trips by Entry Corridor (Out of Basin):

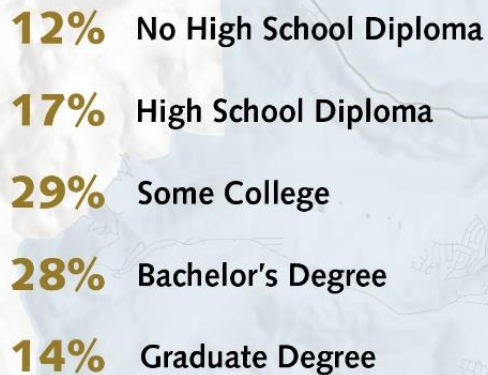


Within Corridor = trips that begin and end within the corridor

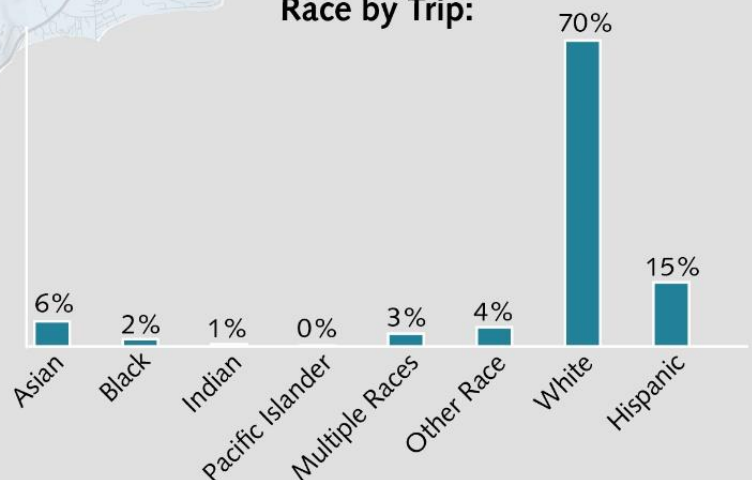
Within Basin = trips to or from the corridor that begin or end outside the corridor, but within the Tahoe Basin

Out of Basin = trips to or from the corridor that begin or end outside the Tahoe Basin

Education Level:



Race by Trip:



Trips by Annual Household Income:



California/Nevada US 50 South Shore

Summary

The U.S. 50 South Shore Corridor begins at Elks Point Road at Round Hill in the north and continues south to Trout Creek near Al Tahoe Boulevard, extending through Douglas County on the Nevada side and El Dorado County and the City of South Lake Tahoe on the California side. The Main Street Management Plan area extends from Lake Parkway in Stateline, Nevada to the U.S. 50 intersection with Pioneer Trail in South Lake Tahoe, California.

Challenges

The corridor spans two local jurisdictions as well as California and Nevada, requiring continuous coordination, engagement, and support among stakeholders, property owners, and community members. The densely developed nature of some areas of the corridor constrain design possibilities which must serve large volumes of people and varieties of user demands.

Main Street Management Plan

Within this corridor, relocation of U.S. Highway 50 around Stateline and the Casino Core through the U.S. 50/South Shore Community Revitalization Project presents a once in a generation opportunity for the South Shore's most dense commercial area.

The Main Street Management Plan lays the framework for a world-class space where people can gather and easily travel among the corridor's tourist lodging, shopping, dining, casinos, and adjoining neighborhoods, as well as to nearby recreation sites. Implementing the plan will enhance resident and tourist experiences and create new business opportunities through mixed-use

redevelopment, with parking management, wayfinding, transit services, amenities for biking and walking, and streetscape improvements.

Vision

Create a world-class space for people, enhance the environment for those visiting surrounding properties, and provide for an experience that matches the unique natural environment at Lake Tahoe.

Measuring Success

- Reducing vehicles along the Main Street corridor
- Increasing safety for pedestrians and bicyclists
- Addition of sustainable and green water quality infrastructure
- Enhance street activation and business vitality with space designed for special events, street closures, and pop-up business.

Future Focus

- Implementing a corridor parking management and wayfinding system
- Constructing multi-use path in the corridor
- Developing an operations, management, and funding plan

