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## MEMORANDUM

Date: February 18, 2015  
To: TRPA Governing Board  
From: TRPA Staff  
*Subject:* 2014 Annual Report

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**Requested Action:** This item is for informational purposes only and no action is required.

**Background and Discussion:** The 2014 TRPA Strategic Plan is designed to guide the Agency for the next 3 to 5 years. Its four key strategic priorities:

1. Accelerating Threshold Attainment
  - a. Implementing the Regional Plan
  - b. Environmental Improvement Program (EIP) Funding
2. Using Best Science
3. Being a Leader in Sustainability
4. Operating as a High-Performance Team

Text in the attached Staff Report tracks to but in many circumstances expands and provides added detail on what was summarized and produced as the final 2014 Annual Report. In addition, the Staff Report appends additional annual performance reporting required by the Regional Plan as well as sustainability indicators reporting.

**Contact Information:**

Joanne S. Marchetta, Executive Director TRPA

**Attachments:**

1. Regional Plan Performance Measures
2. Area Plan Metrics
3. Sustainability Indicators

# 2014 Accomplishments and Future Priorities

## **ACCELERATE THRESHOLD ATTAINMENT**

*Implement the 2012 Regional Plan – Focus on regional issues such as adapting to climate change.*

TRPA's three Planning Divisions – Long Range, Current, and Transportation – implement ongoing regional planning that fulfills the Bi-State Compact requirement for a Regional Plan and related ordinances, rules, and regulations to achieve and maintain environmental threshold carrying capacities and allow for development consistent with those standards. Rather than waiting years for plan updates, regular and continual amendments are now identified through annual Governing Board priority setting lessening the time for response to regional issues. Targeted modifications to address identified barriers and encourage implementation of the 2012 Regional Plan are currently the primary focus of TRPA's Planning Division.

### Long Range Planning Division

Annual priority-setting by the Governing Board identifies resulting Plan and Code amendments, and Regional Plan and Code of Ordinances reviews that are based on evaluation of every four years of progress toward achieving and maintaining the environmental thresholds.

### 2014 Accomplishments

- Completed a "Tahoe Regional Housing Needs Program Report" to identify population demographics, economic trends, conditions of housing stock and affordability, constraints to construction and preservation of affordable housing, and barriers in TRPA regulations that hamper affordable housing projects.
- Convened a working group to evaluate potential improvements to rules governing coverage transfers across hydrologically related areas as a way to accelerate threshold attainment by reducing coverage associated with older developments built in sensitive Stream Environment Zones. The working group also evaluated potential improvements for the Excess Coverage Mitigation Program to accelerate attainment of environmental thresholds.
- Work is ongoing to develop updated shorezone regulations in response to court-ordered invalidation of the 2008 rules. Funding is available to complete the associated environmental analysis and changed environmental conditions (e.g. drought) may call for updated rules that incorporate new information.
- Provided additional funding for a woodstove rebate program to accelerate the replacement of older polluting woodstoves in the Tahoe Region. In 2014, as part of this program, local jurisdictions pre-approved 54 applications for vouchers within the Tahoe Basin, totaling \$20,100 and 7 woodstoves were replaced with newer EPA-certified woodstoves or other devices that emit substantially less particulate matter, greenhouse gases, and toxic air contaminants.

### Future Focus

Long Range Planning will continue collaborating with local governments and communities preparing Area Plans and process them through conformance, environmental review, and adoption processes. Five

Area Plans are currently in progress. The Division will also complete work on priority projects started in 2014. The Regional Land Development Commodities Action Plan identifies various systematic barriers discouraging successful implementation of the 2012 Regional Plan. The Division's focus is to recommend narrow plan modifications to address these barriers, including updating the Excess Coverage Mitigation Program, improving policies for coverage transfers across hydrologically related areas, improving transfer incentives to better facilitate environmental redevelopment, and developing a viable strategy for an update of shorezone regulations.

### **Current Planning Division**

The Current Planning Division implements the Regional Plan by providing timely and consistent review of project applications to achieve environmental improvement and economic investment consistent with the TRPA Regional Plan and Code of Ordinances.

### ***2014 Accomplishments***

- Received and processed 639 permit project applications in 2014. Ninety-eight percent were screened for completeness within 30 days of receipt and 95 percent were reviewed and issued within 120 days of being found complete. Ninety-nine percent of surveyed customers rated their experience with the Customer Service Counter as “good” or “excellent”.
- Updated the TRPA residential allocation program with Governing Board approval, strengthening the environmental benefits linked to the annual Basin-wide allocation of residential parcel development. Annual distribution of residential allocations is now tied to local jurisdictions meeting performance targets for Total Maximum Daily Load (TMDL) implementation. Other amendments update the percent distribution of allocations among local jurisdictions; expand opportunities for jurisdictions to share allocations; and change the allocation release to a two-year distribution cycle. They also allow jurisdictions to earn added allocations by removing and retiring coverage in Stream Environment Zones, concentrating new residential units within town centers, completing Environmental Improvement Program projects, or improving transportation service.
- Consolidated a number of memoranda of understanding (MOUs) with the City of South Lake to streamline the project review process and improve consistency in monitoring and reporting for projects within Area Plans.
- Major projects reviewed and approved:
  - a. Edgewood Lodge and Golf Course Improvement Project: Construction is underway on the changes to the gold course ponds for water quality, vegetation, wildlife habitat, and Stream Environment Zone improvements.
  - b. Heavenly Resort launched its top-of-the-Gondola summer activities last summer improving family recreation opportunities and recreation access on the South Shore.

### ***Future Focus***

The Current Planning Division is piloting a new internal Continuous Improvement Program intended to streamline and update outdated TRPA processes. The team is working to improve its Land Capability, Land Coverage Verification, Unit of Use Verification, and Site Assessment processes. The Division will train additional staff, modify application processes, improve processing, change applicant requirements,

and use consultants as needed to simplify the project application process and reduce application processing times. The Division will work with local jurisdictions to develop MOUs that allow local governments to review and approve routine types of projects to further improve efficiency and overall customer service.

### **Regional Plan Compliance and Enforcement**

The Code Compliance Program implements inspection, monitoring, and enforcement to ensure that projects and activities comply with the TRPA Regional Plan, Code of Ordinances, and MOUs. Primary responsibilities include: Code enforcement, physical inspection of permitted projects, MOU monitoring, and Best Management Practices (BMPs) inspection and enforcement.

#### ***2014 Accomplishments***

- Performed 1,074 compliance inspections. Of these, 104 led to TRPA Code enforcement cases. Seventy-three were resolved, referred, or recorded; 21 resulted in administrative penalty assessments; and 10 major violations resulted in Governing Board approved settlements and penalty assessments.
- Completed 100 percent of pre-grade inspections within three days of request and 100 percent of final inspections within 15 days.
- Completed 100 MOU audit inspections, selecting at random and inspecting at least 10 percent of all active projects for conformance with winterization guidelines and compliance with security release conditions. All jurisdictions scored between 90 and 99 percent in both categories. Where needed, corrective action was agreed upon and monitored to ensure completion.
- With support from Stormwater Management Program grant funding, the Code Compliance Program team performed 80 BMP inspections in 2014 and initiated work on a targeted BMP enforcement action plan against the most recalcitrant or highest priority property owners who have received notice letters but failed to install BMPs.

#### ***Future Focus***

The Code Compliance Program will seek Governing Board endorsement to implement the BMP enforcement plan. Other initiatives for 2015 will improve long-term permit compliance monitoring, strengthen BMP compliance tools, and continue to enhance MOU monitoring.

### **Transportation Planning Division**

The Transportation Planning Division develops and drives implementation of regional transportation plans required by the Bi-State Compact. The TRPA Governing Board, along with a U.S. Forest Service representative, is the designated Tahoe Metropolitan Planning Organization (TMPO) for the Lake Tahoe Region and the Transportation Division serves as the TMPO staff to maintain and implement a continuing, comprehensive, and coordinated regional transportation plan.

#### ***2014 Accomplishments***

- Created the On Our Way grant program and awarded more than \$550,000 in federal funding to local jurisdictions, school districts, and non-profits to identify neighborhood- and community-level transportation project that meet regional sustainability goals of walkable, mixed-use town

centers; increased biking, walking, and transit use; enhanced economic vitality; and reduced environmental impacts.

- Transportation is transformation with most projects providing multiple benefits including water quality, air quality, multi-modal transportation options, recreation access and opportunities, scenic improvements, and community economic revitalization. Major transportation projects completed in 2014 include:
  - a. **Caltrans:** Completed \$27 million of upgrades to seven miles of U.S. Highway 50 in South Lake Tahoe and Meyers to improve pedestrian access and reduce stormwater pollution. Completed a \$4 million project to improve stormwater drainage on State Route 89 between Tahoe City and Squaw Valley. Started \$90 million of construction to reduce stormwater pollution on 16 miles of State Route 89 from Emerald Bay to Meeks Bay and from Tahoma to Tahoe City.
  - b. **Nevada Department of Transportation:** Rebuilt four miles of Kingsbury Grade. The \$13.5 million project installed more than 6,000 feet of storm drain, 8,700 feet of curb and gutter, and 3,000 feet of sidewalk.
  - c. **Tahoe Transportation District:** Built another 1.3 miles of the Nevada Stateline to Stateline Bikeway. The \$2.2 million project extended from Elks Point Road to Round Hill Pines Resort with an access spur to U.S. Highway 50.
  - d. **Placer County:** Started an estimated \$48 million project to overhaul State Route 28 in the Kings Beach Commercial Core with lane reductions and major traffic, streetscape, pedestrian, and stormwater improvements.
  - e. **El Dorado County:** Built 1.7 miles of Class 1 bike trail along Lake Tahoe Boulevard from South Tahoe High School to Sawmill Pond and started building another two miles of Class 2 bike trail from Sawmill Road to Tahoe Mountain Road.
  - f. **City of South Lake Tahoe:** Completed the nearly \$5 million Harrison Avenue Streetscape Improvement Project to improve traffic flow, sidewalks, bike paths, street lighting, and stormwater drainage.

### *Future Focus*

Advocate to secure new transportation investment funds in the face of precipitous decline in historical funding sources. Partner with the Tahoe Transportation District and other Basin organizations on a long-range regional transit plan for improved connectivity and increased ridership. A newly completed Bay to Basin study provides foundational data supporting the need for an integrated interregional transit system at Lake Tahoe and related funding. A subsequent Trans-Sierra Study will be completed. The reports identify sequenced operational and facility improvements needed to shape the envisioned system, steps to implement free-to-rider service, expanded public and private partnerships, connections to recreation areas, and an innovative finance strategy to implement the plan. Partner with Tahoe Transportation District to complete a comprehensive corridor study that identifies targeted transportation needs in and between Lake Tahoe communities, as well as a blueprint for proposed funding and opportunities to leverage limited financial resources.

## **DEVELOP AND IMPLEMENT NEW FUNDING STRATEGIES FOR THE ENVIRONMENTAL IMPROVEMENT PROGRAM (EIP)**

***The Region is confronted with constrained state funding sources and the decline of multiple federal grants that support restoration, science, and monitoring programs.***

The Environmental Improvement Division leads and coordinates the implementation of the Tahoe ecosystem restoration initiative, the Environmental Improvement Program (EIP). The Division provides leadership within the EIP partnership to develop new financing strategies for future projects and programs and sets priorities so that the ever-more-limited funding for EIP projects is being used on those projects that will achieve maximum threshold gain.

### **Stormwater Management Program**

The Stormwater Management Program's purpose is to reduce the amount of pollutants flowing into Lake Tahoe and accelerate attainment of water quality thresholds. The primarily grant-funded program focuses on mitigating the impacts of development through roadway infrastructure projects, area-wide water quality treatment projects, and installation of Best Management Practices (BMPs) on private parcels. TRPA actions supplement and support rather than replace or duplicate the Lake Tahoe Total Maximum Daily Load (TMDL). TRPA coordinates with local jurisdictions and partner agencies to identify priority locations for pollutant load reduction projects to ensure the most effective use of limited implementation resources.

### **2014 Accomplishments**

- Issued 208 BMP completion certificates for newly permitted projects and 289 certificates for BMP retrofits of existing development. As of December 31, 2014, TRPA has issued 16,879 BMP certificates, bringing total compliance within the Region to 39 percent.
- Completed three high-priority area-wide water quality improvement projects in 2014 to treat stormwater runoff from both public roadways and private parcels. Area-wide projects offer greater efficiencies through public and private partnerships that meet property BMP requirements, provide revenue for routine maintenance, and help local jurisdictions meet TMDL requirements. While such projects can be stand-alone water quality improvement projects, more frequently they are occurring as part of larger projects offering multiple benefits. Area-wide projects completed in 2014 are the Harrison Avenue Streetscape and Water Quality Improvement Project, the Bijou Erosion Control Area-Wide Project, and Cave Rock Estates General Improvement District Water Quality Improvement Project. These three projects resulted in 42 parcels achieving a BMP Certificate of Completion by the end of 2014.
- Secured new grant funding from California and Nevada sources to keep BMP retrofit program operating in face of fiscal cliff. Reorganized BMP Program onto general fund to stabilize staffing and renewed contracts with the Tahoe Resource Conservation District (Tahoe RCD) for single family dwelling BMP retrofits using newly secured grant monies.

- Through a multi-stakeholder working group, evaluated options to improve BMP compliance and developed a BMP Action Plan recommending focused improvements to various stormwater management strategies.
- With assistance from the Tahoe RCD, coordinated development of instructional BMP videos to guide property owners on proper BMP installation and maintenance. The videos can be viewed online at [www.tahoebmp.org](http://www.tahoebmp.org).
- In coordination with local jurisdictions, notified 295 single-family residential parcel owners of BMP compliance requirements; 116 properties in Washoe County and 179 properties in the City of South Lake Tahoe. Of the 295 notified owners, 28 BMP Completion Certificates were issued and the remainder are in process.

### *Future Focus*

Identify and pursue additional area-wide water quality improvement projects; train private contractors on BMP design and maintenance at the 2015 Contractor's Workshop in April; develop streamlined electronic permitting for small routine BMP projects; finalize approval of the BMP Compliance Working Group's recommended Action Plan; develop and implement targeted BMP enforcement plan; and notify additional private parcel owners of BMP compliance requirements in coordination with TMDL Load Reduction Plans.

### Forest and Vegetation Management Program

The Forest and Vegetation Management Program restores and maintains healthy and fire-safe forests and provides prioritized direction in fuel reduction and forest management activities to promote ecosystem resiliency. In collaboration with partners implementing projects that protect and manage vegetation and the forests in the Lake Tahoe Basin, the purpose of TRPA's program actions are to improve water, air, land, recreation, and scenic resources and protect the Basin from potential hazards such as catastrophic wildfire.

### *2014 Accomplishments*

- With collaborating partners, TRPA updated the Lake Tahoe Basin Multi-Jurisdictional Fuel Reduction and Wildfire Prevention Strategy, which was presented at the 18<sup>th</sup> annual Lake Tahoe Summit in August.
- TRPA assisted implementation of the Strategy by acting as the Chief of Planning for the collaborative Tahoe Fire and Fuels Team and as a member of the Multi-Agency Coordinating Group.
- Addressed environmental regulations through a streamlined permitting process, technical assistance, and outreach to homeowners, businesses, ski resorts, and partner agencies on forest health, urban forestry issues, defensible space and risk assessment. Through multi-agency hazardous fuels reduction partnership, the Incline Fuels Reduction Project treated an additional 125 acres and progress continued on the South Shore Fuels Reduction Project's goal of treating 10,000 acres. Since 2008 more than 5,500 acres of fuels treatments have been completed on non-federal lands and over 23,600 residences have been inspected for defensible space.

- TRPA is advising on the 2002 Tahoe Yellow Cress Conservation Strategy. The strategy will be considered by the U.S. Fish and Wildlife Service in its endangered species assessment listing decision in 2015.

