





2.6 million vehicles per year impact Lake Tahoe's longest undeveloped shoreline. The fragile roadside ecosystem adds to the challenge of providing access.

## 13 million visits per year to Lake Tahoe 5.5 million recreate in the USFS forest

The country's largest alpine lake, a federally owned reservoir, sits in the middle of the U.S. Forest Service Lake Tahoe Basin Management Unit. With land and lake combined, 87% of Basin watershed is owned or controlled by the federal government. This unspoiled open space is especially attractive to resident and visiting outdoor enthusiasts.

The demand continues to grow with related private car use posing a serious threat to air and water quality. In fact, the source of over 70% of the pollutants clouding the lake is developed-area erosion and run-off, much of it associated with transportation infrastructure and services.

Alternative transportation choices are the key to reconciling access and its impact, but funding is a challenge.

- Lake Tahoe Basin Management Unit does not have an operating budget to service the millions of visitors.
- Yosemite, by comparison, has a \$29 million annual base NPS budget with half the visits.

Collaboration is essential to secure funds for developing and implementing an innovative, integrated transportation system.



# Federal Lands Access Program (FLAP) supports 2 responses to the demand

Projects for a critical access point and a fragile corridor are receiving funding:

- SR 89/Fanny Bridge
  Community Revitalization

  TTD-led, multi-agency project to
  address safety and traffic congestion.

  Will include two roundabouts and a
  new bridge structure.
- SR 28 National Scenic Byway. Unprecedented 13-agency partnership with TTD leadership. Projects and a management plan to protect undeveloped shoreline while providing access.

## Bi-state cooperation with federal participation since 1969

- The U.S. Congress and the California and Nevada state legislatures created a unique Compact in 1969, sharing responsibilities and resources for the lake that crosses the states' border.
- Ahead of their time, the three legislative bodies recognized the need for viable alternatives to the automobile as a mode of transportation and the importance of a good transportation system for the protection, restoration and use of Lake Tahoe.
- In 1980, they amended the Compact to establish the Tahoe Transportation District (TTD) to facilitate and implement Basin and regional transportation improvements/additions.
- Today, the TTD collaborates with federal, state and local agencies, the private sector and community members, to leverage resources from planning and funding through project/program implementation.



### Completed in less than two years, the Incline Gateway is one example of how

#### **Cross-jurisdiction collaborations**



Incline Gateway (complete)

Location: intersection of State Routes 28 and 431

**Construction cost:** state funding of approximately \$2.4 million

Plan/participants: cooperation between federal, state and local agencies and the community.

Nevada Department of Transportation (NDOT) managed construction. Community-led art project for roundabout center. TTD as in-Basin facilitator

**Response to:** community concerns (multiple traffic accidents, some fatalities), high seasonal traffic

**Timing:** related utility relocation work completed spring 2012. Design and construction completed September 2012 one year ahead of plan. Community dedication ceremony October 17

Benefits: improved intersection safety and operation, resulting in fewer accidents; less traffic congestion and side-street traffic overflow; reduced emissions, noise pollution and erosion/runoff from roadway deterioration. Providing a more attractive northern Lake Tahoe gateway that celebrates local public art. Combined with two erosion control projects



#### SR 28 National Scenic Byway

Location: between Incline Village and US 50

**Projected timing and construction cost:** Project Charter commits to a 10-year horizon; varying schedules and costs for projects being proposed

**Plan/participants:** create a national park-like setting with a safer, drivable road and off-street walking/biking trails to connect off-street parking; protect undeveloped shoreline; integrate transit to manage/improve recreational access. TTD acting as in-Basin facilitator for multiple projects developed by an unprecedented, 13-agency collaboration

**Response to:** increase in motorist conflicts with cyclists and pedestrians; more vehicle emissions due to traffic congestion and erosion (nearly double in-corridor shoulder-parking over the past 10 years)

Benefits: protecting one of the lake's longest stretches of undeveloped shoreline; improving safety, traffic flow and environmental impacts while providing appropriate parking; enhancing the recreational experience; leveraging resources, sharing walking/biking trail excavation costs with Incline Village General Improvement District (IVGID)

### Around-the-lake private-car alternative



#### America's Most Beautiful Bikeway™ ]

162 miles new construction, retrofitting existing trails, connecting Basin and adjacent communities

**Per mile estimates:** off-street \$3-4 million, striped on-road \$500,000, signed bicycle/auto roadways \$300,000 (pursuing private, including volunteer labor, local, state and federal funding)

**Plan/participants:** federal, state, local and privatesector undertaking to complete new off-street, striped on-road and signed shared-use segments

