Improving Mobility
To From Lake Tahoe

October 2020
Tahoe Regional Arts Foundation...

held an invitation-only, small-group Tahoe Mobility Forum on Wednesday, September 9th, 2020 focusing on options to reduce vehicle miles traveled to the Lake Tahoe area during periods of peak visitation. The facilitated video forum included transportation experts, local business leaders, government agencies, and other select stakeholders to discuss long-term strategies and potential near-term opportunities for reducing driving miles during peak times of year. Lake Tahoe’s many destinations attract heavy visitation from throughout Northern California and beyond.

Solutions are needed both to meet state goals related to reduced vehicle miles traveled and to address the needs related to traffic relief and air quality, such as at projects like The Stages at Northstar. The forum’s goal was to develop a vision for reduced driving miles to the region, identify key challenges preventing the realization of this vision, and offer a suite of both near- and long-term measures for state and local leaders, as well as for project developers such as The Stages at Northstar, to overcome these challenges. The discussions resulted in this report summarizing the key findings and actionable items.

As a follow-up to this Tahoe Mobility Forum, we will be convening Tahoe Mobility Forum II, in 2021.

Our thanks to Erik Swan for a grant to hold this Forum.
Lake Tahoe is a world-class destination but suffers from a serious seasonal mobility challenge. The Tahoe Basin hosts 55,000 permanent residents and attracts more than 25 million annual visitors, most of whom arrive almost exclusively through the use of private automobiles from cities such as San Francisco, Sacramento and Reno, among others. As a result, more than 50 million vehicle trips are made into, out of, and within the Basin annually, leading to extreme traffic congestion during peak times of the day, weekend, year, and for special events. In addition, many of the region’s top destinations lack sufficient parking, leading to spillover parking in unsafe locations.

The consequences of this congestion are severe. Economically, the delays can discourage visitors to local businesses and decrease quality-of-life for residents and visitors alike. It also jeopardizes public safety by increasing the risk of automobile collisions, especially with people on bicycles or on foot. Environmentally, pollution from these vehicles contributes to poor air quality, greenhouse gases, and algal blooms in the lake from particulate matter that washes off roadways and parking lots.

To address these mobility challenges, the Tahoe Regional Arts Foundation convened a “Tahoe Mobility Forum” in September 2020 with state, regional and local public officials, business leaders, transportation experts, and advocates. The group was surveyed in advance and discussed in the forum their vision for ideal mobility to and from Lake Tahoe, key barriers preventing progress, and preferred solutions. Based on the group’s input, this policy brief summarizes priority solutions, challenges, and next steps.
Vision for Lake Tahoe Mobility

Participants at the September mobility forum described a vision for the ideal mobility scenario to and from Lake Tahoe, featuring:

**Multiple modes of convenient, efficient transit** to bring passengers from the Bay Area, Sacramento, Reno and other population centers to the Tahoe Basin and back, featuring frequent trains and buses that are easy and affordable to use.

**Abundant modes of transportation within the Tahoe Basin**, such as micro transit, pedestrian and bicycle lanes, electric buses and shuttles, zero-emission ride-share vehicles, and waterborne transit, among others.

**Seamless, reliable and consistent access** for users of all modes of travel.

**Consolidated real-time software and smartphone apps** to make transit options easy to access.

**User fees or pricing on vehicles entering the Tahoe Basin or parking in popular areas** during periods of peak visitation, with exemptions and focused spending to address equity impacts.

**Compact development for all new growth**, which would be built around mobility options, not single-occupant vehicles.

**Known and accessible vehicle miles traveled (VMT) data**, which could then be tracked and managed for accountability.

Tracked progress on mobility that includes qualitative metrics for users, as well as **housing availability and affordability, and reduced driving miles**.

**Abundant options for autonomous and ride-share vehicles** to, from and within the Basin.

**Equity in mobility for low-income workers**, travelers, and residents that mesh with solutions for recreational visitors.

**Shared and unified messaging** around a common vision for mobility to, from, and within the Basin.

Achieving this vision requires identifying and overcoming the obstacles that make it unlikely to be realized on its own. The following section describes those obstacles and offers solutions for local and industry leaders.
Barriers and Solutions for Improved Mobility To & From the Tahoe Basin

A specific set of challenges may prevent this vision from coming to fruition. For the September 2020 forum, the Tahoe Regional Arts Foundation surveyed participants in advance and discussed the most common barriers to mobility to and from Lake Tahoe. Participants identified the following four priority barriers and offered solutions to overcome each of them:

- **No concerted regional strategies to reduce travel demand** at peak periods and times
- **Fractured and decentralized governance** across the Tahoe Basin and larger visitor mega-region (defined as the San Francisco Bay Area to Reno)
- **Lack of adequate and modern transit supply and service** to, from, and within the Tahoe Basin
- **Land use policies that could do more to foster compact growth** that promotes access and affordability

While additional barriers exist, participants agreed that these four represent the most pressing barriers to improved Tahoe mobility.