### *Future Focus*

Implement the Lake Tahoe Basin Multi-Jurisdictional Fuel Reduction and Wildfire Prevention Strategy adopted in August 2014. In 2015, fuels reduction projects in Carnelian Bay and Kings Beach are identified for completion. The Tahoe Fire and Fuels Team is developing methods to report multiple resource benefits realized from fuel reduction and forest restoration projects. Complete the Tahoe Yellow Cress Conservation Strategy as input to the U.S. Fish and Wildlife Service's endangered species listing decision in 2015.

### Aquatic Resources Program

TRPA's Aquatic Resources Program leads the Lake Tahoe Region partnership in actions needed to prevent the introduction of new aquatic invasive species (AIS) and eradicate or control the spread of existing AIS. The program implements the Lake Tahoe Aquatic Invasive Species Management Plan, and has set a key goal of securing long term, stable funding for continued operations of AIS prevention needs.

### *2014 Accomplishments*

- Pursued permanent baseline budget enhancements totaling \$750,000 from California and Nevada to secure long-term funding needed for continued operation of the AIS Prevention Program (boat inspections) as a result of sunseting Southern Nevada Public Land Management Act (SNPLMA) funding.
- Updated the Lake Tahoe AIS Management Plan. The document was approved by the Federal Aquatic Nuisance Species Task Force. The updated Plan makes Tahoe eligible for certain federal funding. Members of the Aquatic Nuisance Species Task Force recognized the Lake Tahoe Plan as a model for other plans.
- Inspected more than 7,000 boats. Of those, more than 2,700 required decontamination because they were from a high risk water body, because of onboard water or moisture, or because of observed evidence of AIS. Inspections intercepted 48 boats with evidence of AIS, 12 of which had evidence of invasive mussel species. Intercepted boats fouled with mussel evidence came from the Lower Colorado River system, the Great Lakes, and Mississippi River.
- Prevention Program partners successfully launched more than 28,000 sealed boats during 2014.
- The Tahoe Keepers program continued to educate owners of non-motorized watercraft about AIS. The program registered 807 new Tahoe Keepers in 2014 for a total of 2,457 registered members.
- The Emerald Bay Asian Clam Pilot Control Project treated 5.5 acres of Asian clam infestation in Emerald Bay with rubber mats laid down to suffocate the clams. The mats were removed in summer 2014. A science team will publish results of the project in spring 2015. Preliminary findings indicate an overall clam mortality rate of about 90 percent.



- Three weed removal projects started: 0.5 acres on the Lake Tahoe side of the dam in Tahoe City, on the Truckee River five miles downstream from the dam, and 1.5 acres in the marina at Crystal Shores Condominiums.
- Monitored for the presence of invasive mussels in Lake Tahoe and Fallen Leaf Lake. Three rounds of sampling showed no detections of dreissenid mussel species in the lakes.
- Partnered with the Western states “Building Consensus in the West” coalition to develop a consistent set of AIS standards and protocols for high-risk waters and boats.
- Partnered with private industry to bring to market the first ever technology designed to prevent the spread of AIS. A ballast filter developed by Wake Worx, LLC, filters water for AIS prior to entering a boat’s ballast tanks.

### *Future Focus*

TRPA and its partners will continue to pursue long-term, reliable funding for the AIS Prevention and Control Programs. Completion of a Lake-wide control strategy is expected in 2015. The strategy will guide the type, priority, and location of future control efforts. In consultation with science partners, additional research and alternative control measures will be identified. TRPA is guiding the Tahoe Keys Property Owners Association on completion of its integrated management plan addressing AIS control. The Tahoe Keys is the primary source of spread for invasive aquatic weeds in the Lake. TRPA will continue to provide national and regional policy leadership and direction on AIS prevention and control through participation in the Congressional AIS Coalition and as host to the 2015 annual conference of the Western Regional Panel on Aquatic Nuisance Species.

### EIP Program Administration

#### *2014 Accomplishments*

- Developed an online EIP Reporting Tool for more efficient tracking and reporting of EIP project status and accomplishments to aid annual coordination and accountability reporting by more than 50 EIP implementing and funding partners. The EIP Reporting Tool was developed with Southern Nevada Public Land Management Act funding through the U.S. Environmental Protection Agency.
- Produced and directly mailed two issues of Tahoe In Depth to all Basin property owners. Tahoe In Depth is a biannual publication that aims to inspire environmental understanding and stewardship at Lake Tahoe. The purpose is to give homeowners, landowners, visitors, and policymakers clear, straightforward, and interesting information about the Lake Tahoe environment, from successful restoration to ongoing challenges.

### *Future Focus*

Secure funding needed to continue EIP programs and projects. Complete build-out of EIP work groups to support EIP administration and implementation priorities.

## **ESTABLISH TRPA AS A LEADER IN ENVIRONMENTAL AND SUSTAINABILITY PROGRAMS**

***Establish New Cutting-Edge, Nationally Recognized Environmental and Sustainability Approaches and Programs. The agency operates on a world stage and the time is ripe for growing TRPA's reputation nationally and internationally as a leader in environmental restoration and sustainability approaches. We will use best practices and form new strategic alliances.***

### **Lake Tahoe Sustainable Communities Program**

The Lake Tahoe Region has a long history of balancing the natural and human systems to protect the landscape for future generations. To that end, TRPA has been building a framework for sustainability since before it became a common catchphrase. Climate change effects have arrived in the Sierra Nevada and are projected to continue into the foreseeable future. Increased air and water temperatures, reduced winter snowpack, altered precipitation patterns, and more frequent storm events are expected trends. Potential effects such as increased wildfire risk, drought, public health and safety issues, and aquatic invasive species infestations affect the environment and may impact economic prosperity. Mountain resort communities like Lake Tahoe are especially vulnerable to these changes because our economy and sense of community are so intrinsically linked to our environment.

Ecosystem sustainability is larger than TRPA alone and requires multi-sector public and private partners to succeed. By doing our part and spurring others to do theirs, we can adapt to climate change effects. The 2012 Sustainable Communities Strategy TRPA adopted achieves California greenhouse gas reduction targets for transportation-related emissions. The recently completed award-winning Lake Tahoe Sustainability Action Plan is an even broader action blueprint for both public and private sector participants to address greenhouse gas reduction and the effects of climate change.

### **2014 Accomplishments**

- Awarded the 2014 California American Planning Association Award for Excellence for Innovation in Green Community Planning for the TRPA-sponsored Lake Tahoe Sustainability Action Plan, funded by the California Strategic Growth Council. The Sustainability Action Plan identifies additional implementation actions to further regional sustainability and resilience for residents, businesses, schools, visitors, and community members.
- Created the Sustainability Dashboard, a suite of indicators representative of the Lake Tahoe Region's economy, environment, and community. Launched at the Lake Tahoe Summit in August, the Dashboard offers public access to 28 selected indicators of sustainability in 11 key categories: Water quality, forest health, greenhouse gas emissions, aquatic invasive species, income, business environment, employment, housing, transportation, healthy lifestyle, and education. The Sustainability Dashboard is updated annually and is available online at [www.laketahoeinfo.org](http://www.laketahoeinfo.org).
- Secured grant funding for Safe Routes to Schools planning in South Lake Tahoe.

- Worked as a founding member of Mountain Pact, a coalition of mountain resort communities in the American West advocating for federal funding and legislation to improve environmental and economic resiliency in the face of changing climate.
- Participated in the Bureau of Reclamation’s Truckee Basin Study to evaluate and account in future plans for the range of potential changes in water demands and supplies under potential climate change and drought scenarios for the Truckee River Basin, which includes 3,060 square miles in California and Nevada.

### ***Future Focus***

Through partnerships, TRPA will implement the Sustainability Action Plan, targeting elements needed to support high priorities of the Regional Plan, bring the best available climate change science and best practices to the Region, and secure funding for sustainability and climate change adaptation programs and projects.

## **PROPEL THE DEVELOPMENT AND USE OF BEST INFORMATION, DATA, AND SCIENCE FOR DECISION MAKING AND ACCOUNTABILITY**

***Provide Excellent Information for Policy Decisions, Accountability, and Operations*** – *TRPA is committed to continuing strong relations with the science community and improving measurement and reporting for programmatic and fiscal accountability.*

### **Research and Analysis Division**

TRPA is charged with monitoring and measuring many hundreds of threshold standards, performance measures, and management actions for progress and effectiveness at a regional cost of many millions of dollars. The new reorganized Research and Analysis Division brings all data systems and resources together for more efficient response to continually growing monitoring, evaluation, and reporting needs. The Division incorporated personnel and roles previously spread throughout TRPA into a single organizational unit for additional coordination and staff support. Its personnel are strengthening TRPA’s relationship with the science community and providing excellent information for policy decisions, accountability, and operations. The scope of data management, reporting, and analysis is broad, extending to internal TRPA operations, as well as external coordination among TRPA, partner agencies, and the scientific community on applied research, status and trend monitoring related to TRPA standards, and partner agency data needs.

### ***2014 Accomplishments***

- Completed noise monitoring studies along primary roadway corridors in the Lake Tahoe Basin to satisfy the TRPA Regional Plan Noise Mitigation Measure. Roadways included U.S. Highway 50, California State Routes 89, 28, 267 and Nevada State Routes 28, 431, and 207.

- Streamlined and made categories of routine permits more efficient by creating online application forms for tree removal, grading exceptions, and water quality BMP real estate disclosures. Electronic processing improves customer service, increases staff efficiency, and reduces customer vehicle trips.
- With the Environmental Improvement Division, developed an online EIP Reporting Tool for efficient tracking and reporting of EIP projects implemented by multiple agencies and organizations that participate in the EIP.
- Updated and streamlined outdated records management systems. Converted 3,568 paper permit files and other records such as land capability verifications and site assessments, to electronic files in Accela, where they can be efficiently accessed by staff and the public.
- Coordinated annual Threshold Indicator monitoring including tributary, pelagic, and nearshore water quality, stream bio-assessment, air quality, and noise. Nearshore monitoring was newly funded through multi-agency contributions and expanded per scientific recommendations. Annual monitoring data and analysis is needed to complete the upcoming 2016 Threshold Evaluation Report, which provides information on the status of the TRPA Thresholds to the public and decision makers.
- Through a multi-agency and local jurisdiction partnership, funded and initiated TMDL effectiveness monitoring, the newest critical component of the Lake Tahoe water quality monitoring program.

#### ***Future Focus***

Completing the next four-year Threshold Evaluation Report by 2016, reporting on the status and progress of threshold indicators and Regional Plan compliance measures, is a high priority. TRPA coordinates with technical experts from academia, agencies, partner organizations, and consultants to collect and analyze data for the report. TRPA will collaborate with the science community to prioritize, update, and streamline Threshold Standards.

## **OPERATE AS A HIGH PERFORMANCE ORGANIZATION**

***Create an Enduring Organizational Culture of High Performance and Continuous Improvement – The agency will improve its performance management system so that each individual is in alignment with, evaluated against, and rewarded for achieving performance targets.***

#### **Executive**

##### ***2014 Accomplishments***

- The TRPA Governing Board unanimously approved an updated TRPA Strategic Plan in June. The updated Plan focuses internally on building core competencies, training, and growing.
- With the hire of a new director, reoriented the TRPA model of human resource services from benefits and systems administration to an organizational development emphasis.

- Implemented a strengthened staff performance management system aligned with the 2014 Strategic Plan goals.
- Re-chartered the Advisory Planning Commission (APC) to grow the organization and Basin capacity for collaborative broadly supported solutions to difficult policy problems. Following a first-ever strategic planning retreat in 2014, the APC took on an expanded role as a stakeholder collaborative to recommend solutions to Regional Plan policy questions the Governing Board delegates to it.

### *Future Focus*

Advocating for, secure, and deploy new funding for the EIP to continue threshold attainment; lead best practices and Regional Plan modifications needed to encourage and drive Regional Plan implementation; invest in Agency talent to assure enduring capacity to deliver quality outcomes including Performance Management and Talent Development programs; and, expand Continuous Improvement initiative throughout the Agency.

### External Affairs

TRPA supports an internal culture committed to public education and outreach and community engagement to implement the Regional Plan. The External Affairs team leads public engagement initiatives in collaboration with a wide variety of Agency and non-profit stakeholders.

### *2014 Accomplishments*

- **Read all about it:** Tahoe In Depth, the biannual newspaper TRPA created in 2012 to enhance environmental awareness and stewardship at Lake Tahoe, was recognized in November with a Silver Spike award for communications excellence by the Sierra Nevada Chapter of the Public Relations Society of America. Tahoe In Depth quickly became financially self-sustaining through reader subscriptions, underwriters, and agency contributions. It features reporting and photography by employees of local, state, and federal agencies and nonprofit groups in the Lake Tahoe Basin and is mailed out to every homeowner at Lake Tahoe, reaching not only full-time residents, but also part-time residents from places such as the Bay Area.
- **Classroom education:** TRPA is placing a renewed emphasis on public education. An environmental education specialist is working with local schools to teach students about Lake Tahoe and the importance of protecting it. TRPA staff reached more than 900 students in eight area schools in 2014.
- **Community events:** Events serve as a platform to inform, engage, and interact with the public, improving the Agency's transparency, customer service, and public reach. TRPA staffed booths at nearly 10 community events and interacted with more than 2,500 people in 2014.
- **Web site and social media:** Building off a successful redesign of [www.trpa.org](http://www.trpa.org) in 2013, TRPA continues to build its online and social media presence as tools for public education and information. The web site receives more than 29,000 page views per month and social media engagement experienced growth in 2014, including a 55 percent increase in Twitter followers.
- **Spreading the message:** Three new gateway signs installed along Nevada highways in the Lake Tahoe Basin read, "Entering the Lake Tahoe Watershed – Help Protect It!" TRPA worked with

funding partners to install the signs near Daggett Summit on State Route 207, Spooner Summit on U.S. Highway 50, and on State Route 431 the Mount Rose Highway as a way to remind the millions of people who visit Lake Tahoe each year that they are entering a special place and share a duty to help protect it.

### ***Future Focus***

Continue to grow TRPA's role as a leader in collaborative outreach regionally, nationally, and globally to inspire and achieve conservation and stewardship for Lake Tahoe.

## **Finance & Information Technology**

### ***2014 Accomplishments***

- Completed the 2014 fiscal year with a surplus, with all Divisions meeting budget goals. This allows TRPA to set aside money for long-delayed maintenance needs and other resource issues. Financial audit by an independent Certified Public Accounting firm and resulted in an unqualified opinion, demonstrating TRPA is operating in full compliance with accounting rules.
- Finance and Information Technology are implementing infrastructure best practices, including moving appropriate enterprise software packages into a cloud environment. Cloud hosting improves reliability and reduces ongoing maintenance costs. The TRPA accounting software Springbrook was the first major system to be moved into the cloud.
- TRPA continues to support employees with an appropriate, modern IT system. Outdated servers were replaced with new models that increase performance while reducing costs and energy usage. Approximately one-third of TRPA staff had their individual laptops upgraded as part of a normal replenishment cycle.
- The Facilities Manager brought building expenses in \$100,000 below budgeted costs and successfully retained two existing tenants with lease extensions.

### ***Future Focus***

Continue to move systems into the cloud for improved efficiencies. Work to make more services and information available to the public online. Find additional funding for programs through cost efficiencies and new funding sources.

## **Human Resources & Organizational Development**

### ***2014 Accomplishments***

- The TRPA Executive Director hosted a series of roundtable meetings with employees to better understand what TRPA can do to accelerate high performance and evolve as the "Best Place to Work and Employer of Choice in the Basin," resulting in several new initiatives.
- Initiated a new Talent Development Program focused on performance management and core competency training designed to ensure every employee has a work program and individual priorities aligned with the agency's most critical initiatives.
- Launched a workplace wellness committee chartered with recommending and implementing progressive programs for employee recognition and engagement, community involvement, and evolving TRPA's workplace culture.