**Response to:** lack of access to destinations in and near the Basin, need for alternative to private cars

**Benefits:** safer, better bicycling and walking options to enhance recreation access and transportation choices; improving air quality and protecting lake clarity; economic development of bicycle tourism



South Demonstration Project Phases 1b and 1c Complete

**Location:** Stateline commercial core to Round Hill Pines Beach

**Timing:** Phases 1b and 1c – Kahle Drive to Round Hill Pines Beach – complete. Construction in progress for Laura Drive/Phase 1d, summer 2015

#### North Demonstration Project

**Location:** Incline Village to Sand Harbor

Funding: state, local, private and federal

**Timing:** Environmental Assessment completed and preferred alignment chosen for project development. Construction start planned for 2016

#### Meeks Bay Segment

Location: Sugar Pine Point to Meeks Bay Resort

**Timing:** start pending match for Federal Lands Access Program (FLAP) funds advance

### Shuttle, local and commuter transit



#### East Shore Express Shuttle and Parking

**Location:** Incline Village parking, shuttle to Sand Harbor beaches

**Construction/operating costs:** Planning for permanent terminus. Final costs to be determined through planning process (pursuing local, state and federal funding). Buses supplied and operated by TTD

**Timing:** park and ride operating from temporary Incline Village terminus mid-June through Labor Day, 2015. Permanent parking, expansion to full corridor and operational funding in development

**Plan/participants:** developed by federal, state and local agencies and the community; facilitated by TTD

**Response to:** community and public safety, agency concerns about safety, seasonal congestion, shoulder parking-related erosion

**Benefits:** improving safety, especially for pedestrians and bicyclists; reducing congestion with fewer cars waiting to park and/or enter Sand Harbor; decreasing erosion by reducing/eliminating shoulder parking

Pilot period ridership: up 21% in second of two years



#### TTD Transit Operations and Facilities

**Location:** South Shore transit passenger facilities and fixed routes, commuter service between South Lake Tahoe/Stateline and Carson City, Carson Valley

**Funding:** federal transit subsidies, state and privatesector support, service revenues

**Operations:** seven-day, year-round, regularly scheduled, in-Basin and regional transit managed by TTD under its operational authority. Logs 780,000+ passenger trips per year. Ongoing program of construction of passenger facilities integrated with walking, hiking and biking trails, wired for future implementation of real-time information technology

Participants: public and private support

**Response to:** metropolitan needs for reliable, safe, attractive, convenient facilities and services for residents, commuters and tourists. Negative impacts on infrastructure and environment from growing private-car use

**Benefits:** in-Basin/regional coordinated transit system, reducing congestion, decreasing emissions, noise pollution and erosion/runoff from roadway deterioration; safe, relaxing, scenic transportation and passenger shelter during inclement weather

### Cross-lake and cross-community transit



#### All-season Crosslake Passenger Ferry

Location: north to south shores

**Construction cost:** approximately \$34 million including piers, transfer centers, parking and two, 120-passenger vessels. Exploring federal, state and local funding opportunities

**Timing:** high-speed ferry identified as Local Preferred Alternative (LPA) after recent analysis of 10 north-south shore transit options; preparation of environmental impact documents in progress; vessel research and preliminary engineering underway

**Plan/participants:** FTA, TRPA and TTD preparing environmental impact documents; federal, bi-state and local agencies, communities and businesses support the project

**Response to:** need for time-efficient, year-round environmentally positive regional transit system; anticipated growth that will overwhelm infrastructure

Benefits: lower environmental impact compared to building additional road capacity; reduces private-car congestion, emissions and impact on erosion; estimated 20-minute savings in typical travel time compared to driving; recreational attraction for visitors; jobs for residents; centerpiece for an integrated transit system



## Truckee North Tahoe TMA, Placer County Multiple Ongoing Operations

**Locations and participants:** within and beyond the Basin with TTD, public and private support

**Funding:** federal transit subsidies, state and privatesector support, service revenues

**Operations:** North Lake Tahoe Express and Night Rider managed by the TMA under TTD authority to own and operate systems and facilities; TART operated by Placer County

North Lake Tahoe Express: to/from Reno-Tahoe International Airport and various stops; daily service 5am to midnight

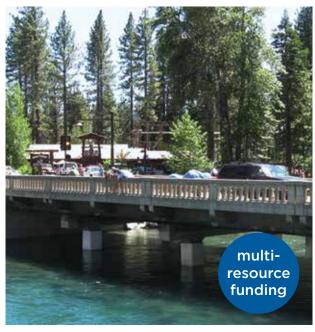
**Night Rider:** Homewood to Squaw Valley to Tahoe City to Crystal Bay, 7pm to 2am, free