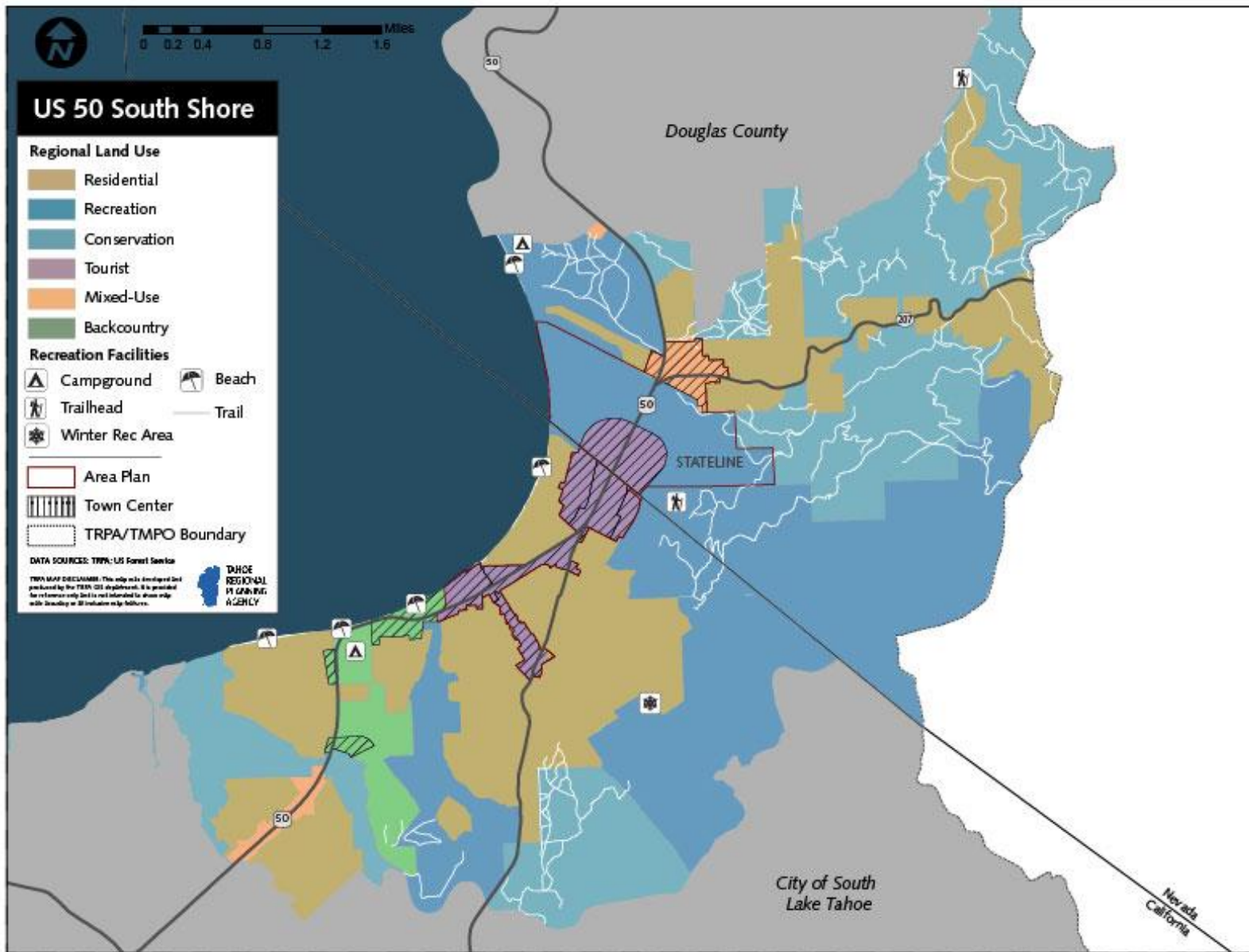
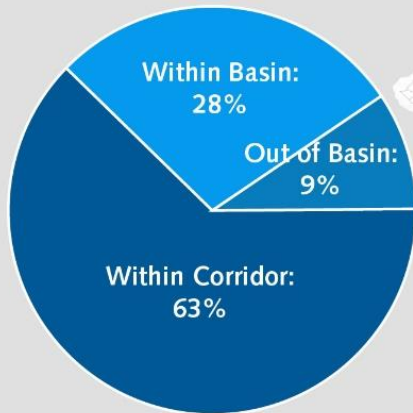


Figure 63: U.S. 50 South Shore Corridor

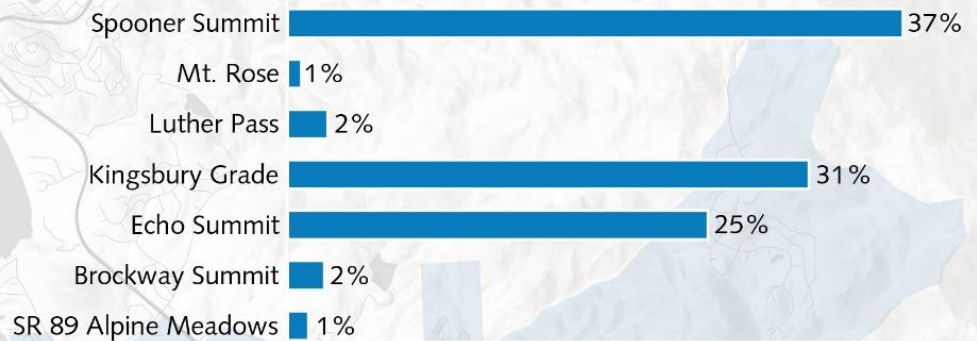
CORRIDOR PROFILE: US 50 SOUTH SHORE

Source: StreetLight Data

Average Daily Trips:



Trips by Entry Corridor (Out of Basin):