- Piloted a Continuous Improvement Initiative in Current Planning Division seeking process improvements, cost savings, and updates to outdated permit processing approaches.
- Launched a strategic human resources redesign initiative focused on ways to automate, streamline, and reduce costs associated with the management of our human resource functions.

### *Future Focus*

Build the Performance Management and Talent Development Programs including leadership and career development; implement the Continuous Improvement initiative throughout the Agency; and assess compensation and benefits for staff retention and recruitment.

## **ATTACHMENTS**

**Attachment 1: 2014 Regional Plan Performance Measure Report**

**Attachment 2: 2013-14 Area Plan Annual Reporting & Recertification Review**

**Attachment 3: 2014 Sustainability Indicators Report**

## **Attachment 1**

### **2014 Regional Plan Performance Measure Report**

In June 2013, the TRPA Governing Board approved 14 Regional Plan Performance Measures and associated sub-categories. Each performance measure has an associated Level-1 and Level-2 Benchmark, or target, to be reported both annually and every four years.

The approved measures relate to the intended implementation actions resulting from the 2012 Regional Plan amendments which are largely based on incentivizing compact environmental redevelopment in pursuit of threshold attainment as directed in the Bi-State Compact. Many measures are long-term land use or environmental goals and may take years or even decades to show measurable progress. In those instances, ongoing activities expected to lead to performance results will be described. In addition, the Governing Board established short-term Level-1 Benchmarks to indicate interim progress, and where information is available, progress toward these is reported.

While there are few final outcomes or results to report on what are inherently long-term performance measures, activities and projects are moving forward under the updated policies of the Regional Plan that are anticipated to result in measurable positive outcomes for the environment. One example is the Edgewood Lodge and Golf Course Improvement Project, adjacent to, but not within, a Town Center, which transferred 63 Tourist Accommodation Units (TAUs) from dilapidated properties outside Town Centers. The dilapidated motel properties have been demolished and the sites restored. The 2012 Regional Plan incentivizes this type of transfer of development from old, environmentally harmful structures to redevelopment sites. Over time, the benchmarks in the regional land use patterns category are expected to show more of this type of progress.

### **Adopted Regional Plan Performance Measures**

#### **Regional Land Use Patterns**

1. Distribution of development for land-use types
2. Annual average number of units transferred to Town Centers from sensitive and remote land
3. Retirement rate for existing non-residential units of use
4. Housing availability for residents and workers

#### **Travel Behavior**

5. Percentage of all trips using non-automobile modes of travel (transit, bicycle, pedestrian)
6. Automobile vehicle miles traveled per capita (excluding through trips)
7. Construction of pedestrian and bicycle improvements

#### **Environmental Restoration**

8. Coverage removal from Stream Environment Zones and other sensitive lands (privately-funded)
9. Issuance of Best Management Practices (BMP) Certificates in conjunction with property improvements and area-wide BMP installations
10. TMDL performance benchmarks
11. Scenic improvement rate on urban roadways

#### **Effective Regional Plan Implementation**



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12. Prepare and maintain Area Plans in conformance with the 2012 Regional Plan
13. Complete mitigation measures identified in the Regional Plan Update EIS

### **Economic Vitality**

14. Rate of redevelopment

### **Executive Summary of Performance Measure Status**

A brief summary of the status of the 14 Regional Plan Performance Measures follows. Data used to evaluate the measures was collected through December 31, 2014. Detailed discussion of the status of each measure follows the Executive Summary.

#### *Regional Land Use Patterns*

1. Distribution of development for land-use types: Four sub-categories of development were evaluated, distribution of Commercial Floor Area, Tourist Accommodation Units (TAUs), Residential Units, and property improvements. Of these, the distribution of Commercial Floor Area met the Level-1 Benchmark to increase the percentage of this type of development in Town Centers.
2. Annual average number of units transferred to Town Centers from sensitive and remote land: No units of use were transferred to Town Centers from sensitive and remote land so the Level-1 Benchmark was not met. Although 63 dated TAUs were demolished and transferred to the approved Edgewood Lodge and Golf Course Improvement Project near the casino core, the transfer could not be counted. Although Edgewood is immediately adjacent to a Town Center, and within walking distance of the most concentrated development in the basin, the project site is not within a Town Center. The TAU transfer while environmentally beneficial is not captured by the metric. These TAU units were transferred off of sensitive land from environmentally non-compliant motels that were demolished in order to facilitate the environmental redevelopment hotel project at the Edgewood Golf Course site. The Edgewood project features wetlands restoration and other environmental improvements. There have been other indications of interest in qualifying TAU transfer projects, but a shortage of bonus units in TRPA's pool must be addressed so as not to discourage completing these anticipated redevelopment transactions.
3. Retirement rate for existing non-residential units of use: The California Tahoe Conservancy has developed a program (The Tahoe Livable Communities Program) to acquire and retire existing non-residential units of use, meeting the Level-1 Benchmark calling for creation of a program.
4. Housing availability for residents and workers: No bonus units were utilized for-low income housing. No affordable housing projects have been completed in the last year.

#### *Travel Behavior*

5. Percentage of all trips using non-automobile modes of travel (transit, bicycle, pedestrian): Non-auto mode share data are collected every four years. This performance measure will be evaluated in 2016.

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6. Automobile vehicle miles traveled per capita (excluding through trips): Per capita vehicle miles traveled is calculated every four years for the Regional Transportation Plan. This performance measure will be evaluated in 2016.
7. Construction of pedestrian and bicycle improvements: An annual average of six miles of pedestrian and bicycle improvements were constructed each year, meeting the Level-1 Benchmark. Specific project segments added to the bicycle route system are listed on page 11 of the Annual Report and page 5 of the accompanying Staff Report.

### *Environmental Restoration*

8. Coverage removal from Stream Environment Zones and other sensitive lands (privately-funded): The annual average removal of coverage from Stream Environment Zones was 0.06 acres per year, which is 43 percent of the Level-1 Benchmark of 0.14 acres. The annual average for coverage removal from other sensitive lands was 0.05 acres, which is 29% of the Level-1 Benchmark of 0.17 acres. The annual average collection of excess coverage mitigation fees was \$472,168 per year, which is 39 percent of the Level-1 Benchmark of \$1.2 million per year. The current annual average is more in line with the post-recession average.
9. Issuance of BMP Certificates in conjunction with property improvements and area-wide BMP installations: In 2013-14, TRPA issued 538 BMP certificates. The annual average percentage of non-compliant parcels issued a certificate in conjunction with property improvements was 0.85 percent. This figure equates to an annual average of 40 certificates short of the Level-1 Benchmark of 1 percent. Important to note is the construction of the innovative “pump and treat” Bijou Erosion Control Project in the City of South Lake Tahoe. This \$11 million area-wide stormwater project is one of three major area-wide projects implemented that resulted in 42 BMP certificates issued by TRPA.
10. Total Maximum Daily Load (TMDL) performance benchmarks: Tahoe Basin implementing agencies (local jurisdictions, Caltrans, and Nevada Department of Transportation) are fully implementing the TMDL. As of December 2014, all jurisdictions have submitted pollutant load reduction plans. In March 2016, jurisdictions will submit their first annual stormwater reports detailing progress on the amount of nitrogen, phosphorus, and fine sediment reductions into Lake Tahoe. The Lahontan Regional Water Quality Control Board and the Nevada Division of Environmental Protection are the lead agencies on TMDL implementation. A current progress report on the TMDL can be found here: <https://www.enviroaccounting.com/TahoeTMDL/Program/Home>
11. Scenic improvement rate on urban roadways: The analysis of scenic improvement on urban roadways is performed as part of the four-year Threshold Evaluation and will be available as part of that report in 2016.

### *Effective Regional Plan Implementation*

12. Prepare and maintain Area Plans in conformance with the 2012 Regional Plan: Two Area Plans have been approved to date, the South Shore Area Plan (approximately 667 acres in Douglas County, Nevada), and the Tourist Core Area Plan (approximately 282 acres in the City of South Lake Tahoe, California). Placer County, Douglas County, the City of South Lake Tahoe, El Dorado

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County, and Washoe County are actively preparing Area Plans for their jurisdictions with expected adoption over the next two years.

13. Complete mitigation measures identified in the Regional Plan Update Environmental Impact Statement (EIS): The Regional Plan Update EIS called for mitigation measures covering four topic areas: construction best practices for air quality and noise, region-wide traffic noise reduction, noise policy for mixed-use development, and greenhouse gas emissions reduction. To date, 100 percent of the Regional Plan Update mitigation measures have been completed and adopted by the TRPA Governing Board.

### *Economic Vitality*

14. Rate of redevelopment: The rate of redevelopment as measured by the annual average number of TRPA permits issued for additions/modifications was 101 permits per year, which is 93 percent of the Level-1 Benchmark of 108.2 permits per year.

## Discussion

Detailed discussion and analysis of the status of all Regional Plan Performance Measures is set out below.

Background: In May 2013 the TRPA Governing Board adopted performance measures to track the effectiveness of the 2012 updates to the TRPA Regional Plan. This first report covers activities during the six months following the Board's adoption of the measures in 2013 as well as 2014 activity through December 31, 2014. Exceptions will be noted.

### Performance Measure #1: Modify the distribution of development after 2012 compared to the distribution in 2012

The purpose of this Performance Measure is to track the anticipated increase in the percent of development located within Centers, and the accompanying decrease in the percent of auto-dependent development (located more than ¼ mile from Centers and not at a ski area with transit services). Progress is tracked by measuring the distribution of Residential Units, Tourist Accommodation Units (TAUs), Commercial Floor Area (CFA), and total market valuation.

Using permit data from TRPA's permit tracking system (Accela) and information from local jurisdictions, projects were included if the action (permit or allocation) was finalized and construction completed after the 2012 Regional Plan Update. Due to the cost effectiveness and accuracy, permits rather than remote sensing data (relied on to set the 2013 baseline) were used to determine changes in the distribution of units of use.

Changes in the distribution of residential units and CFA compared with the baseline are outlined in Table 1. The Level-1 Benchmark to increase the percentage of development within Centers and decrease the percentage outside Centers has been met for CFA. The other benchmarks for residential units and TAUs

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were not met; furthermore there was a small decrease in residential units within Centers. However, the changes to both CFA and residential units are insignificant (less than 0.1 percent). The very small percent changes are due to only a small number of projects having been completed in the two years since the Regional Plan was updated in 2012.

| <b>Table 1: Distribution of development measured as percentage of units and CFA</b> |                 |             |                                  |
|---|-----------------|-------------|----------------------------------|
| <b>Land Use</b>   | <b>Baseline</b> | <b>2014</b> | <b>Net change since Baseline</b> |
| <b>CFA</b>  |                 |             |                                  |
| Centers   | 63.13%          | 63.17%      | 0.09%                            |
| neutral   | 10.55%          | 10.48%      | -0.09%                           |
| outside   | 26.32%          | 26.35%      | 0.00%                            |
| <b>Residential Units</b>  |                 |             |                                  |
| Centers   | 3.84%           | 3.83%       | -0.01%                           |
| neutral   | 28.50%          | 28.48%      | -0.02%                           |
| outside   | 67.66%          | 67.69%      | 0.03%                            |
| <b>TAUs</b>   |                 |             |                                  |
| Centers   | 83.37%          | 83.37%      | 0.00%                            |
| neutral   | 6.19%           | 6.19%       | 0.00%                            |
| outside   | 10.44%          | 10.44%      | 0.00%                            |

Total market valuation proved difficult to measure and analyze in accordance with the benchmark related to this indicator. Changes are needed to reflect Proposition 13 assessment rates by counties in California. The Advisory Planning Commission (APC) recommended the use of permit valuation data rather than assessed value to solve this issue. Data collection difficulties leading up to this first Report are being remedied through memoranda of understanding with local jurisdictions related to Area Plan implementation and reporting.

For this report, 2012 baseline data was converted to taxable value of property improvements rather than total assessed property value to make the information more consistent across counties. This approach leaves still unresolved issues raised by the APC related to Proposition 13. Table 2 reflects the recalculated baseline and the 2014 results and percentage changes in taxable value of property improvements compared to the baseline to determine status of Level-1 Benchmark.

| <b>Table 2: Percentage of taxable property improvement value by location</b>   |                  |                |   |
|--|------------------|----------------|---|
| <b>Location</b>  | <b>Baseline*</b> | <b>2014</b>    | <b>Net percentage change since baseline</b> |
| Centers  | 10.94%           | 10.71%         | -0.23%                                      |
| Neutral  | 17.67%           | 17.77%         | 0.09%                                       |
| Outside  | 71.38%           | 71.52%         | 0.14%                                       |
| <b>Total Market Value</b>  | <b>100.00%</b>   | <b>100.00%</b> | <b>0.00%</b>                                |
| * TRPA staff recalculated the 2012 baseline data and converted all data to taxable value of property improvements rather than total assessed property value originally used to set the baseline. |                  |                |   |

Performance Measure #2: Increase the annual average number of units transferred to Centers from sensitive and remote land compared to the annual average prior to 2012.

This performance measure complements the tracking of distribution of development in Performance Measure # 1 by tracking the rate at which the transfer of units of use from sensitive and remote lands to Centers occurs. TAUs, CFA and Residential Units are tracked.

Unit transfer data was obtained by querying records from TRPA’s electronic permit tracking system (Accela), and physical file research. The Accela query was for all transfer applications submitted each year. TRPA’s GIS system was used to determine receiving parcels in Centers and sending parcels considered “Remote”.

| <b>Table 3: Average annual number of units transferred to Centers from sensitive and remote land</b> |   |   |  |  |  |   |
|--|---|---|--|--|--|---|
| <b>Land Use Type</b>   | <b>Baseline Transfers from SEZ to Centers</b> | <b>Baseline Transfers from Other Sensitive Lands to Centers</b> | <b>Baseline Transfers from Remote Areas to Centers</b> | <b>2013-2014 Average Transfers from SEZ to Centers</b> | <b>2013-2014 Average Transfers from Other Sensitive Lands to Centers</b> | <b>2013-2014 Average Transfers from Remote Areas to Centers</b> |
| Residential Units  | 0   | 0   | 0  | 0  | 0  | 0   |
| CFA (ft <sup>2</sup> )*  | 49  | 0   | 49   | 0  | 0  | 0   |
| Tourist Units  | 0   | 0   | 0  | 0  | 0  | 0   |
| Residential Development Rights   | 0   | 0   | 0  | 0  | 0  | 0   |

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\* This 49 ft<sup>2</sup> average value in the baseline is the result of a single project in 2008 that transferred coverage that originated on a parcel that was both remote and SEZ.

The results of this analysis (Table 3) show that there were no transfers of TAUs, CFA or Residential Units to Centers from remote or sensitive parcels in 2013 or 2014. Consequently, the Level-1 Benchmark to increase the transfer rate to Centers from remote and sensitive parcels over the baseline has not been met. Other environmentally beneficial transfers did occur during this period but could not be counted. Sixty-three dated TAU units were demolished and transferred during this period to the Edgewood Lodge and Golf Course Improvement Project from sensitive lands which have since been restored. While the Edgewood project is not located in a Center, it is immediately adjacent to a Center and is anticipated to result in significant water quality and other threshold improvements. Similar non-qualifying transfers may be noted in future reports to track whether the adopted performance metric is capturing all relevant environmentally beneficial transfer projects.

In addition, there have been other indicators of interest in qualifying TAU transfer projects. A shortage of units in TRPA's bonus pool is disincentivizing completion of these anticipated redevelopment transfer transactions.