**Tahoe Area Regional Transit:** daily bus service along the north and west shores, SR 89 from Tahoe City to Alpine Meadows and Squaw Valley and SR 267 to Northstar and Truckee

**Response to:** need for reliable, convenient services for residents, commuters and tourists

**Benefits:** reducing private-car congestion, noise, emissions and erosion/runoff from deteriorating roads; potentially part of regional transit system

### Integrated, comprehensive improvements



SR 89 / Fanny Bridge Community Revitalization Project

Location: southwest end of Tahoe City, CA

**Construction cost:** Federal Lands Access Program (FLAP), state and local funding

**Projected timing:** with the Environmental Document certified and the Preferred Alternative agreed upon, facilitator TTD and the Central Federal Lands Highway Division are moving ahead with project development; construction start June 2016

**Plan/participants:** joint undertaking of the TTD, federal, state and local agencies, property and business owners will realign SR 89, replace the bridge across the Truckee River, install two roundabouts and promote redevelopment in the "Wye" area

Response to: community plans for safety and community cultural concerns about the historic bridge; present and future travel demand on California SR 89/28, the river crossing and intersections; transit service delays

**Benefits:** improving pedestrian, cyclist and driver safety; providing two viable emergency evacuation routes from the West Shore; making public transportation more effective; lessening environmental impacts by reducing vehicle emissions and improving stormwater treatment



US 50 / South Shore Community Revitalization Project

**Location:** US 50 between Pioneer Trail in South Lake Tahoe, CA and Lake Parkway in Stateline, NV

**Construction cost:** \$72 million estimate for ROW and construction (pursuing federal, state and local funding)

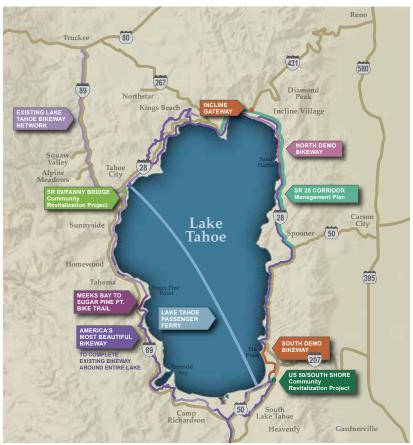
**Projected timing:** route alternatives being vetted through the public process for the Environmental Impact Study (EIS); decision after EIS is completed.

**Plan/participants:** federal, state and local agencies, residents, business and property owners working together toward possible realignment of US 50 and converting the existing route for reclassification as a local street with local area control and development; TTD-facilitated

**Response to:** community plans to address insufficient and outdated infrastructure for ongoing improvements; need for provisions for pedestrians, cyclists, drivers

Benefits: relieving congestion; improving safety, connectivity, reliability, travel times and air and water quality; potentially creating a local main street; enhancing economic development opportunity; updating adjacent properties and improving affordable housing units

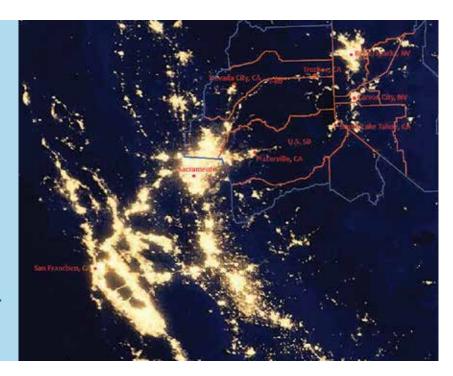
### Transportation project locations



### **Transit locations**



Metropolitan areas across
the country are spreading
into densely populated
"megapolitans." 15 million
residents of the growing
Northern CaliforniaNevada megapolitan,
shown here at night,
already consider access
to the Tahoe/Trans Sierra
region as a key contributor
to their quality of life.



### **Challenges for Tahoe transportation**

- Growth dichotomy. Over the next 20 years, the number of residents in the Greater Tahoe Basin and surrounding region is expected to increase by only 1%. By contrast, the number of annual visits is projected to grow by approximately 22%.
- **Demand impact.** This would completely overwhelm existing infrastructure.
- Funding dilemma. While transportation demand is already at urban levels and continues to grow, state and federal policies haven't acknowledged the trend. Funding for critical improvements and alternatives to private car use in the Tahoe/Trans Sierra region is still at a rural level.

### **Current funding focus**

- State and federal emphasis. With budget cuts, agencies are allocating limited monies where the need seems greatest: population centers and commute corridors.
- Self-help in urban areas. Facing the uncertainty of state and federal funds, local governments with stronger economies and large population bases are self-funding some projects/programs.
- Partnerships to compete. Collaboration is key to securing limited funding for alternatives to private car use in the Tahoe/Trans Sierra region with its small resident population and ongoing, slower economic recovery.