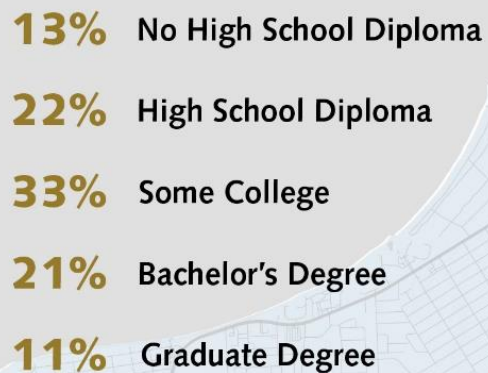


Within Corridor = trips that begin and end within the corridor

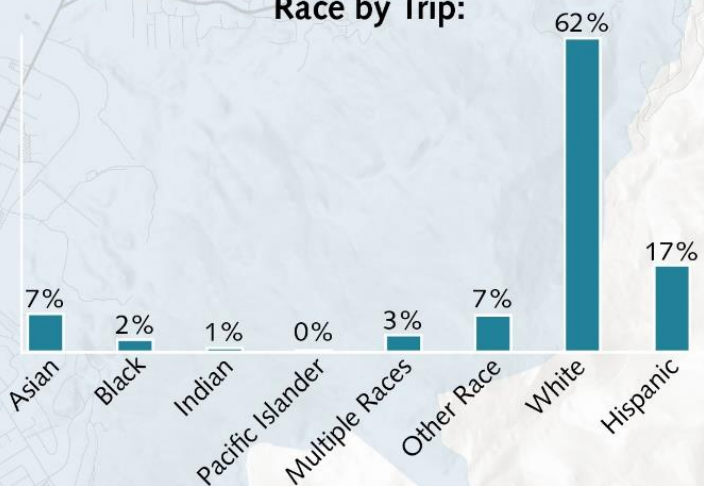
Within Basin = trips to or from the corridor that begin or end outside the corridor, but within the Tahoe Basin

Out of Basin = trips to or from the corridor that begin or end outside the Tahoe Basin

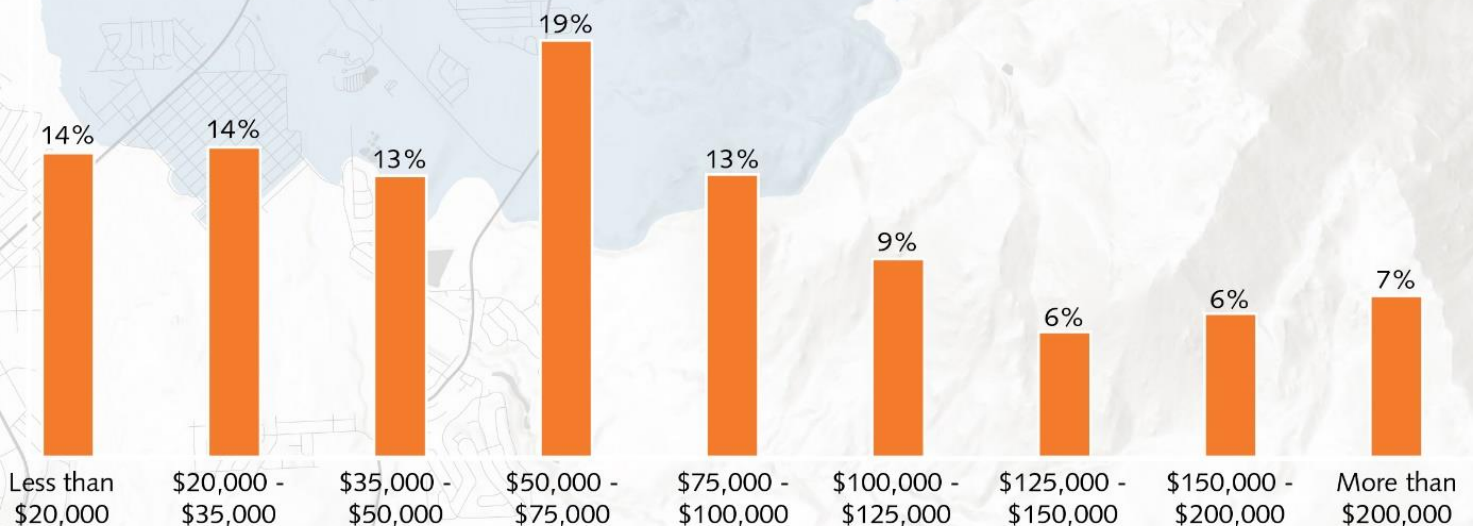
Education Level:



Race by Trip:



Trips by Annual Household Income:



Nevada US 50 East Shore

Summary

The U.S. 50 East Shore corridor in Nevada begins at the crest of the Carson Range at Spooner Summit and continues south and west to Stateline Avenue, extending through Douglas County. The corridor includes the unincorporated communities of Stateline, Zephyr Cove, Round Hill Village, Glenbrook, Skyland, and Lakeridge along the eastern shore and connects to South Lake Tahoe, California.

The corridor functions as both a rural transportation system and a busy entry route for visitors, recreation travelers, commuters, and through traffic. The corridor is comprised mostly of public lands. Where development has occurred, it has been for residential and recreation uses. Significant recreation areas within the corridor include Spooner Summit, with public access to the Tahoe Rim Trail and Spooner Summit State Park, Zephyr Cove Resort, Round Hill Pines Beach Resort, Nevada Beach, and sections of the Tahoe trail.

Challenges

Public transit service does not currently exist within the corridor. Pedestrian and bicycle facilities and crossings are limited in the corridor, which isolates neighborhoods from local retail and recreation opportunities. Parking on road shoulders is common at popular recreation sites causing safety issues as vehicles and passengers encroach into travel lanes. The roadway has safety issues, including at the intersection of SR 28 and U.S. 50 at Spooner Summit, as well as at residential, commercial, and recreation access points, which often lack turn pockets.

Vision

The U.S. 50 East Shore Corridor provides safe on- and off-street transportation with connected pedestrian and bicycle paths, transit service, sustainable recreation access, and connectivity to the many neighborhoods and businesses from within the region and from neighboring regions.