### Performance Measure #3: Accelerate the removal rate for existing non-residential units of use on sensitive lands

Historically, the Region has relocated existing non-residential development but has not retired any non-residential units of use. The 2012 Regional Plan Update added policy language encouraging an acquisition program targeted at retiring excess existing non-residential development on sensitive lands. This performance measure tracks the creation of the program and its effectiveness at removing existing CFA and TAUs from sensitive lands. Progress was ascertained from personal communications with staff from the California Tahoe Conservancy (CTC) and the Nevada Division of State Lands (NDSL) confirming a new CTC program (Tahoe Livable Communities Program) is in place and projects have been implemented removing and retiring existing development commodities. Transfer of these commodities is waiting for approval to be transferred to the land bank. Due to very different development patterns on sensitive lands in Nevada, NDSL relies instead on coverage removal rather than retirement of existing development.

### Performance Measure #4: Improve housing availability for residents and workers

The Regional Plan Update EIS documented that housing has become less affordable over time and quality housing is now prohibitively expensive for many essential workers such as teachers and police officers. This performance measure is tracked through the utilization of multi-residential bonus units against Level-1 and Level-2 Benchmarks. The data for this performance measure was collected directly from Accela.

The results of the analysis for this performance measure show that no multi-family bonus units were utilized during 2013 and 2014, which results in not attaining the Level-1 Benchmark to increase utilization over the baseline of 20.23 bonus units per year. It should be noted that the baseline was set

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using 26 years of data and that a direct comparison of a two year average (2013 and 2014) with a 26 year average skews the analysis and fails to account for year to year variability in utilization of bonus units. Over time, this potential issue may resolve itself.

Performance Measure #5: Increase percentage of all trips using non-automobile modes of travel (transit, bicycle, pedestrian).

Non-auto mode share travel captures the percentage of people bicycling, walking, and using transit or other non-auto travel modes indicating the degree to which land-use patterns, policy, and funding decisions at Lake Tahoe influence travel behavior of residents and visitors. Non-auto mode share at Lake Tahoe is measured by intercept surveys at commercial and recreation sites in winter and summer.

Using a detailed longstanding monitoring protocol to collect this data, non-auto mode share is reported every two years in the Tahoe Metropolitan Planning Organization's *Transportation Monitoring Program Report*. The two year cycle alternates updates to summer and winter mode share which are individually calculated every four years. Benchmarks are shown in Table 4.

| <b>Table 4: 2014 Summer percentage of trips by travel mode compared to 2010 mode share</b> |   |   |
|--|---|---|
|  | 2014 Summer Percentage of Trips by Mode | 2010 Summer Percentage of Trips by Mode |
| Auto, Truck, Motorcycle, etc.  | 83.00%                                  | 82.85%                                  |
| Walk   | 9.00%                                   | 9.8%                                    |
| Bike   | 6.00%                                   | 6.0%                                    |
| Transit  | 2.00%                                   | 1.35%                                   |
| <b>Total Non-Auto Mode Share</b>   | <b>17.00%</b>                           | <b>17.15%</b>                           |

Although data was available to establish the 2012 baseline, the needed data was not available to measure the established Level-1 Benchmark (i.e., increase in non-auto mode share from the average annual percentage baseline of 19.07 percent) because the last winter mode survey was completed in 2012. Table 4 shows a comparison for informational purposes of 2014 summer non-auto mode share, with the 2010 summer non-auto mode share. This comparison shows little change in mode share percentages over several years.

Performance Measure #6: Decrease in automobile vehicle miles travelled per capita (excluding through-trips).

Vehicle miles traveled (VMT) per capita is a measure of the efficiency of the transportation system and the degree to which the land use pattern affects personal motor vehicle travel. VMT per capita is measured through an activity-based computer model, which is updated with empirical data including traffic counts, population, and parcel-based land-use data. VMT per capita is analyzed for the Regional

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Transportation Plan update every four years. The next update and progress report for the performance measure will be part of the 2016 Regional Transportation Plan Update.

A suitable annual alternate measure to VMT per capita, total regional VMT, is presented here and is compared against the Threshold Standard. Total VMT is estimated annually from traffic counts. The estimated VMT for 2013 was 1,968,664 miles, which is 5 percent below the Threshold Standard of 2,067,568 miles.

### Performance Measure #7: Accelerate Pedestrian and Bicycle Improvements

This performance measure is related to the policies in the Regional Plan regarding sidewalks, trails, and public investment levels. The 2012 Regional Plan Update included coverage exemptions and other amendments that are intended to decrease costs for construction of these facilities and increase the number of improvements. The data used to calculate the average annual miles of pedestrian and bicycle facilities constructed was obtained from the Lake Tahoe Region Bicycle and Pedestrian Plan, Technical Amendment December 2014. The data was verified through personal communications with implementing jurisdictions, field surveys, and TRPA GIS data.

The results of this analysis show that there were 11.9 miles of qualifying improvements in 2013 and 2014 combined for a post-2012 annual average for this performance measure of 6 miles. This meets the Level-1 Benchmark of 4.15 miles per year derived from the Lake Tahoe Region Bicycle and Pedestrian Plan.

### Performance Measure #8: Accelerate privately-funded coverage removal from Stream Environment Zones and other Sensitive Lands.

This performance measure is related to policy amendments in the 2012 Regional Plan Update that seek to facilitate environmental improvements through redevelopment and private investment. The effectiveness of key amendments related to transfer incentives for coverage is tracked through coverage removal from Stream Environment Zones (SEZs), coverage removal from other sensitive lands, and collection of excess coverage mitigation fees.

The data to determine the average annual removal was obtained from coverage transfer records using the same methods as in Performance Measure #2; however data transfers initiated as a result of public acquisitions were removed from the analysis.

| Year | SEZ Transfer (acres) | Sensitive Transfer (acres) |
|------|----------------------|----------------------------|
| 2014 | 0.13                 | 0.03                       |
| 2013 | 0.00                 | 0.08                       |



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|                          |             |             |
|--------------------------|-------------|-------------|
| <b>2013-2014 Average</b> | <b>0.06</b> | <b>0.05</b> |
| <b>Baseline average</b>  | <b>0.14</b> | <b>0.17</b> |

Table 5 shows the post-2012 average coverage removal from SEZ and sensitive transfers in acres compared to the baseline average calculated for the years 2002 through 2012. Based on this analysis, the post-2012 average does not meet the Level-1 Benchmark to increase transfers over the baseline average. This performance measure is likely to be achieved only over the long-term. The baseline average included a wide range of annual transfers. Transfers from SEZs ranged from 0 acres in 2008 to 0.57 acres in 2011, while the transfers from sensitive lands ranged from 0 in 2012 to 0.53 acres in 2006. Comparison using only two years of post-2012 data are inherently skewed when compared against 11 years of variability.

For excess coverage mitigation (ECM) fees, the baseline for this sub-category was recalculated using TRPA’s Springbrook financial software for the years 2005 through 2012. This was done to make the baseline date consistent with post-2012 data collection. The new baseline is an annual average of \$1,217,281 per year. TRPA’s Springbrook financial software was queried to determine the annual average for 2013 through 2014 and the post-2012 average was compared to the baseline. The post-2012 annual average of \$472,169 did not meet the benchmark to increase ECM fees collected above the pre-2012 average. The data in Table 6 clearly shows a lower average collection of ECM fees since 2009, and the post-2012 average is more in line with the amount of ECM fees collected since that time. Building permit approvals, which generally trigger the payment of ECM fees, have been at lower than average levels possibly due to continuing post-2008 recessionary economic conditions and investor reluctance due to uncertainty about the outcome of the Regional Plan litigation. However, recently the number of building permit applications has been slowly increasing and annual ECM fee collection is expected to increase in accordance with this increased activity. A diverse stakeholder working group convened in 2014 to make recommended improvements to the ECM fee assessment system. Governing Board consideration is expected in 2015.

| <b>Table 6: Annual average excess coverage mitigation fees collected in 2013 -2014 compared to baseline</b> |  |  |
|---|--|--|
| <b>Annual Year</b>  | <b>Total Excess Coverage Mitigation Fees</b> | <b>Post 2012 Excess Coverage Mitigation Fees</b> |
| 2005  | \$1,920,069                                  |  |
| 2006  | \$1,729,530                                  |  |
| 2007  | \$2,606,676                                  |  |
| 2008  | \$1,206,660                                  |  |
| 2009  | \$562,623                                    |  |
| 2010  | \$577,754                                    |  |
| 2011  | \$743,776                                    |  |
| 2012  | \$391,163                                    |  |
| 2013  |  | \$401,192  |
| 2014  |  | \$543,144  |

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|                                 |                       |                     |
|---------------------------------|-----------------------|---------------------|
| <b>Baseline annual average</b>  | <b>\$1,217,281.29</b> |                     |
| <b>Post 2012 annual average</b> |                       | <b>\$472,167.91</b> |

Performance Measure #9: Accelerate issuance of water quality BMP certificates in conjunction with property improvements.

This performance measure tracks the private investment to mitigate the impacts of development through implementation of water quality BMPs associated with development permits. Certificates issued as a result of permitted projects, as well as the certification rates by all methods shown in Table 7, were obtained directly from the TRPA BMP Database.

| <b>Table 7: BMP Certification Summary</b>   |                             |                            |                         |
|---|-----------------------------|----------------------------|-------------------------|
| Performance Measure   | 2013                        | 2014                       | Average per Year        |
| % of total outstanding properties issued BMP certificates in conjunction with property improvements | 0.8 %<br>(248 certificates) | 0.9%<br>(208 certificates) | 0.85%<br>(228 per year) |
| Certification of single family residential parcels all methods                                      | 368 certificates            | 358 certificates           | 363 per year            |
| Certification of multi-family residential parcels all methods                                       | 153 certificates            | 94 certificates            | 123.5 per year          |
| Certification of commercial parcels   | 58 certificates             | 45 certificates            | 51.5 per year           |
| Total number of certifications issued in area-wide BMPs   | n/a                         | 42                         | n/a                     |
| Completed area-wide BMP projects  | 0                           | 3                          | 1.5                     |
| Approved and funded area-wide BMP projects  | 3                           | 0                          | 1.5                     |

The results of the analysis of the post-2012 annual average of the percentage of uncertified parcels that receive BMP certificates through permitting shows that the average across 2013 and 2014 was 0.85 percent, just short of the Level-1 Benchmark to achieve an increase over the historic baseline average rate of 1 percent per year, which varied from a low of 0.5 percent in 2008 to a high of 1.5 percent in 2011. A potential complicating factor in this analysis is that there can be a lag of up to three years or more for complex projects between a permit issued under the updated Regional Plan and the completion and certification of that project.

This performance measure also tracks, without an established benchmark, the number of BMP certificates issued with various activities (Table 7). Of note is the average of 51.5 certificates per year for commercial parcels receiving BMP certification post 2012. These certificates often result in the highest water quality benefit per certificate when compared with single family residential certificates.

Performance Measure #10: Achieve Lake Tahoe Total Maximum Daily Load performance benchmarks.

This performance measure is related to the performance benchmarks set by the Lake Tahoe Total Maximum Daily Load (TMDL) program. These performance benchmarks are not directly impacted by amendments in the 2012 Regional Plan, nor are they directly administered under TRPA’s regulations;

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however, they are a critical part of the overall regulatory and implementation system relied on to attain TRPA water quality Threshold Standards. The TMDL performance benchmarks are tracked by the Lahontan Regional Water Quality Control Board and the Nevada Division of Environmental Protection. This report incorporates by reference the current progress report available here: <https://www.enviroaccounting.com/TahoeTMDL/Program/Home>.

### Performance Measure #11: Accelerate Scenic Threshold attainment on urban roadways.

Scenic conditions in the Region's less intensely developed areas generally meet adopted Threshold Standards. Scenic quality in developed areas is generally out of attainment. The 2012 Regional Plan Update included amendments to accelerate redevelopment activity which is expected to also achieve scenic improvements in Centers. This performance measure is tracked by analyzing the average annual improvement rate for urban roadway units. This information is not available on an annual basis, and is collected every four years for the threshold report analysis. Budget requests are currently pending to fund the next comprehensive scenic survey for the 2016 Threshold Evaluation Report.

### Performance Measure #12: Prepare and maintain Area Plans in conformance with the 2012 Regional Plan.

Under the 2012 Regional Plan, Area Plans, once approved by local governments and found in conformance with the Regional Plan by TRPA, will replace Community Plans and Plan Area Statements. This category measures and tracks acres included in Area Plans, the recertification rate for Area Plans, and the number of public meetings for each Area Plan.

As of the date of this report, there are two adopted Area Plans with five others in progress. A description of each adopted Area Plan is provided:

1. The Governing Board adopted the South Shore Area Plan (SSAP) and an associated Memorandum of Understanding (MOU) on September 25, 2013. The SSAP includes approximately 667 acres in Douglas County, Nevada and is currently in the process of being updated. The update will request the SSAP boundary be amended to add 3.64 acres to the Town Center. The MOU is not fully in effect. Procedural guidelines have been developed and TRPA is planning consultation and training with Douglas County planning before the permitting is fully delegated. Until then, TRPA continues to issue permits within the SSAP.
2. The Governing Board adopted the City of South Lake Tahoe's Tourist Core Area Plan on November 11, 2013. It includes approximately 282 acres (excluding roadways) in the City of South Lake Tahoe. A MOU for the Plan was adopted by the TRPA Governing Board on December 17, 2014. Similar to the SSAP, the Area Plan will not go into effect until the procedural guidelines are fully developed and City staff is trained.

The recertification rate of Area Plans cannot be measured at this time as the two adopted Area Plans are not yet fully in effect. However, the current status of activities within these two Area Plans is available in Attachment 2 to the Staff Report.

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The following (Table 8) summarizes the number of public meetings that occurred in 2014 related to the development and update of Area Plans.

| <b>Table 8: Number of public meetings and workshops conducted in support of the development and update of Area Plans in 2014</b> |  |
|--|--|
| <b>Area Plan</b>   | <b>Number of Public Meetings/Workshops</b> |
| Martis Valley West Area Plan   | 5  |
| Placer County Tahoe Basin Area Plan  | 15   |
| Tahoe Douglas Area Plan/ South Shore Area Plan Update  | 4  |
| Tahoe Valley Area Plan   | 10   |
| Washoe County Area Plan  | 1  |
| Meyers Area Plan   | 5  |

### Performance Measure #13: Complete mitigation measures identified in the Regional Plan Update EIS

This Performance Measure is related to the mitigation measures called for in the Regional Plan Update EIS. The mitigation measures address construction best practices for air quality and noise, Region-wide traffic noise reduction, noise policy for mixed-use development, and greenhouse gas emissions reduction. Due to be completed in 2013, 100 percent of specified categories have been completed and adopted by the TRPA Governing Board, meeting the benchmark for this Performance Measure.

### Performance Measure #14: Increase rate of redevelopment

An objective of the 2012 Regional Plan Update is to improve economic vitality through accelerated property improvement and redevelopment associated with environmental improvement. This performance measure is evaluated by tracking the average annual rate of permits issued for rebuild, addition, and remodel projects (Table 9). Only TRPA permit data from Accela is reported here. While the use of only TRPA permits for analysis is efficient and matches the procedures used to establish the baseline and benchmarks, as Area Plans are implemented analysis of permits issued by local jurisdictions will be added.

| <b>Table 9: Annual Average of TRPA permits issued for Additions/Modifications/Rebuilds after 2012</b> |             |             |                        |  |
|---|-------------|-------------|------------------------|--|
| <b>Additions/Modifications/Rebuilds</b>   | <b>2013</b> | <b>2014</b> | <b>2013-14 Average</b> | <b>Pre-2012 Baseline Average (2002 – 2012)</b> |
| Residential Permits   | 80          | 110         | 95                     | n/a  |
| Commercial Permits  | 6           | 6           | 6                      | n/a  |
| <b>Total</b>  | <b>86</b>   | <b>116</b>  | <b>101</b>             | <b>108.2</b>                                   |

The results of this analysis (Table 9) show that the annual average number of permits issued over the last two years, 101 permits, is slightly below the baseline of 108.2 permits per year and therefore does not meet the Level-1 Benchmark to increase the annual average above the baseline. The baseline was calculated using permit records from 2002 through 2012 and annual values ranged from a low of 70 permits in 2010 to a high of 154 permits in 2002. As discussed in reference to the utilization of bonus units and coverage transfers, this comparison to the baseline that was calculated using 11 years of variable data should be viewed with caution because only two years of post-2012 data is available.