### New delivery model

- Collaboration and cooperation. Remove jurisdictional impediments. Leverage individual contributor strengths to achieve mutual goals.
- Comprehensive corridor plans. Develop solutions that promote economic vitality, protect the environment and improve quality of life.
- Significant community participation.

  Engage in an ongoing dialogue to seek input on purpose/needs, share information, respond to concerns and discuss benefits.

## Trans Sierra Transportation Coalition (TSTC)

- Six California counties (Alpine, Amador, El Dorado, Nevada, Placer, and Sierra), five Nevada counties (Carson, Douglas, Lyon, Storey, and Washoe), federal and state agencies, stakeholders, citizens and the TTD are participating in this informal group.
- Concerns include peak periods congestion, lack of staging areas to encourage inter-region transit use and lack of funding for infrastructure maintenance and construction.
- The TSTC is beginning to develop local support for the concept of long-term financing for integrated transportation solutions.



### Tahoe transportation innovation through collaboration

Federal, state, local and private-sector organizations are working with the TTD to secure funding and accelerate project delivery. Here is a partial list:

**Federal Agencies.** U.S. Department of Transportation/Federal Highway Administration, U.S. Forest Service, U.S. Department of the Interior, Federal Transit Administration, U.S. Army Corps of Engineers

State of California Agencies. Caltrans, California State Parks, California Environmental Protection Agency, California Highway Patrol, California Tahoe Conservancy Lahontan Regional Water Quality Control Board

**State of Nevada Agencies.** NDOT, Nevada State Parks, Nevada Division of State Lands, Nevada Division of Environmental Protection, Nevada Highway Patrol

Bi-state Regional Agencies and Organizations. Tahoe Regional Planning Agency, Tahoe Metropolitan Planning Organization, South Shore Transportation Management Association, Truckee North Tahoe Transportation Management Association, Washoe Tribe of Nevada and California

California Local Agencies and Organizations. County of El Dorado, County of Placer, Nevada County, El Dorado County Transportation Commission, Nevada County Transportation Commission, Placer County Transportation Planing Agency, City of South Lake Tahoe, South Tahoe Public Utility District, North Tahoe Public Utility District, Tahoe City Public Utility District

Nevada Local Agencies and Organizations. Carson City, County of Douglas, County of Washoe, Carson City Regional Transportation Commission, Incline Village General Improvement District, Kingsbury General Improvement District, Washoe County Regional Transportation Commission

Private Sector. Chambers of Commerce, Commercial Property Owners, Incline Village/Crystal Bay Visitors Bureau, Lake Tahoe Visitors Authority, North Lake Tahoe Resort Association, South Tahoe Alliance of Resorts (Edgewood Companies, Harrah's Tahoe, Harveys Resort Hotel and Casino, Hard Rock Hotel and Casino Lake Tahoe, Lake Tahoe Resort Hotel, Lakeside Inn and Casino and Vail Resorts), South Lake Tahoe Lodging Association, Tahoe Fund, The Ridge Resorts

#### From innovation to implementation

Transportation needs in Lake Tahoe stem from a unique intersection of interests. For example, improvements associated with road corridors account for two-thirds of Tahoe's Environmental Improvement Program (EIP), a federal, state and local partnership. The following is a proposal for goals, actions and funding, on the part of all interests, to develop, implement and maintain an innovative, integrated, comprehensive Tahoe/Trans Sierra transportation system.

#### **■** Federal Government

Adopt technical language for TMPO as a TMA in a long-term federal transportation bill.

Make Tahoe a focus area for Federal Lands Transportation Program for the LTBMU and for the Federal Lands Access Program for local and state transportation projects.

**Funding target** over the next six years or the life of the transportation bill \$25 million a year for transit and capital improvements

#### ■ State of California

Support changes to California formulaic funding streams for transportation to the Tahoe Basin based on federal technical language making TMPO a TMA.

**Funding target** over the next six years \$15 million a year for transit and capital improvements \$10 million from Cap and Trade for SCS implementation

#### State of Nevada

Support bond sales from the \$100 million EIP authority for shared use trail development and other EIP corridor improvements.

Funding target over the next six years \$10 million a year for transit and capital improvements

#### Local Governments

Support the development and/or enhancement of a menu of funding sources for transit operations and capital improvements.

Funding target over the next six years \$10 million a year

#### ■ Private Sector

Support the development of a menu of local and/or private-sector funding sources for transit operations and capital improvements. Investment in commercial properties to enhance ADA access, and facilitate pedestrian, bicycle, transit, and auto access.

Funding target over the next six years \$10 million a year