Measuring Success

- Tahoe Trail
- Transit Service
- Rate of Serious Injuries per 100 million VMT

Future Focus

- Round Hill Pines intersection improvements
- Complete the U.S. 50 East Shore Corridor Management Plan
- NDOT Repaving - Broadband

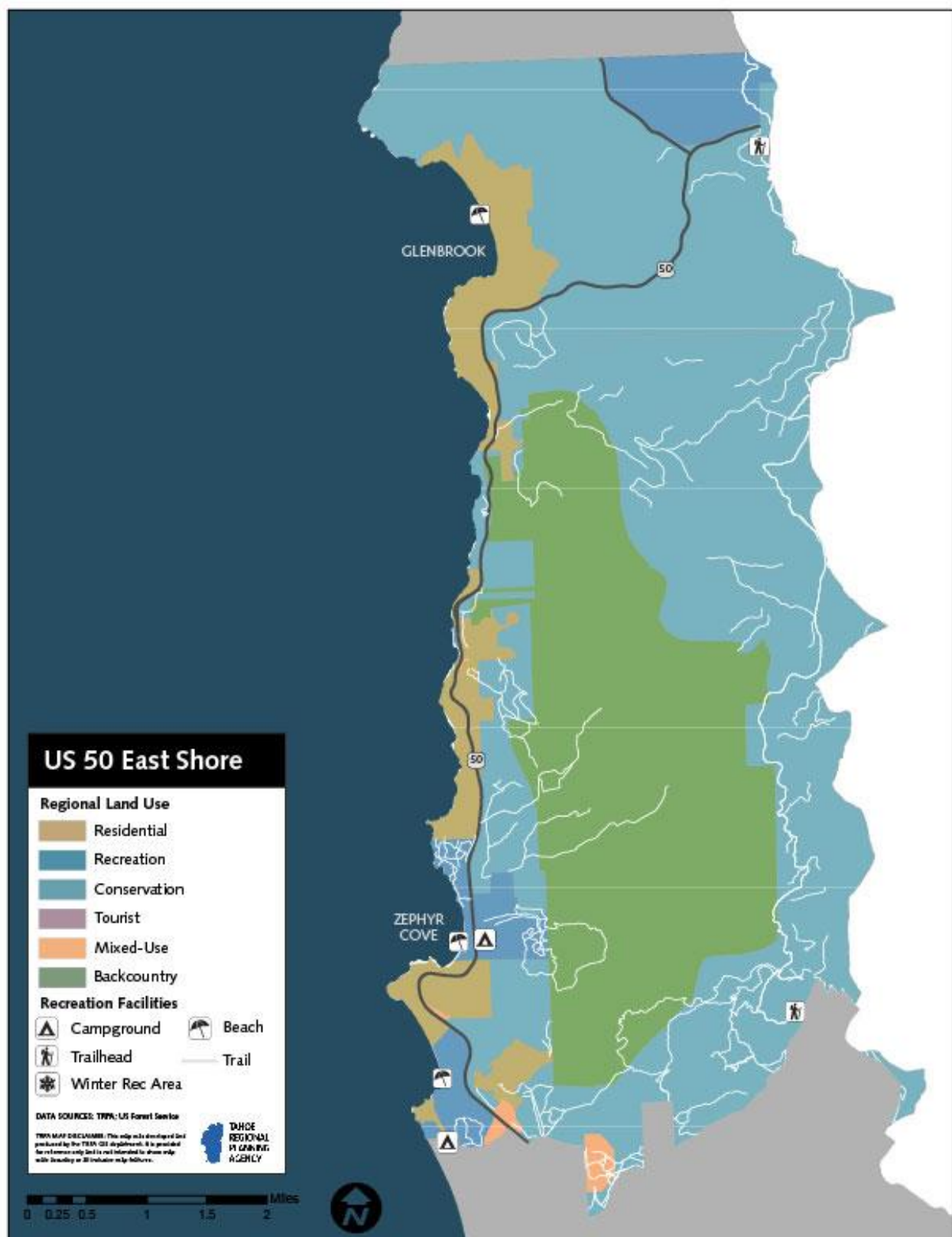
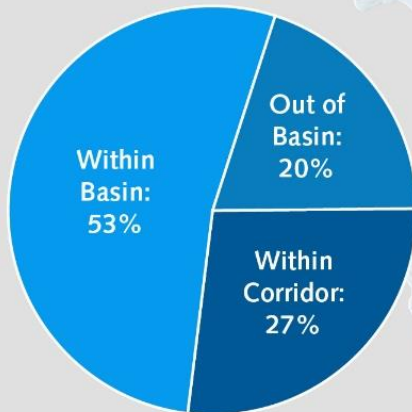


Figure 64: Nevada US 50 East Shore Corridor

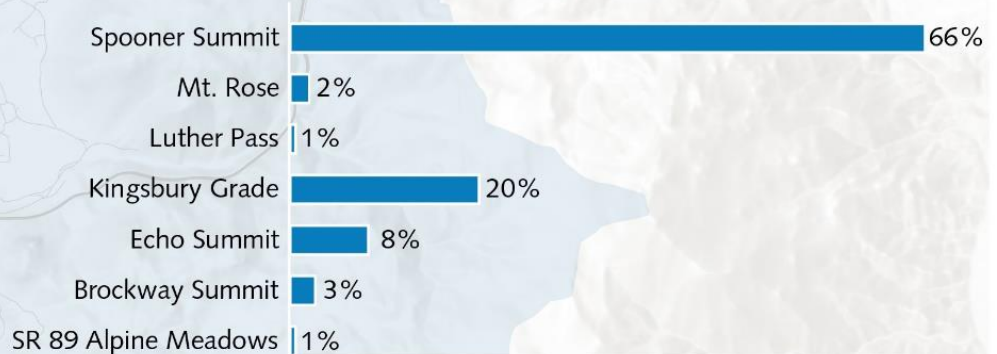
CORRIDOR PROFILE: US 50 EAST

Source: StreetLight Data

Average Daily Trips:



Trips by Entry Corridor (Out of Basin):

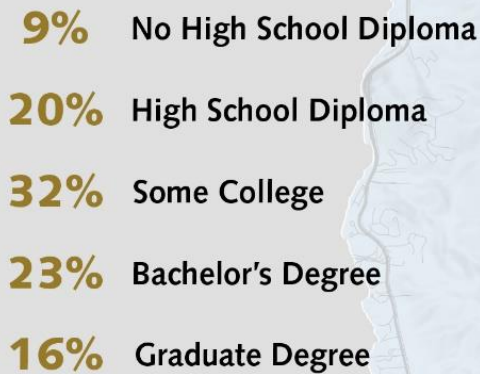


Within Corridor = trips that begin and end within the corridor

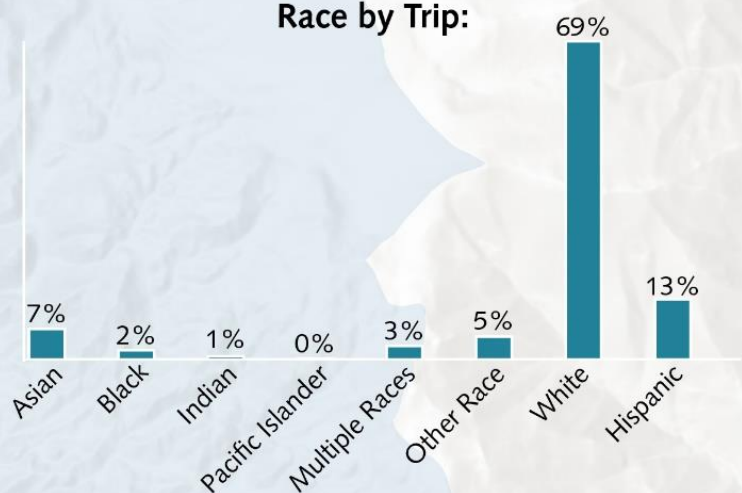
Within Basin = trips to or from the corridor that begin or end outside the corridor, but within the Tahoe Basin

Out of Basin = trips to or from the corridor that begin or end outside the Tahoe Basin

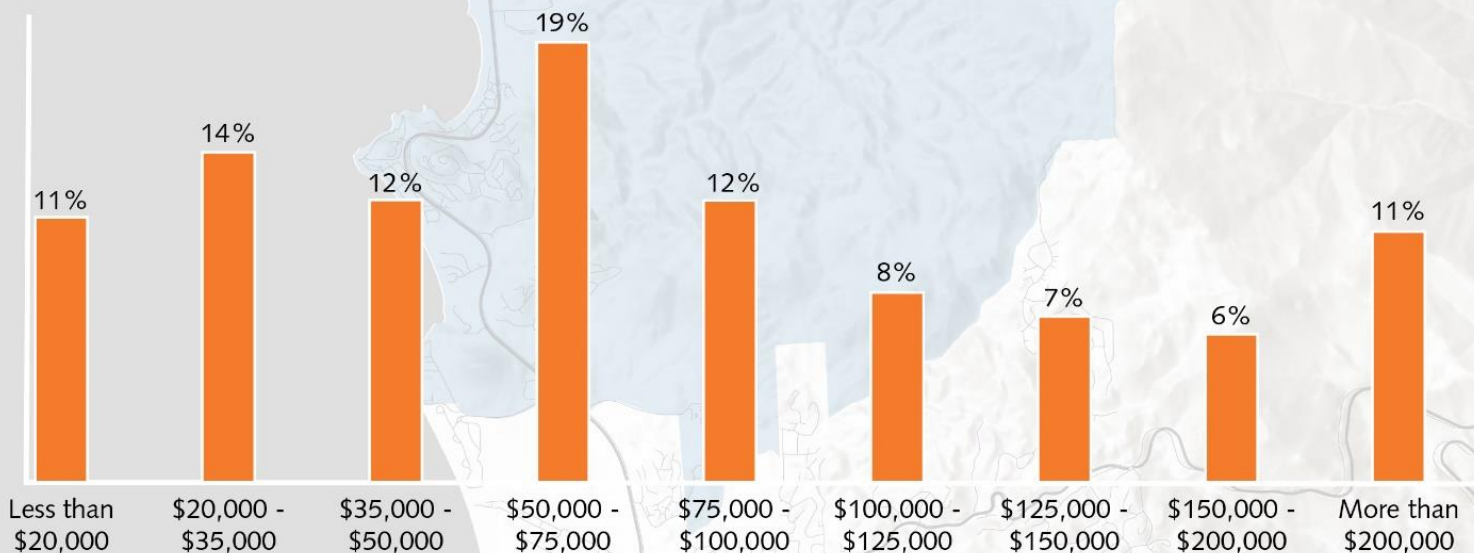
Education Level:



Race by Trip:



Trips by Annual Household Income:



Meyers/Y Corridor

Summary

The Meyers/Y Corridor stretches along U.S. 50 from Trout Creek to the western edge of South Lake Tahoe at SR 89, as well as almost six miles of U.S. 50 south of the “Y” intersection at U.S. 50 and SR 89. It also includes 5.3 miles of Pioneer Trail.