## **Attachment 2**

### **2013-2014 Area Plan Annual Reporting & Recertification Review**

#### **Summary:**

To better address issues of regional environmental significance, the 2012 Regional Plan amendments initiated a Basin-wide transition to a planning and permitting system where multiple requirements—local, TRPA, state, and federal—are addressed in coordinated Area Plans. The new system of regional and Area Plans increases TRPA’s focus on key environmental goals while removing the need, in most cases, for two layers of overlapping permit requirements.

Prior to the 2012 Regional Plan amendments, Plan Area Statements and TRPA Community Plans provided descriptions of land uses for particular areas in the Basin. Under the 2012 Plan amendments, Area Plans will begin to replace Plan Area Statements and TRPA Community Plans. Area Plans will allow local governments in the Region to implement the Regional Plan policies in ways more specifically tailored to the character of their local communities.

Chapter 13 of the TRPA Code of Ordinances provides details on all aspects of Area Plans including required and optional content; the review and approval process; procedures for adoption of a memorandum of understanding (MOU); and monitoring, certification, and enforcement of Area Plans. Any development review activity delegated to a local jurisdiction is monitored, evaluated, and reported by TRPA annually.

Currently there are two adopted Area Plans: The South Shore Area Plan (SSAP), which includes approximately 667 acres in Douglas County, Nevada, and the Tourist Core Area Plan (TCAP), which includes approximately 282 acres in the City of South Lake Tahoe, California.

The TRPA Governing Board adopted the SSAP and an associated Memorandum of Understanding (MOU) on September 25, 2013. The SSAP is currently in the process of being updated to add 3.64 acres to the town center. The MOU is not fully in effect. Procedural guidelines have been developed and TRPA is planning consultation and training with Douglas County planning staff before permitting is fully delegated. Since the MOU is not yet in effect, TRPA continues to issue permits within the SSAP.

The Governing Board adopted the City of South Lake Tahoe’s TCAP on November 11, 2013. A MOU for the TCAP was adopted by the TRPA Governing Board on December 17, 2014. Similar to the SSAP, the Area Plan will not go into effect until the procedural guidelines are fully developed and City staff is trained.

This report will cover the status of permitting activity, audit results, corrective actions, coverage changes and environmental benefits for both the SSAP and the TCAP since adoption of these plans in the fall of 2013.

## Attachment 2

### Annual Activity in Area Plans:

Because the delegation of Area Plan permitting is not yet in effect, this section describes all TRPA permitting activity for development projects, tenant improvements, and other activities that have occurred within the geographic area covered by these plans.

#### ***South Shore Area Plan***

TRPA permit activity within the geographic area of the SSAP is shown in Table 1.

| <b>Table 1: TRPA Permit Activity with the geographic area of South Shore Area Plan from adoption through December 2014</b> |                     |   |                          |
|--|---------------------|---|--------------------------|
| <b>Project Types</b>   | <b>Under Review</b> | <b>Permit Issued/Under Construction</b> | <b>Project Completed</b> |
| Building/ERS/Permits/Temporary Uses  | 0                   | 3                                       | 0                        |
| Commercial Project   | 0                   | 2                                       | 2                        |
| Rec-Public Service   | 0                   | 2                                       | 0                        |
| Residential Dwelling   | 0                   | 2                                       | 0                        |
| Sign   | 0                   | 1                                       | 0                        |
| <b>Total</b>   | <b>0</b>            | <b>10</b>                               | <b>2</b>                 |

Two significant projects are currently under construction within the SSAP. The Hard Rock Hotel and Casino project was nearing completion on December 31, 2014. Now complete, it has animated the casino core streetscape by creating an open and pedestrian-friendly space along U.S. Highway 50 within the SSAP. The hotel remodel is the first major project in the area to incorporate the vision of the SSAP Design Guidelines through the use of additional landscaping, improved building design and materials, new signage, public art and pedestrian amenities. The remodel removed the large porte-cochere that dominated the entrance and replaced it with sitting areas and balconies that overlook an open-air landscaped courtyard that is set back from the roadway resulting in significant scenic improvements and a walkable street frontage.

The second significant project currently under construction in the SSAP is the Edgewood Lodge and Golf Course Improvement Project. This project will result in a new Lodge building, but the major work currently underway is construction of the environmental improvement projects associated with the golf course ponds and Edgewood Creek. These projects focus on improvements to water quality, vegetation, wildlife and stream environment zones (riparian vegetation, soils, fisheries, and hydrology). A number of the ponds within the golf course serve double-duty as golf course water hazards and as stormwater treatment for the south shore casino corridor area and the lower reaches of the Edgewood Creek watershed.

## Attachment 2

### *Tourist Core Area Plan*

TRPA permit activity within the geographic area of the TCAP is shown in Table 2. The City for years has had some delegated permitting authority in this area. This report summarizes projects in various stages of completion only for projects permitted by TRPA. Once Area Plan delegation is in full effect, future reports will summarize projects by stage of completion for both TRPA and City of South Lake Tahoe Area Plan permit actions.

| <b>Table 2: Permit Activity with the geographic area of Tourist Core Area Plan from adoption through December 2014</b> |                     |   |                          |                                 |
|--|---------------------|---|--------------------------|---------------------------------|
|  | <b>TRPA Permits</b> |   |                          | <b>City of South Lake Tahoe</b> |
| <b>Project Types</b>   | <b>Under Review</b> | <b>Permit Issued/Under Construction</b> | <b>Project Completed</b> | <b>Final Permits</b>            |
| Commercial Project   | 1                   | 2                                       | 0                        | 7                               |
| Grading Project  | 0                   | 1                                       | 0                        | 0                               |
| Residential Dwelling   | 0                   | 0                                       | 0                        | 2                               |
| <b>Total</b>   | <b>1</b>            | <b>3</b>                                | <b>0</b>                 | <b>9</b>                        |

Two projects are underway or recently completed within the TCAP, both permitted before TCAP adoption. The first is the Tahoe Woods Multi-family Dwelling Project, which is being built on the site of a former mobile home park. It provides 28 residential units in seven buildings where residents will be within walking distance of shopping and other amenities.

The second, the Pioneer Trail Pedestrian Upgrades Project, constructed 0.8 miles of 5-foot wide sidewalks along both side of Pioneer Trail between U.S. Highway 50 and Larch Avenue. Lighting and transit shelters provide a safer pedestrian experience along this busy stretch of roadway to encourage residents and visitors to walk to their destinations.

#### **Permit Audit Results for Area Plans:**

No Area Plan conformance audits are planned for either the SSAP or the TCAP until the MOUs authorizing permitting delegation are in effect. Procedural guidelines are being finalized and training for city and county staff is planned to implement the MOUs. Once local jurisdictions have been trained and permits have been issued under these delegation MOUs, auditing will be performed.

Future audits and reporting will follow these general guidelines:

- The audit will be based on 10 percent of the permits issued within the Area Plan (a minimum of 10 permits, or all permits if less than 10 permits issued).
- At a minimum, the audit will evaluate whether issued permits:
  - Included the required findings and environmental review.
  - Were consistent with zoning and development standards in the adopted Area Plan.



## **Attachment 2**

- Were consistent with design standards in the Area Plan and TRPA scenic requirements.
- Included the TRPA standard conditions of approval and other special conditions as appropriate for the project.
- Included adequate requirements for permanent and temporary BMPs, vegetation protection, and other resource protection requirements as required by the Area Plan.
- The audit will also assess whether all required MOU reporting has been provided to TRPA and that procedural guidelines have been followed.

### **Corrective Actions Needed for Area Plans:**

Future reports will also include any corrective actions:

- For permits that are inconsistent with the Area Plan, required corrective actions will be specified with a schedule for completion.
- Corrective actions will be tracked and reported until complete.

### **Coverage Changes and Environmental Benefits in Area Plans:**

The following section describes changes in coverage, implementation of water quality BMP certification, and restoration that has occurred in the geographic area covered by Area Plans since their adoption by the TRPA Governing Board. As more Area Plans are adopted, and associated MOUs are implemented, further comparisons between coverage changes within area plans and the Region as a whole will be reported annually as well.

#### ***South Shore Area Plan***

The two projects completed since the SSAP was adopted in 2013 (Table 1) did not result in any new coverage. Coverage changes from other projects currently under construction in the SSAP will be reported after completion.

The State Route 207 (Kingsbury Grade) Water Quality Improvement Project, an important Environmental Improvement Program project partially within the SSAP, has been under construction by the Nevada Department of Transportation and is now complete. The project addressed needed water quality improvements along the entire length of State Route 207 within the Lake Tahoe Basin.

Since SSAP adoption, no new BMP certificates have been issued. The newly completed commercial projects shown in Table 1 within the Area Plan were on parcels already BMP certified.

#### ***Tourist Core Area Plan***

Of the nine projects completed within the TCAP (Table 2), one added 4,999 square feet of coverage on high capability land but less than the base allowable coverage for the parcel. The project increases the total coverage within the TCAP on high capability land by that same amount.

Several significant Environmental Improvement Projects were implemented within the TCAP. Two focused on water quality improvements: Caltrans implemented water quality improvements along U.S.

## **Attachment 2**

Highway 50 from Ski Run Boulevard to Wildwood Avenue, and a portion of the City of South Lake Tahoe's Bijou Area Erosion Control Project was within the TCAP. The City of South Lake Tahoe implemented two pedestrian and bicycle improvement projects: the Linear Park Rehabilitation and Pioneer Trail Pedestrian Upgrades (described on page 3 of this attachment).

Since the adoption of the TCAP, five new BMP certificates have been issued within the Area Plan, two for commercial properties and the others for a hotel/motel property, a multifamily property and a single family dwelling property.

### 2014 Sustainability Indicators Report

Summary: In 2013, the Lake Tahoe Sustainable Communities Program partners and community stakeholders selected a suite of indicators representative of the Lake Tahoe Region’s economic, environmental, and community health. In 2014, this subset of indicators were incorporated into a dashboard that provides ready public access to an overview of the Lake Tahoe Region’s economic, environmental, and community health.

#### Sustainability Dashboard Categories

- Water Quality
- Forest Health
- Greenhouse Gas Emissions
- Aquatic Invasive Species
- Income
- Business Environment
- Employment
- Housing
- Transportation
- Healthy Lifestyle

The Sustainability Dashboard reports on 28 selected indicators of sustainability and is organized by 11 key categories of importance for the Lake Tahoe Region. Each dashboard category provides information on indicator status, ongoing efforts and projects, and suggestions on how individuals can get involved.

The Sustainability Dashboard is not meant to be a complete inventory of all metrics and indicators in the region – the goal of the dashboard is to make easily accessible the big picture about the condition of the Region’s economy, community, and environment. The Sustainability Dashboard is also not static; as new information becomes available or new priorities are identified, its indicators may also change. The Sustainability Dashboard is updated annually and can be found at [www.laketahoeinfo.org](http://www.laketahoeinfo.org). This report provides the most recent data for the 28 sustainability indicators. For many

indicators, complete and current data are compiled only through 2013, as reflected below.

#### ENVIRONMENT

##### WATER QUALITY

Lake Tahoe’s clarity has historically been the bellwether indicator for water quality – and the health of the entire ecosystem. Stormwater runoff from roads and dense urban areas, vehicle exhaust, altered wetlands and streams, and inadequate stormwater pollution control has significantly impacted Lake Tahoe’s famous clarity and the health of its watersheds. Many of these impacts occurred decades ago. Watershed restoration, air pollution controls, and aggressively implementing proper stormwater controls and best management practices are essential to restore the Lake’s clarity and the Basin’s wetlands and wildlife. Fine sediment loads entering Lake Tahoe are the primary cause of the Lake’s clarity loss, thus efforts to slow clarity loss are focused on fine sediment load reductions. Stormwater runoff from paved and unpaved roads in the Tahoe Basin is responsible for contributing about two-thirds of total fine sediment pollution to Lake Tahoe. Reduced stormwater volumes result in less demand on public stormwater treatment systems and fewer fine sediment particles and other nutrients being delivered to Lake Tahoe. When fewer nutrients are available in the waters of Lake Tahoe, less algae can grow and clarity loss is reduced.

| Indicator  | Status   |                                 |                                    |                                 |      |      |     |      |    |      |      |              |            |      |     |     |      |     |     |      |     |     |      |     |     |      |     |     |      |     |     |      |     |     |      |     |     |      |     |      |      |      |      |      |      |      |      |      |      |
|--|--|---------------------------------|------------------------------------|---------------------------------|------|------|-----|------|----|------|------|--------------|------------|------|-----|-----|------|-----|-----|------|-----|-----|------|-----|-----|------|-----|-----|------|-----|-----|------|-----|-----|------|-----|-----|------|-----|------|------|------|------|------|------|------|------|------|------|
| <p><b>Tahoe Deep Water Clarity</b><br/>Annual average depth of clarity in Lake Tahoe, as measured with a Secchi disk.</p>  | <p><b>Annual Average Secchi Depth</b></p> <table border="1"> <thead> <tr> <th>Year</th> <th>Annual Average Secchi Depth (Feet)</th> <th>TMDL 2016 Interim Target (Feet)</th> </tr> </thead> <tbody> <tr> <td>2007</td> <td>70</td> <td>78</td> </tr> <tr> <td>2008</td> <td>69</td> <td>78</td> </tr> <tr> <td>2009</td> <td>68</td> <td>78</td> </tr> <tr> <td>2010</td> <td>64</td> <td>78</td> </tr> <tr> <td>2011</td> <td>69</td> <td>78</td> </tr> <tr> <td>2012</td> <td>75</td> <td>78</td> </tr> <tr> <td>2013</td> <td>70</td> <td>78</td> </tr> </tbody> </table> <p>SOURCE: <a href="#">Tahoe Environmental Research Center</a></p>  | Year                            | Annual Average Secchi Depth (Feet) | TMDL 2016 Interim Target (Feet) | 2007 | 70   | 78  | 2008 | 69 | 78   | 2009 | 68           | 78         | 2010 | 64  | 78  | 2011 | 69  | 78  | 2012 | 75  | 78  | 2013 | 70  | 78  |      |     |     |      |     |     |      |     |     |      |     |     |      |     |      |      |      |      |      |      |      |      |      |      |
| Year   | Annual Average Secchi Depth (Feet)   | TMDL 2016 Interim Target (Feet) |                                    |                                 |      |      |     |      |    |      |      |              |            |      |     |     |      |     |     |      |     |     |      |     |     |      |     |     |      |     |     |      |     |     |      |     |     |      |     |      |      |      |      |      |      |      |      |      |      |
| 2007   | 70   | 78                              |                                    |                                 |      |      |     |      |    |      |      |              |            |      |     |     |      |     |     |      |     |     |      |     |     |      |     |     |      |     |     |      |     |     |      |     |     |      |     |      |      |      |      |      |      |      |      |      |      |
| 2008   | 69   | 78                              |                                    |                                 |      |      |     |      |    |      |      |              |            |      |     |     |      |     |     |      |     |     |      |     |     |      |     |     |      |     |     |      |     |     |      |     |     |      |     |      |      |      |      |      |      |      |      |      |      |
| 2009   | 68   | 78                              |                                    |                                 |      |      |     |      |    |      |      |              |            |      |     |     |      |     |     |      |     |     |      |     |     |      |     |     |      |     |     |      |     |     |      |     |     |      |     |      |      |      |      |      |      |      |      |      |      |
| 2010   | 64   | 78                              |                                    |                                 |      |      |     |      |    |      |      |              |            |      |     |     |      |     |     |      |     |     |      |     |     |      |     |     |      |     |     |      |     |     |      |     |     |      |     |      |      |      |      |      |      |      |      |      |      |
| 2011   | 69   | 78                              |                                    |                                 |      |      |     |      |    |      |      |              |            |      |     |     |      |     |     |      |     |     |      |     |     |      |     |     |      |     |     |      |     |     |      |     |     |      |     |      |      |      |      |      |      |      |      |      |      |
| 2012   | 75   | 78                              |                                    |                                 |      |      |     |      |    |      |      |              |            |      |     |     |      |     |     |      |     |     |      |     |     |      |     |     |      |     |     |      |     |     |      |     |     |      |     |      |      |      |      |      |      |      |      |      |      |
| 2013   | 70   | 78                              |                                    |                                 |      |      |     |      |    |      |      |              |            |      |     |     |      |     |     |      |     |     |      |     |     |      |     |     |      |     |     |      |     |     |      |     |     |      |     |      |      |      |      |      |      |      |      |      |      |
| <p><b>Parcels With Stormwater Retrofits</b><br/>Number of developed parcels in the Tahoe Basin that are retrofitted with Best Management Practices.</p>  | <p><b>Number of Parcels with BMP Retrofits</b></p> <table border="1"> <thead> <tr> <th>Year</th> <th>CA Parcels With SW Retrofits</th> <th>NV Parcels With SW Retrofits</th> </tr> </thead> <tbody> <tr> <td>2000</td> <td>0</td> <td>0</td> </tr> <tr> <td>2001</td> <td>0</td> <td>50</td> </tr> <tr> <td>2002</td> <td>50</td> <td>150</td> </tr> <tr> <td>2003</td> <td>100</td> <td>200</td> </tr> <tr> <td>2004</td> <td>200</td> <td>300</td> </tr> <tr> <td>2005</td> <td>300</td> <td>400</td> </tr> <tr> <td>2006</td> <td>400</td> <td>500</td> </tr> <tr> <td>2007</td> <td>500</td> <td>600</td> </tr> <tr> <td>2008</td> <td>600</td> <td>700</td> </tr> <tr> <td>2009</td> <td>700</td> <td>800</td> </tr> <tr> <td>2010</td> <td>800</td> <td>900</td> </tr> <tr> <td>2011</td> <td>900</td> <td>1000</td> </tr> <tr> <td>2012</td> <td>1000</td> <td>1100</td> </tr> <tr> <td>2013</td> <td>1100</td> <td>1200</td> </tr> <tr> <td>2014</td> <td>1200</td> <td>1300</td> </tr> </tbody> </table> <p>SOURCE: <a href="#">Environmental Improvement Program</a></p> | Year                            | CA Parcels With SW Retrofits       | NV Parcels With SW Retrofits    | 2000 | 0    | 0   | 2001 | 0  | 50   | 2002 | 50           | 150        | 2003 | 100 | 200 | 2004 | 200 | 300 | 2005 | 300 | 400 | 2006 | 400 | 500 | 2007 | 500 | 600 | 2008 | 600 | 700 | 2009 | 700 | 800 | 2010 | 800 | 900 | 2011 | 900 | 1000 | 2012 | 1000 | 1100 | 2013 | 1100 | 1200 | 2014 | 1200 | 1300 |
| Year   | CA Parcels With SW Retrofits   | NV Parcels With SW Retrofits    |                                    |                                 |      |      |     |      |    |      |      |              |            |      |     |     |      |     |     |      |     |     |      |     |     |      |     |     |      |     |     |      |     |     |      |     |     |      |     |      |      |      |      |      |      |      |      |      |      |
| 2000   | 0  | 0                               |                                    |                                 |      |      |     |      |    |      |      |              |            |      |     |     |      |     |     |      |     |     |      |     |     |      |     |     |      |     |     |      |     |     |      |     |     |      |     |      |      |      |      |      |      |      |      |      |      |
| 2001   | 0  | 50                              |                                    |                                 |      |      |     |      |    |      |      |              |            |      |     |     |      |     |     |      |     |     |      |     |     |      |     |     |      |     |     |      |     |     |      |     |     |      |     |      |      |      |      |      |      |      |      |      |      |
| 2002   | 50   | 150                             |                                    |                                 |      |      |     |      |    |      |      |              |            |      |     |     |      |     |     |      |     |     |      |     |     |      |     |     |      |     |     |      |     |     |      |     |     |      |     |      |      |      |      |      |      |      |      |      |      |
| 2003   | 100  | 200                             |                                    |                                 |      |      |     |      |    |      |      |              |            |      |     |     |      |     |     |      |     |     |      |     |     |      |     |     |      |     |     |      |     |     |      |     |     |      |     |      |      |      |      |      |      |      |      |      |      |
| 2004   | 200  | 300                             |                                    |                                 |      |      |     |      |    |      |      |              |            |      |     |     |      |     |     |      |     |     |      |     |     |      |     |     |      |     |     |      |     |     |      |     |     |      |     |      |      |      |      |      |      |      |      |      |      |
| 2005   | 300  | 400                             |                                    |                                 |      |      |     |      |    |      |      |              |            |      |     |     |      |     |     |      |     |     |      |     |     |      |     |     |      |     |     |      |     |     |      |     |     |      |     |      |      |      |      |      |      |      |      |      |      |
| 2006   | 400  | 500                             |                                    |                                 |      |      |     |      |    |      |      |              |            |      |     |     |      |     |     |      |     |     |      |     |     |      |     |     |      |     |     |      |     |     |      |     |     |      |     |      |      |      |      |      |      |      |      |      |      |
| 2007   | 500  | 600                             |                                    |                                 |      |      |     |      |    |      |      |              |            |      |     |     |      |     |     |      |     |     |      |     |     |      |     |     |      |     |     |      |     |     |      |     |     |      |     |      |      |      |      |      |      |      |      |      |      |
| 2008   | 600  | 700                             |                                    |                                 |      |      |     |      |    |      |      |              |            |      |     |     |      |     |     |      |     |     |      |     |     |      |     |     |      |     |     |      |     |     |      |     |     |      |     |      |      |      |      |      |      |      |      |      |      |
| 2009   | 700  | 800                             |                                    |                                 |      |      |     |      |    |      |      |              |            |      |     |     |      |     |     |      |     |     |      |     |     |      |     |     |      |     |     |      |     |     |      |     |     |      |     |      |      |      |      |      |      |      |      |      |      |
| 2010   | 800  | 900                             |                                    |                                 |      |      |     |      |    |      |      |              |            |      |     |     |      |     |     |      |     |     |      |     |     |      |     |     |      |     |     |      |     |     |      |     |     |      |     |      |      |      |      |      |      |      |      |      |      |
| 2011   | 900  | 1000                            |                                    |                                 |      |      |     |      |    |      |      |              |            |      |     |     |      |     |     |      |     |     |      |     |     |      |     |     |      |     |     |      |     |     |      |     |     |      |     |      |      |      |      |      |      |      |      |      |      |
| 2012   | 1000   | 1100                            |                                    |                                 |      |      |     |      |    |      |      |              |            |      |     |     |      |     |     |      |     |     |      |     |     |      |     |     |      |     |     |      |     |     |      |     |     |      |     |      |      |      |      |      |      |      |      |      |      |
| 2013   | 1100   | 1200                            |                                    |                                 |      |      |     |      |    |      |      |              |            |      |     |     |      |     |     |      |     |     |      |     |     |      |     |     |      |     |     |      |     |     |      |     |     |      |     |      |      |      |      |      |      |      |      |      |      |
| 2014   | 1200   | 1300                            |                                    |                                 |      |      |     |      |    |      |      |              |            |      |     |     |      |     |     |      |     |     |      |     |     |      |     |     |      |     |     |      |     |     |      |     |     |      |     |      |      |      |      |      |      |      |      |      |      |
| <p><b>Miles of Roads Treated</b><br/>Miles of city, county, state and U.S. Forest Service (USFS) roads that are retrofitted, decommissioned or obliterated to reduce stormwater pollution.</p> | <p><b>Miles of Roadway Treated</b></p> <table border="1"> <thead> <tr> <th>Year</th> <th>Miles of Roadway Treated</th> </tr> </thead> <tbody> <tr> <td>1997-2010</td> <td>500</td> </tr> <tr> <td>2011</td> <td>100</td> </tr> <tr> <td>2012</td> <td>50</td> </tr> <tr> <td>2013</td> <td>50</td> </tr> <tr> <td><b>Total</b></td> <td><b>700</b></td> </tr> </tbody> </table> <p>SOURCE: <a href="#">Environmental Improvement Program</a></p>   | Year                            | Miles of Roadway Treated           | 1997-2010                       | 500  | 2011 | 100 | 2012 | 50 | 2013 | 50   | <b>Total</b> | <b>700</b> |      |     |     |      |     |     |      |     |     |      |     |     |      |     |     |      |     |     |      |     |     |      |     |     |      |     |      |      |      |      |      |      |      |      |      |      |
| Year   | Miles of Roadway Treated   |                                 |                                    |                                 |      |      |     |      |    |      |      |              |            |      |     |     |      |     |     |      |     |     |      |     |     |      |     |     |      |     |     |      |     |     |      |     |     |      |     |      |      |      |      |      |      |      |      |      |      |
| 1997-2010  | 500  |                                 |                                    |                                 |      |      |     |      |    |      |      |              |            |      |     |     |      |     |     |      |     |     |      |     |     |      |     |     |      |     |     |      |     |     |      |     |     |      |     |      |      |      |      |      |      |      |      |      |      |
| 2011   | 100  |                                 |                                    |                                 |      |      |     |      |    |      |      |              |            |      |     |     |      |     |     |      |     |     |      |     |     |      |     |     |      |     |     |      |     |     |      |     |     |      |     |      |      |      |      |      |      |      |      |      |      |
| 2012   | 50   |                                 |                                    |                                 |      |      |     |      |    |      |      |              |            |      |     |     |      |     |     |      |     |     |      |     |     |      |     |     |      |     |     |      |     |     |      |     |     |      |     |      |      |      |      |      |      |      |      |      |      |
| 2013   | 50   |                                 |                                    |                                 |      |      |     |      |    |      |      |              |            |      |     |     |      |     |     |      |     |     |      |     |     |      |     |     |      |     |     |      |     |     |      |     |     |      |     |      |      |      |      |      |      |      |      |      |      |
| <b>Total</b>   | <b>700</b>   |                                 |                                    |                                 |      |      |     |      |    |      |      |              |            |      |     |     |      |     |     |      |     |     |      |     |     |      |     |     |      |     |     |      |     |     |      |     |     |      |     |      |      |      |      |      |      |      |      |      |      |