The Meyers/Y Corridor connects the communities of Meyers and South Lake Tahoe, an area that houses one-quarter of all year-round residents in the Tahoe Region. The corridor has over 20 miles of shared-use path and three miles of sidewalk. It provides access to year-round recreation including hiking and mountain biking trails, golf, and extensive public lands.

Challenges

The corridor also functions as an entry/exit route for Discover and Visit Tahoe users from Sacramento and the San Francisco Bay Area. It holds Tahoe’s busiest roads and experiences heavy traffic congestion and long travel delays during peak times of visitation, a situation sometimes compounded by local and visitor traffic as well as severe mountain weather, traffic accidents, and avalanche controls.

Existing transit services do not provide a competitive alternative to the car due to limited coverage and frequency. Many people working in South Lake Tahoe and Stateline live in the Meyers/Y corridor. Home to work car trips by these workers are sometimes impacted by entry/exit travel to the region, compounding congestion. The Meyers/Y intersection is the busiest in the Tahoe Basin with average annual daily traffic of 47,000 vehicles per day and average daily traffic in July exceeding 57,000 vehicles per day.

Vision

A comprehensive pedestrian and bicycle network with convenient transit to effectively connect residents and visitors to the many nearby recreational, residential, and commercial areas. Reliable transit connects the many workers living in Meyers with jobs in South Lake Tahoe, the larger region, and beyond. Traffic on the roadways traversing the community now moves more smoothly, with intersection improvements and new technologies that improve safety and efficiency.

Measuring Success

- Trails
- Transit
- Travel Demand Management (TDM)

Future Focus

- Complete the Meyers/Y Corridor Plan
- South Tahoe Micro Transit Service

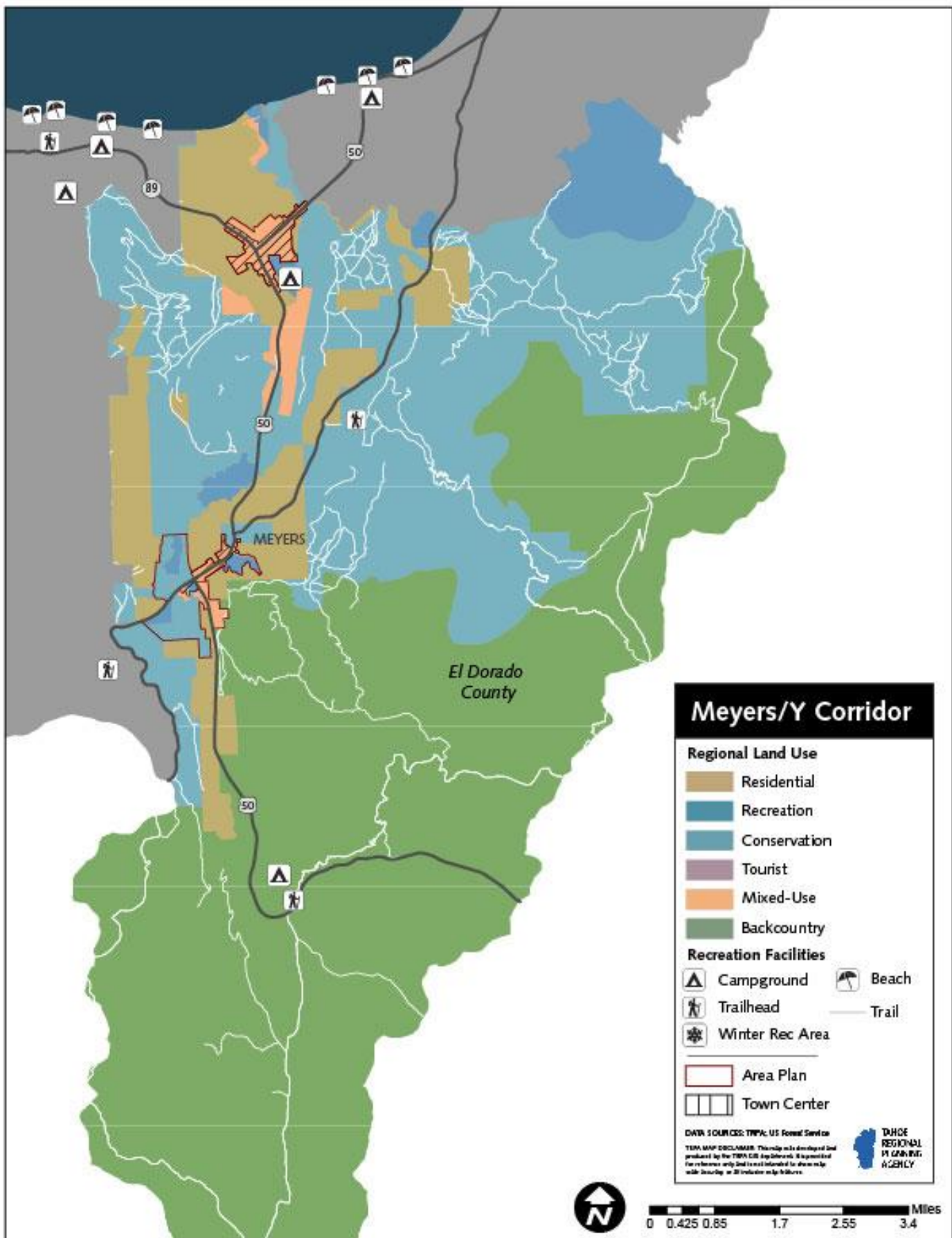
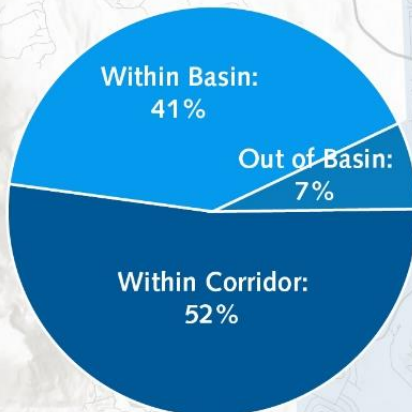


Figure 65: Meyers/Y Corridor

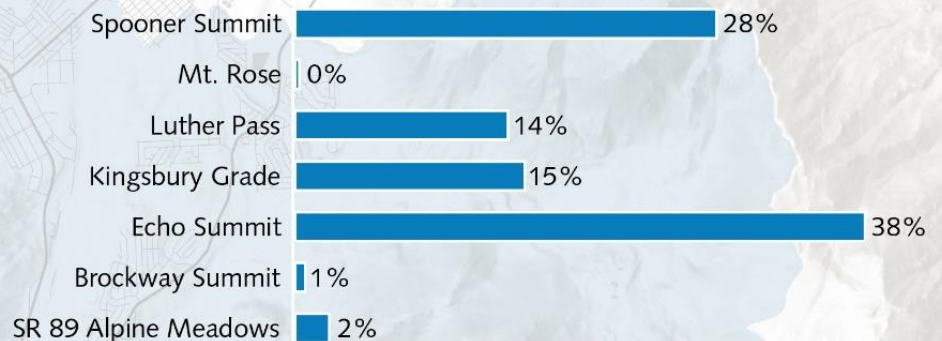
CORRIDOR PROFILE: MEYERS Y

Source: StreetLight Data

Average Daily Trips:



Trips by Entry Corridor (Out of Basin):

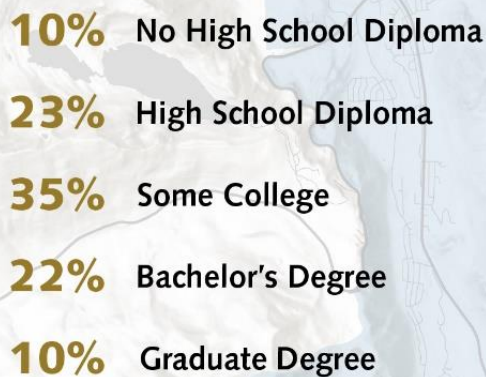


Within Corridor = trips that begin and end within the corridor

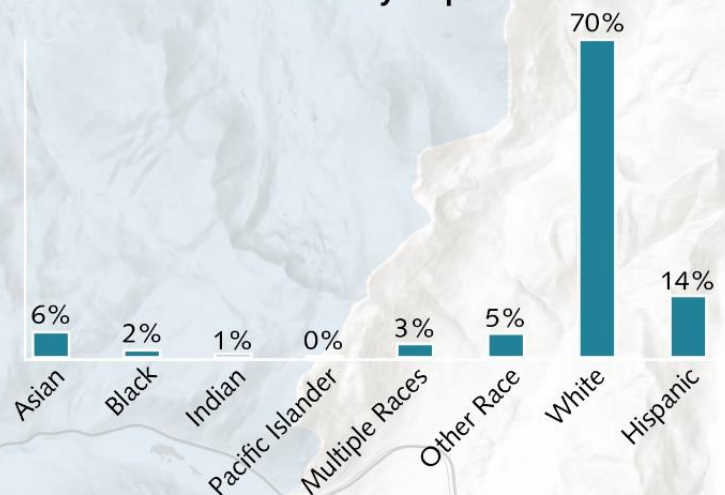
Within Basin = trips to or from the corridor that begin or end outside the corridor, but within the Tahoe Basin

Out of Basin = trips to or from the corridor that begin or end outside the Tahoe Basin

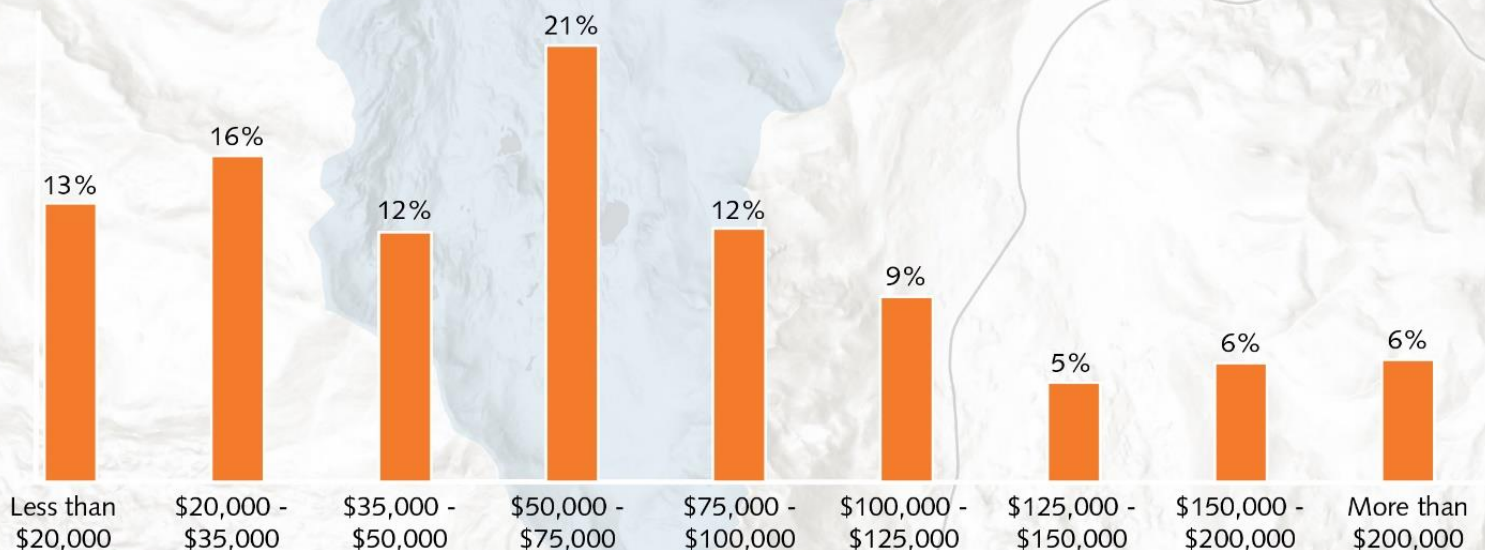
Education Level:



Race by Trip:



Trips by Annual Household Income:



Tracking Efficiency and Effectiveness of the Communities Approach

TRPA's approach to focusing and incentivizing development in and near to regional and town centers and connecting those centers and popular recreation destinations through the RTP/SCS supports the environmental goal of reducing GHG emissions. Progress is tracked using two performance measures: Daily VMT traveled and VMT per capita. These performance measures reflect the extent to which people are driving to destinations such as work, home, and recreation.

The Communities' focus on building mobility hubs in the region and in neighboring regions, and the Bi-State Consultation's recommitment to the Corridor Planning Framework, support the Regional Plan and RTP goals for connectivity and economic vitality and quality of life by creating a seamless, efficient, and accessible

multi-modal transportation system that operates at the highest possible level and supports the safe and efficient movement of people and goods in the region. Two key performance measures track progress toward these goals: the percentage of identified Priority Communities with access to transit services (within ¼ mile), bicycle paths (within ¼ mile), and pedestrian paths (within ¼ mile); and the percentage of overnight lodging and recreation areas with access to transit services (within ¼ mile), bicycle paths (within ½ mile), and pedestrian paths (within ¼ mile).

Safety metrics meet federal requirements and TRPA's Regional Plan and RTP goals for safety, systems preservation, and operations and congestion management through the measurement of crash rates, including serious injury crashes per 100 million vehicle miles travelled, as well as pavement and bridge conditions.

Adaptive Management

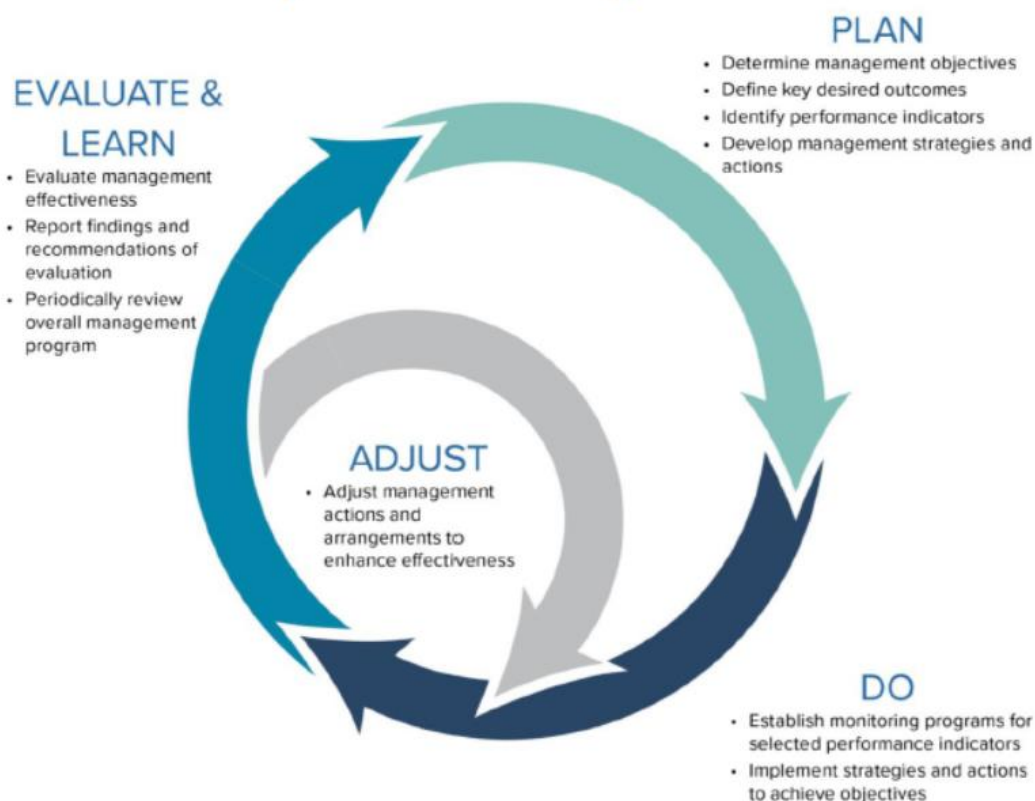


Figure 66: Adaptive Management Process in Monitoring Corridor Performance