| <p><b>INVASIVE SPECIES</b><br/>                 Aquatic invasive species degrade the biological integrity of aquatic ecosystems and impact nearshore clarity by altering the chemical, physical, and biological habitat features of waterbodies, outcompeting native species and increasing algae growth. Aquatic invasive species can also degrade recreational assets and reduce property values which would have significant impacts on the local economy and community.</p>      |   |                  |               |                  |      |           |           |      |           |           |      |           |           |      |           |           |      |           |           |      |           |           |      |           |           |      |           |           |      |           |           |      |           |           |      |           |           |
|--|---|------------------|---------------|------------------|------|-----------|-----------|------|-----------|-----------|------|-----------|-----------|------|-----------|-----------|------|-----------|-----------|------|-----------|-----------|------|-----------|-----------|------|-----------|-----------|------|-----------|-----------|------|-----------|-----------|------|-----------|-----------|
| <p><b>Indicator</b></p>  | <p><b>Status</b></p>  |                  |               |                  |      |           |           |      |           |           |      |           |           |      |           |           |      |           |           |      |           |           |      |           |           |      |           |           |      |           |           |      |           |           |      |           |           |
| <p><b>Aquatic Invasive Plant Infestation</b><br/>                 Number of sites with Eurasian watermilfoil or curlyleaf pondweed colonies present in Lake Tahoe.</p>   | <p><b>Aquatic Invasive Plant Infestations</b></p> <table border="1"> <thead> <tr> <th>Year</th> <th>Milfoil</th> <th>Pondweed</th> </tr> </thead> <tbody> <tr> <td>1995</td> <td>12</td> <td>0</td> </tr> <tr> <td>1996</td> <td>13</td> <td>0</td> </tr> <tr> <td>1997</td> <td>14</td> <td>0</td> </tr> <tr> <td>2000</td> <td>18</td> <td>0</td> </tr> <tr> <td>2003</td> <td>30</td> <td>8</td> </tr> <tr> <td>2006</td> <td>50</td> <td>20</td> </tr> </tbody> </table> <p>SOURCE: <a href="#">Aquatic Invasive Species Program, Tahoe Regional Planning Agency</a></p>  | Year             | Milfoil       | Pondweed         | 1995 | 12        | 0         | 1996 | 13        | 0         | 1997 | 14        | 0         | 2000 | 18        | 0         | 2003 | 30        | 8         | 2006 | 50        | 20        |      |           |           |      |           |           |      |           |           |      |           |           |      |           |           |
| Year   | Milfoil   | Pondweed         |               |                  |      |           |           |      |           |           |      |           |           |      |           |           |      |           |           |      |           |           |      |           |           |      |           |           |      |           |           |      |           |           |      |           |           |
| 1995   | 12  | 0                |               |                  |      |           |           |      |           |           |      |           |           |      |           |           |      |           |           |      |           |           |      |           |           |      |           |           |      |           |           |      |           |           |      |           |           |
| 1996   | 13  | 0                |               |                  |      |           |           |      |           |           |      |           |           |      |           |           |      |           |           |      |           |           |      |           |           |      |           |           |      |           |           |      |           |           |      |           |           |
| 1997   | 14  | 0                |               |                  |      |           |           |      |           |           |      |           |           |      |           |           |      |           |           |      |           |           |      |           |           |      |           |           |      |           |           |      |           |           |      |           |           |
| 2000   | 18  | 0                |               |                  |      |           |           |      |           |           |      |           |           |      |           |           |      |           |           |      |           |           |      |           |           |      |           |           |      |           |           |      |           |           |      |           |           |
| 2003   | 30  | 8                |               |                  |      |           |           |      |           |           |      |           |           |      |           |           |      |           |           |      |           |           |      |           |           |      |           |           |      |           |           |      |           |           |      |           |           |
| 2006   | 50  | 20               |               |                  |      |           |           |      |           |           |      |           |           |      |           |           |      |           |           |      |           |           |      |           |           |      |           |           |      |           |           |      |           |           |      |           |           |
| <p><b>Watercraft Inspections</b><br/>                 Total annual number of pre-launch watercraft inspections completed.</p>  | <p><i>In 2013, 8105 watercraft inspections were conducted.</i></p>  |                  |               |                  |      |           |           |      |           |           |      |           |           |      |           |           |      |           |           |      |           |           |      |           |           |      |           |           |      |           |           |      |           |           |      |           |           |
| <p><b>GREENHOUSE GAS EMISSIONS</b><br/>                 The Greenhouse Gas Emissions Inventory measures the estimated GHG emissions generated by human-driven sources in the Lake Tahoe Region historically, as well as the projected GHG emissions generated in the future based on population and activity assumptions, and legislation and regulations currently in place. The Region's Sustainability Action Plan calls for a 15 percent reduction in GHG emissions by 2020.</p> |   |                  |               |                  |      |           |           |      |           |           |      |           |           |      |           |           |      |           |           |      |           |           |      |           |           |      |           |           |      |           |           |      |           |           |      |           |           |
| <p><b>Indicator</b></p>  | <p><b>Status</b></p>  |                  |               |                  |      |           |           |      |           |           |      |           |           |      |           |           |      |           |           |      |           |           |      |           |           |      |           |           |      |           |           |      |           |           |      |           |           |
| <p><b>GHG Emissions</b><br/>                 Estimated historic GHG emissions generated by human-driven sources in the Lake Tahoe Region.</p>  | <p><i>According to the Greenhouse Gas Emissions Inventory, electricity consumption, natural gas consumption, and transportation activities contribute approximately 75 percent of GHG emissions in the Region.</i></p>  |                  |               |                  |      |           |           |      |           |           |      |           |           |      |           |           |      |           |           |      |           |           |      |           |           |      |           |           |      |           |           |      |           |           |      |           |           |
| <p><b>Vehicle Miles Traveled</b><br/>                 Estimated average annual daily Vehicle Miles Traveled (VMT) on roadways in the Tahoe Basin.</p>  | <p><b>Vehicle Miles Traveled</b></p> <table border="1"> <thead> <tr> <th>Year</th> <th>Estimated VMT</th> <th>Threshold Target</th> </tr> </thead> <tbody> <tr> <td>1981</td> <td>2,300,000</td> <td>2,080,000</td> </tr> <tr> <td>1984</td> <td>2,350,000</td> <td>2,080,000</td> </tr> <tr> <td>1987</td> <td>2,550,000</td> <td>2,080,000</td> </tr> <tr> <td>1990</td> <td>2,450,000</td> <td>2,080,000</td> </tr> <tr> <td>1993</td> <td>2,350,000</td> <td>2,080,000</td> </tr> <tr> <td>1996</td> <td>2,400,000</td> <td>2,080,000</td> </tr> <tr> <td>1999</td> <td>2,350,000</td> <td>2,080,000</td> </tr> <tr> <td>2002</td> <td>2,300,000</td> <td>2,080,000</td> </tr> <tr> <td>2005</td> <td>2,150,000</td> <td>2,080,000</td> </tr> <tr> <td>2008</td> <td>2,050,000</td> <td>2,080,000</td> </tr> <tr> <td>2011</td> <td>2,000,000</td> <td>2,080,000</td> </tr> </tbody> </table> <p>SOURCE: <a href="#">Tahoe Metropolitan Planning Organization</a></p> | Year             | Estimated VMT | Threshold Target | 1981 | 2,300,000 | 2,080,000 | 1984 | 2,350,000 | 2,080,000 | 1987 | 2,550,000 | 2,080,000 | 1990 | 2,450,000 | 2,080,000 | 1993 | 2,350,000 | 2,080,000 | 1996 | 2,400,000 | 2,080,000 | 1999 | 2,350,000 | 2,080,000 | 2002 | 2,300,000 | 2,080,000 | 2005 | 2,150,000 | 2,080,000 | 2008 | 2,050,000 | 2,080,000 | 2011 | 2,000,000 | 2,080,000 |
| Year   | Estimated VMT   | Threshold Target |               |                  |      |           |           |      |           |           |      |           |           |      |           |           |      |           |           |      |           |           |      |           |           |      |           |           |      |           |           |      |           |           |      |           |           |
| 1981   | 2,300,000   | 2,080,000        |               |                  |      |           |           |      |           |           |      |           |           |      |           |           |      |           |           |      |           |           |      |           |           |      |           |           |      |           |           |      |           |           |      |           |           |
| 1984   | 2,350,000   | 2,080,000        |               |                  |      |           |           |      |           |           |      |           |           |      |           |           |      |           |           |      |           |           |      |           |           |      |           |           |      |           |           |      |           |           |      |           |           |
| 1987   | 2,550,000   | 2,080,000        |               |                  |      |           |           |      |           |           |      |           |           |      |           |           |      |           |           |      |           |           |      |           |           |      |           |           |      |           |           |      |           |           |      |           |           |
| 1990   | 2,450,000   | 2,080,000        |               |                  |      |           |           |      |           |           |      |           |           |      |           |           |      |           |           |      |           |           |      |           |           |      |           |           |      |           |           |      |           |           |      |           |           |
| 1993   | 2,350,000   | 2,080,000        |               |                  |      |           |           |      |           |           |      |           |           |      |           |           |      |           |           |      |           |           |      |           |           |      |           |           |      |           |           |      |           |           |      |           |           |
| 1996   | 2,400,000   | 2,080,000        |               |                  |      |           |           |      |           |           |      |           |           |      |           |           |      |           |           |      |           |           |      |           |           |      |           |           |      |           |           |      |           |           |      |           |           |
| 1999   | 2,350,000   | 2,080,000        |               |                  |      |           |           |      |           |           |      |           |           |      |           |           |      |           |           |      |           |           |      |           |           |      |           |           |      |           |           |      |           |           |      |           |           |
| 2002   | 2,300,000   | 2,080,000        |               |                  |      |           |           |      |           |           |      |           |           |      |           |           |      |           |           |      |           |           |      |           |           |      |           |           |      |           |           |      |           |           |      |           |           |
| 2005   | 2,150,000   | 2,080,000        |               |                  |      |           |           |      |           |           |      |           |           |      |           |           |      |           |           |      |           |           |      |           |           |      |           |           |      |           |           |      |           |           |      |           |           |
| 2008   | 2,050,000   | 2,080,000        |               |                  |      |           |           |      |           |           |      |           |           |      |           |           |      |           |           |      |           |           |      |           |           |      |           |           |      |           |           |      |           |           |      |           |           |
| 2011   | 2,000,000   | 2,080,000        |               |                  |      |           |           |      |           |           |      |           |           |      |           |           |      |           |           |      |           |           |      |           |           |      |           |           |      |           |           |      |           |           |      |           |           |

**Attachment 3**

| Indicator   | Status  |      |       |           |        |      |       |      |       |      |       |              |               |
|---|---|------|-------|-----------|--------|------|-------|------|-------|------|-------|--------------|---------------|
| <p><b>Natural Gas Consumption</b><br/>Total therms of natural gas consumption from residential, commercial and industrial buildings in the Tahoe Basin.</p>   | <p><i>According to the Greenhouse Gas Emissions Inventory, natural gas consumption accounts for roughly 25 percent of the total GHG emissions in the Lake Tahoe Region. Natural gas consumption went up in the Lake Tahoe Region between 2012 and 2013.</i></p>   |      |       |           |        |      |       |      |       |      |       |              |               |
| <p><b>FOREST HEALTH</b><br/>In Tahoe, the buildup of forest fuels in addition to changes in climate have increased the likelihood of uncharacteristic, catastrophic wildfires that pose a serious risk to public safety, private property, and forest ecosystems. Vegetation management projects have been implemented throughout the Tahoe Region forests to reduce the amount of forest fuels that could lead to large-scale fires. Improving forest ecosystem health and reducing hazardous fuels (wildfire risk) requires fuels reduction/forest health treatments in the defense zone and threat zone of the wildland urban interface. Treatments are prioritized to reduce fuel conditions that could support high-intensity wildfires in and near communities.</p> |   |      |       |           |        |      |       |      |       |      |       |              |               |
| Indicator   | Status  |      |       |           |        |      |       |      |       |      |       |              |               |
| <p><b>Flame Length</b><br/>Percentage of the wildland urban interface in the Lake Tahoe Region that is estimated and projected to have flame lengths that are within the desired condition of less than four feet.</p>  | <p><i>Flame lengths in Tahoe are projected to increase by 2020.</i></p>   |      |       |           |        |      |       |      |       |      |       |              |               |
| <p><b>Acres of Forest Fuels Treatment</b><br/>This indicator measures the number of acres of treatment performed in the Lake Tahoe Region to reduce hazardous fuels.</p>  | <div style="text-align: center;"> <p><b>Acres of Forest Fuel Reduction Treatments</b></p> <table border="1"> <caption>Acres of Forest Fuel Reduction Treatments (Estimated)</caption> <thead> <tr> <th>Year</th> <th>Acres</th> </tr> </thead> <tbody> <tr> <td>1997-2010</td> <td>45,000</td> </tr> <tr> <td>2011</td> <td>5,000</td> </tr> <tr> <td>2012</td> <td>2,000</td> </tr> <tr> <td>2013</td> <td>1,000</td> </tr> <tr> <td><b>Total</b></td> <td><b>53,000</b></td> </tr> </tbody> </table> <p><small>SOURCE: <a href="#">Environmental Improvement Program</a></small></p> </div> | Year | Acres | 1997-2010 | 45,000 | 2011 | 5,000 | 2012 | 2,000 | 2013 | 1,000 | <b>Total</b> | <b>53,000</b> |
| Year  | Acres   |      |       |           |        |      |       |      |       |      |       |              |               |
| 1997-2010   | 45,000  |      |       |           |        |      |       |      |       |      |       |              |               |
| 2011  | 5,000   |      |       |           |        |      |       |      |       |      |       |              |               |
| 2012  | 2,000   |      |       |           |        |      |       |      |       |      |       |              |               |
| 2013  | 1,000   |      |       |           |        |      |       |      |       |      |       |              |               |
| <b>Total</b>  | <b>53,000</b>   |      |       |           |        |      |       |      |       |      |       |              |               |
| <p><b>Acres of SEZ Restored or Enhanced</b><br/>This indicator measures acres of stream environment zone in the Lake Tahoe Region that have been restored or enhanced in order to regain natural or historic function and values.</p>   | <p><i>Between 1997 and 2013, over 1,400 acres of SEZ have been restored or enhanced.</i></p>  |      |       |           |        |      |       |      |       |      |       |              |               |

| ECONOMY  |   |
|--|---|
| <p><b>EMPLOYMENT</b><br/>                     Employment numbers can be compared to population, age distribution, and per capita income to indicate how job increases and losses are affecting the region’s residents, the economic health of a community, and the overall quality of life of community residents.</p> |   |
| Indicator  | Status  |
| <p><b>Employment (CA)</b><br/>                     Annual average employment numbers for several California communities in the Lake Tahoe Region.<sup>1</sup></p>  | <p style="text-align: center;"><small>SOURCE: CA Employment Development Division</small></p>  |
| <p><b>Unemployment Rates (CA)</b><br/>                     Annual average unemployment rate for California communities in the Lake Tahoe Region.<sup>2</sup></p>   | <p><i>In 2012, the unemployment rate in the City of South Lake Tahoe was 14.1 percent compared to the California statewide average of 10.5 percent.</i></p> |

<sup>1</sup> Annual employment numbers are not available for communities in the Nevada portion of Tahoe or residents in the California portion of the Lake Tahoe Region who live outside of defined Census Designated Place (CDP). However, the portion of the total population of the Lake Tahoe Region who reside within defined CDPs in the California portion of the Tahoe Basin is roughly 70 percent so this indicator is a good proxy for employment numbers for the entire Lake Tahoe Region.

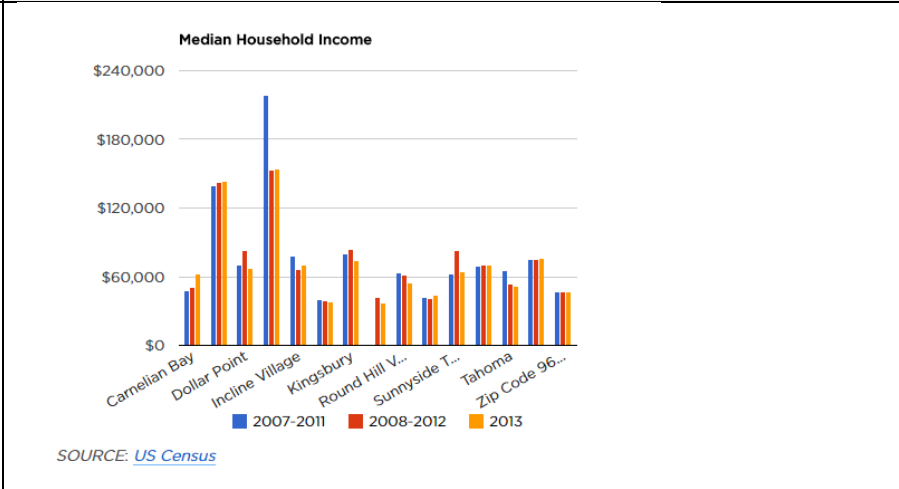
<sup>2</sup> Annual unemployment rates are not available for communities in the Nevada portion of the region or residents in the California portion of the region who live outside of defined Census Designated Place (CDP). However, the portion of the total population of the Lake Tahoe Region who reside within defined CDPs in the California portion of Tahoe is roughly 70 percent so this indicator is a good proxy for employment numbers for the entire region.

**Attachment 3**

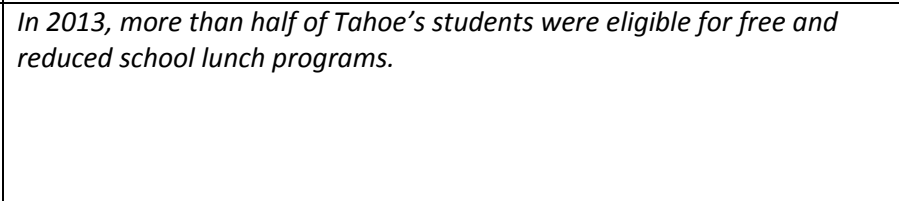
**INCOME**  
 Income is an important gauge of the standard of living and wealth distribution of communities in the Lake Tahoe Region. An increase in income for a community creates opportunities for its residents, ranging from educational attainment to community participation. Increases in average income are likely to increase environmental stewardship through increased philanthropic spending. Reporting the income for Tahoe communities provides both a comparison of economic health in different communities in the Lake Tahoe Region and an understanding of the trend within each community over time.

| Indicator | Status |
|-----------|--------|
|-----------|--------|

|   |  |
|---|--|
| <p><b>Median Household Income</b><br/>                     Median household income of each Census Designated Places (CDPs) in the Lake Tahoe Region annually.</p> | <p style="text-align: center; font-size: small;">SOURCE: <a href="#">US Census</a></p> |
|---|--|



|   |   |
|---|---|
| <p><b>Lake Tahoe Community College Courses Offered</b><br/>                     This indicator measures the annual total number of credit and non-credit courses offered at LTCC.<sup>3</sup></p> | <p style="text-align: center; font-size: small;">SOURCE: <a href="#">CA Community College Chancellor’s Office</a></p> |
|---|---|



<sup>3</sup> Credit courses are courses offered at LTCC that have an associated credit amount that can be used to advance towards a degree or can be transferred as credits to another college or university. Non-credit courses are courses offered by LTCC that have no credit associated with it.



**Attachment 3**

**BUSINESS ENVIRONMENT**

The business environment within a community influences the financial health and employment opportunities of its residents, as well as the character of the community. Tourism is the primary economic driver in the Lake Tahoe Region, roughly 40 percent of the overall economy in the region. Increasing industry diversification will increase the resilience of the local economy to macroeconomic trends, reducing the impacts of a recession and increasing the region’s ability to capitalize on a range of opportunities during periods of economic growth.

Concentrating development reduces the travel time and cost for residents and tourists to access retail facilities, facilitates additional visits to retail facilities and reduces public sector investments in infrastructure outside of the urban areas. These changes cause the concentrated areas of development to become economic hubs that generate higher private sector revenues, become community gathering areas, and cause the public sector to increase infrastructure investments (e.g. walking paths, parks) in concentrated development areas.

| <b>Indicator</b>   | <b>Status</b>  |
|--|--|
| <p><b>Transient Occupancy Tax</b><br/>Total annual transient occupancy tax revenues collected from overnight lodging facilities in the Lake Tahoe Region.</p>  | <p><i>Region-wide, TOT revenues increased in 2012-2013.</i></p>  |
| <p><b>Employment by Industry</b><br/>Number of employees per industry in the Lake Tahoe Region.</p>  | <p><i>Arts, Entertainment &amp; Recreation and Accommodations &amp; Food Services account for the majority of employment in the Lake Tahoe Region.</i></p>   |
| <p><b>Distribution of Development</b><br/>Percentage of Residential Units, Tourist Accommodation Units (TAUs) and Commercial Floor Area (CFA) located within defined centers (residential, tourist and commercial centers) in the Lake Tahoe Region.<sup>4</sup></p> | <p><i>Four sub-categories of development were evaluated for 2013-2014, distribution of CFA, TAUs, Residential Units, and property improvements. Of these, the distribution of CFA increased within Town Centers by 0.09 percent.</i></p> |

<sup>4</sup> The Tahoe Regional Planning Agency’s Regional Plan defines specific boundaries for these existing centers, generally including all concentrated areas of development and properties within ¼ mile of existing commercial and public services land uses.

| COMMUNITY   |  |
|---|--|
| <p><b>HOUSING</b></p> <p>A lack of affordable housing limits the ability of people to live close to work and can reduce the availability of qualified workers for local businesses. In response to high housing prices, local workers may be forced to choose between living outside the region and facing long commutes or paying more for housing than they can for housing. Commuting to and from the Lake Tahoe Region also increases greenhouse gas emissions and impacts quality of life.</p>   |  |
| Indicator   | Status   |
| <p><b>Second Home Ownership</b></p> <p>Percentage of housing units in the Lake Tahoe Region in seasonal, recreational or occupational use.<sup>5</sup></p>  | <p style="text-align: center;">SOURCE: US Census</p>   |
| <p><b>Median House Prices</b></p> <p>Annual median house price of houses sold in the Lake Tahoe Region.</p>   | <p><i>In 2012, in some communities of the Lake Tahoe Region, median home prices were as high as \$745,000.</i></p> |
| <p><b>TRANSPORTATION</b></p> <p>Transportation policies and programs in the Lake Tahoe Region aim to provide a successful multi-modal transportation system that appeals to users, supports mobility needs, and decreases dependency on the private automobile. A well-functioning public transit system is one of the primary tools for changing travel mode share in the Lake Tahoe Region to be less dependent on automobile travel. Transit ridership is regularly monitored in the Lake Tahoe Region because it allows transportation planners the ability to assess how and to what extent public transportation systems are being utilized and enables prioritization for the allocation of transportation resources. Pedestrian and bicycle routes and paths provide options for increased personal mobility and decreased dependence on automobiles, both for everyday travel needs as well as recreational use. This reduces air and water pollution, increases community health and cultivates additional economic activity.</p> |  |
| Indicator   | Status   |
| <p><b>Travel Mode Share</b></p> <p>Percentage of travelers in the Lake Tahoe Region that drive in a car/truck/van, use public transit, ride a bike, walk, or use another form of transportation.<sup>6</sup></p>  | <p><i>The total non-auto mode share in 2014 was 17 percent.</i></p>  |

<sup>5</sup> The US Census Bureau defines these units as vacant units used or intended for use only in certain seasons or for weekends or other occasional use throughout the year. Seasonal units include those used for summer or winter sports or recreation, such as beach cottages and hunting cabins. Interval ownership units, sometimes called shared-ownership or time-sharing condominiums, also are included.

<sup>6</sup> This indicator is based on surveys conducted by the Tahoe Metropolitan Planning Organization (TMPO) in winter and summer seasons every two years.

**Attachment 3**

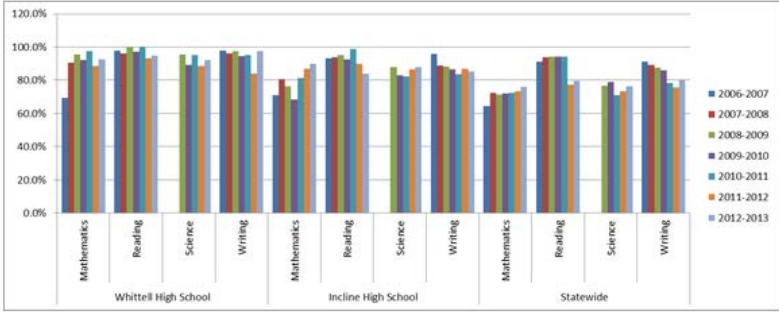
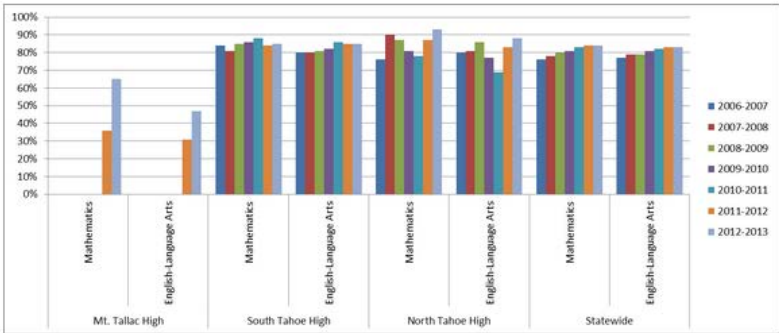
| Indicator   | Status   |             |             |             |       |           |           |         |           |           |         |         |           |           |           |         |           |           |           |         |           |           |           |         |           |           |         |         |           |           |         |         |           |
|---|--|-------------|-------------|-------------|-------|-----------|-----------|---------|-----------|-----------|---------|---------|-----------|-----------|-----------|---------|-----------|-----------|-----------|---------|-----------|-----------|-----------|---------|-----------|-----------|---------|---------|-----------|-----------|---------|---------|-----------|
| <p><b>Transit Ridership</b><br/>Total annual transit ridership for the two most utilized public transportation systems serving Tahoe communities.<sup>7</sup></p>   |  <p><b>Annual Transit Ridership</b></p> <p>The chart shows annual transit ridership from 1999-2000 to 2011-2012. The y-axis represents the number of riders, ranging from 0 to 1,600,000 in increments of 400,000. The x-axis shows two-year periods. Each bar is stacked with South Shore (blue) at the bottom and North Shore (orange) on top. Ridership peaks around 2005-2006 and 2007-2008, with a slight decline in the most recent period.</p> <table border="1"> <caption>Estimated Annual Transit Ridership Data</caption> <thead> <tr> <th>Year</th> <th>South Shore</th> <th>North Shore</th> <th>Total</th> </tr> </thead> <tbody> <tr><td>1999-2000</td><td>1,000,000</td><td>200,000</td><td>1,200,000</td></tr> <tr><td>2001-2002</td><td>950,000</td><td>250,000</td><td>1,200,000</td></tr> <tr><td>2003-2004</td><td>1,000,000</td><td>250,000</td><td>1,250,000</td></tr> <tr><td>2005-2006</td><td>1,100,000</td><td>250,000</td><td>1,350,000</td></tr> <tr><td>2007-2008</td><td>1,000,000</td><td>300,000</td><td>1,300,000</td></tr> <tr><td>2009-2010</td><td>900,000</td><td>300,000</td><td>1,200,000</td></tr> <tr><td>2011-2012</td><td>850,000</td><td>250,000</td><td>1,100,000</td></tr> </tbody> </table> <p>SOURCE: <a href="#">Tahoe Metropolitan Planning Organization</a></p> | Year        | South Shore | North Shore | Total | 1999-2000 | 1,000,000 | 200,000 | 1,200,000 | 2001-2002 | 950,000 | 250,000 | 1,200,000 | 2003-2004 | 1,000,000 | 250,000 | 1,250,000 | 2005-2006 | 1,100,000 | 250,000 | 1,350,000 | 2007-2008 | 1,000,000 | 300,000 | 1,300,000 | 2009-2010 | 900,000 | 300,000 | 1,200,000 | 2011-2012 | 850,000 | 250,000 | 1,100,000 |
| Year  | South Shore  | North Shore | Total       |             |       |           |           |         |           |           |         |         |           |           |           |         |           |           |           |         |           |           |           |         |           |           |         |         |           |           |         |         |           |
| 1999-2000   | 1,000,000  | 200,000     | 1,200,000   |             |       |           |           |         |           |           |         |         |           |           |           |         |           |           |           |         |           |           |           |         |           |           |         |         |           |           |         |         |           |
| 2001-2002   | 950,000  | 250,000     | 1,200,000   |             |       |           |           |         |           |           |         |         |           |           |           |         |           |           |           |         |           |           |           |         |           |           |         |         |           |           |         |         |           |
| 2003-2004   | 1,000,000  | 250,000     | 1,250,000   |             |       |           |           |         |           |           |         |         |           |           |           |         |           |           |           |         |           |           |           |         |           |           |         |         |           |           |         |         |           |
| 2005-2006   | 1,100,000  | 250,000     | 1,350,000   |             |       |           |           |         |           |           |         |         |           |           |           |         |           |           |           |         |           |           |           |         |           |           |         |         |           |           |         |         |           |
| 2007-2008   | 1,000,000  | 300,000     | 1,300,000   |             |       |           |           |         |           |           |         |         |           |           |           |         |           |           |           |         |           |           |           |         |           |           |         |         |           |           |         |         |           |
| 2009-2010   | 900,000  | 300,000     | 1,200,000   |             |       |           |           |         |           |           |         |         |           |           |           |         |           |           |           |         |           |           |           |         |           |           |         |         |           |           |         |         |           |
| 2011-2012   | 850,000  | 250,000     | 1,100,000   |             |       |           |           |         |           |           |         |         |           |           |           |         |           |           |           |         |           |           |           |         |           |           |         |         |           |           |         |         |           |
| <p><b>Miles of Pedestrian &amp; Bicycle Routes Improved or Constructed</b><br/>Miles of bicycle paths, sidewalks and other transit routes improved or constructed in the Lake Tahoe Region each year.</p> |  <p><b>Miles of Bicycle and Pedestrian Paths Improved or Created</b></p> <p>The chart shows the cumulative miles of pedestrian and bicycle routes improved or constructed from 1997-2010 to 2014. The y-axis represents miles, ranging from 0 to 160 in increments of 40. The x-axis shows the years. The 1997-2010 period (blue) is the largest, followed by 2011 (red), 2012 (orange), 2013 (green), and 2014 (purple).</p> <table border="1"> <caption>Estimated Miles of Routes Improved or Created Data</caption> <thead> <tr> <th>Year</th> <th>Miles</th> </tr> </thead> <tbody> <tr><td>1997-2010</td><td>130</td></tr> <tr><td>2011</td><td>10</td></tr> <tr><td>2012</td><td>5</td></tr> <tr><td>2013</td><td>5</td></tr> <tr><td>2014</td><td>10</td></tr> </tbody> </table> <p>SOURCE: <a href="#">Environmental Improvement Program</a></p>  | Year        | Miles       | 1997-2010   | 130   | 2011      | 10        | 2012    | 5         | 2013      | 5       | 2014    | 10        |           |           |         |           |           |           |         |           |           |           |         |           |           |         |         |           |           |         |         |           |
| Year  | Miles  |             |             |             |       |           |           |         |           |           |         |         |           |           |           |         |           |           |           |         |           |           |           |         |           |           |         |         |           |           |         |         |           |
| 1997-2010   | 130  |             |             |             |       |           |           |         |           |           |         |         |           |           |           |         |           |           |           |         |           |           |           |         |           |           |         |         |           |           |         |         |           |
| 2011  | 10   |             |             |             |       |           |           |         |           |           |         |         |           |           |           |         |           |           |           |         |           |           |           |         |           |           |         |         |           |           |         |         |           |
| 2012  | 5  |             |             |             |       |           |           |         |           |           |         |         |           |           |           |         |           |           |           |         |           |           |           |         |           |           |         |         |           |           |         |         |           |
| 2013  | 5  |             |             |             |       |           |           |         |           |           |         |         |           |           |           |         |           |           |           |         |           |           |           |         |           |           |         |         |           |           |         |         |           |
| 2014  | 10   |             |             |             |       |           |           |         |           |           |         |         |           |           |           |         |           |           |           |         |           |           |           |         |           |           |         |         |           |           |         |         |           |

<sup>7</sup> The first is the Tahoe Area Regional Transit (TART) system, which primarily serves North Lake Tahoe communities, and connects North Lake Tahoe users with the Truckee Train and Intermodal Depot. The second is BlueGo, which primarily serves Tahoe South Shore communities, and connects South Shore residents with Carson City and the Carson Valley in Douglas County. Transit Ridership is defined as the number of user trips of the transit system, including paid and complimentary trips, whether they are on a fixed route or demand-response.

**Attachment 3**

**EDUCATION**

A good education empowers children to fulfill their dreams and become productive members of society. In addition, a highly skilled and educated workforce is a key driver of innovation and economic growth for a community. Communities with a higher number of employers requiring a diploma for most well-paying jobs are likely to see higher graduation rates.

| Indicator  | Status   |
|--|--|
| <p><b>High School Proficiency Test Scores</b><br/>Annual percentage of students in Tahoe Basin public high schools that pass the high school proficiency test.<sup>8</sup></p> | <p><b>NV High School Proficiency Exam</b></p>  <p><b>CA High School Exit Exam</b></p>  <p><i>SOURCE: CA Department of Education; NV Department of Education</i></p> |
| <p><b>Graduation Rates</b><br/>Annual cohort graduation rate of students from Tahoe Basin public high schools.<sup>9</sup></p>   | <p><i>The graduation rate for high school students in the Lake Tahoe Region is higher than both the California and Nevada statewide averages.</i></p>  |

<sup>8</sup> High School proficiency tests are scored differently in California and Nevada and therefore data for each state is displayed separately.

<sup>9</sup> Cohort graduation rates measure the percentage of students who enter high school and graduate within four years.

**Attachment 3**

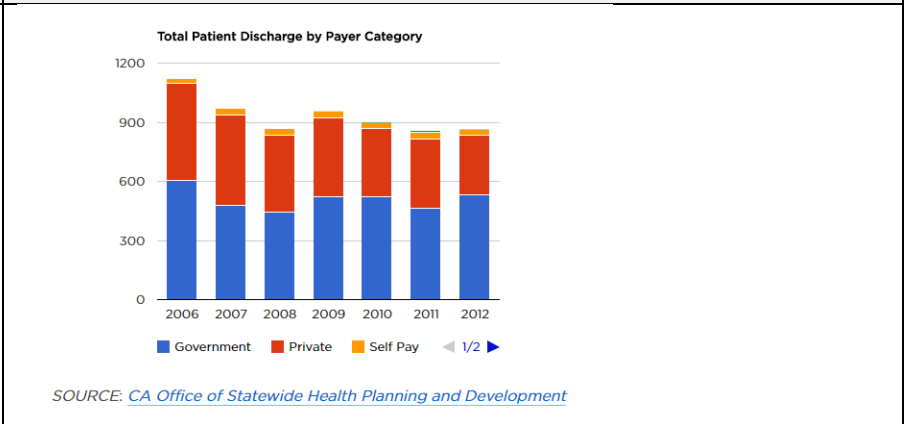
**PUBLIC HEALTH**

A healthy community contains more productive members of society, reduces local health care system costs and promotes healthy behavior choices of its residents and visitors.

The distribution of payers for hospital services is a helpful measure of the wealth levels, personal health and hospital affordability for Tahoe residents over time. This indicator reflects the affordability and accessibility of hospitals in the region for local residents; affordability and accessibility are impacted by the dependence on government insurance because below market rates for government insurers are offset by above market rates for private insurers and self-payers.

| Indicator | Status |
|-----------|--------|
|-----------|--------|

**Payers for Hospital Services**  
Annual total count of Tahoe residents discharged from hospitals in California serving Tahoe residents by expected source of payment.



**Principal Diagnosis of Concern**  
Annual total count of patients discharged from Tahoe hospitals by principal diagnosis group.<sup>10</sup>

*In 2012, the most common health issue at Tahoe hospitals was respiratory system conditions.*

<sup>10</sup> The California Office of Statewide Health Planning and Development (OSHPD) tracks 19 principal diagnosis group, but this indicator only reports on cancer, circulatory system, respiratory system, and skin disorder diagnosis groups. These groups were selected because they consistently have the highest total patient counts and/or they are the most relevant health conditions experienced by Tahoe residents.