To help overcome these barriers, participants helped identify 10 near-term solutions to improve mobility primarily for recreational travelers, with co-benefits for residents and the larger Tahoe workforce as well:
Bolster funding for Amtrak Capitol Corridor train service to extend to Truckee/Reno, as part of improved, high-quality line-haul transit service to Tahoe destinations

Develop a regionally shared vision and alignment on improved local transit service and funding by convening a governance team through the existing bi-state transportation consultation process

Mitigate regional peak travel demand and fund transit usage and carpooling through congestion pricing pilot projects with the Sacramento Area Council of Governments and other regional entities, with federal and state legislative support

Develop priority bus-only lanes in conjunction with congestion pricing, by working with federal and state agencies to allow highway shoulder or reversible center-running lane access

Implement a user fee on recreational vehicles entering the Tahoe Basin at peak times to encourage off-peak demand and fund and encourage transit alternatives

Use existing corridor planning processes to integrate demand-side planning solutions for recreational travelers, based on comprehensive, integrated data on travel patterns and demographics

Mitigate recreational travel transportation impacts on federal lands by ensuring that reauthorization of the federal transportation bill provides commensurate funding and assigns local roles and responsibilities

Coordinate “first/last mile” solutions from major regional transit hubs with ride-hailing, public-private partnerships, micro-transit, and on-demand shuttle services, among others, based on travel data

Align regional policies on dynamically priced parking that incorporates equity concerns to reduce parking demand at key times

Bolster existing resort microtransit shuttle programs with federal and state grants to fund free buses with priority lane access to serve shuttle passengers

These and other solutions are discussed in more detail below.
Barrier One

No concerted strategies to reduce travel demand at peak periods and times

Travel to and from Lake Tahoe, particularly by recreational visitors, is often concentrated during holidays, key seasons, weekends, and special events, leading to undesirable traffic congestion and negative environmental and economic impacts. Yet the various state, local and regional entities that govern the mega-region (defined as stretching from the San Francisco Bay Area to Reno) lack any concerted, consistent and coordinated strategies to reduce this demand and encourage alternative or off-peak travel. Instead, policy makers have generally relied on the provision of travel alternatives (“supply”), which will not be successful without additional investment and coordinated demand-side strategies. Ultimately, without programs to discourage private vehicle use based on comprehensive travel and lodging data and visitor demographics, this congestion will only worsen in the coming decades as visitation is projected to increase.

Solutions for Demand-Side Strategies: Launch regional congestion pricing pilot projects with federal and state support

To help encourage off-peak travel and alternatives like carpooling and shuttles, regional and local leaders could collaborate on congestion pricing pilot projects with federal and state support that would place a charge on peak visitation by automobile, tailored to address equity impacts on low-income travelers and the local workforce, with revenues funding alternative transportation modes.
Regional and local leaders could:

Collaborate to develop pricing pilot projects to and from Lake Tahoe to encourage off-peak travel and fund alternatives to automobile traffic. Local leaders, along with regional entities like the Sacramento Area Council of Governments (SACOG) and other metropolitan planning organizations (MPO) in the mega-region, could together identify prime candidates for a pilot project, such as along the Interstate 80 or Highway 50 corridors. They could include pricing rates that vary by time of day to mitigate peak travel demand. Prices could decrease or disappear for Basin and/or low-income residents and workers to address equity concerns. Revenue from the pricing projects could in turn help fund transit and carpool options, among other mobility options.

Collaborate to develop coordinated pricing policies for parking during peak times around Lake Tahoe, with revenue to fund alternatives to automobile travel. Dynamic pricing on parking at popular visitation spots (including ski resorts, trailheads, and other recreational destinations), which generally involves charging more for parking during peak periods of visitation to minimize congestion and associated emissions, could encourage off-peak visitation and alternative travel modes, like carpooling and shuttles. However, these parking policies need to be coordinated among the various federal, state and local governments, as well as industry actors, with jurisdiction around the Basin. Regional entities and local governments could convene to align their policies and incorporate equity concerns, such as through exemptions or discounts for local and low-income residents.

Use existing corridor planning processes to integrate demand-side planning solutions for recreational travelers. Local and regional leaders are already engaged in planning processes to address travel demand and alternatives in key corridors to, from and within the Tahoe Basin. They could use these processes to develop demand-side strategies for recreational travelers, based on comprehensive, integrated data on travel patterns and demographics of visitors.
Consider a pilot project to develop a user-fee to enter the Tahoe Basin at key points, with revenues to fund transit solutions. Along with congestion pricing pilot project, regional and local leaders could collaborate on a potential user fee to enter the Tahoe Basin, which could apply primarily to recreational travelers with exemptions for local and low-income residents. The key to success would be a strong enforcement mechanism to ensure compliance. Revenues could then fund transit solutions and alternatives in the Basin.

Seek federal and state legislation and funding to implement congestion and parking pricing projects. State legislation to authorize, plan and fund the congestion and parking pricing projects would provide critical resources and directions to regional and local leaders. In some instances, federal legislation and/or funding will be necessary when the projects involve federal lands.

Leverage existing Tahoe Regional Planning Agency (TRPA) funding to promote demand-side strategies in the region. TRPA already funds various transportation projects around the Basin. These dollars could support and encourage local implementation of demand-side strategies, such as pricing on automobile congestion and parking, based on user data to optimize outcomes in terms of reduced congestion, revenue, and equity.

Develop a region-wide communication tool to help the public access alternative travel information. The Tahoe region currently does not make all of the various travel options and updated pricing and congestion information available in one, easy-to-use website or phone app, like the 511 number in many urban areas. Regional leaders could develop such a system in partnership with private entities, to help give travelers more information about alternatives to automobile travel.
California and Nevada state leaders could:

Authorize and support congestion and parking pricing pilot projects throughout the mega-region that includes Lake Tahoe. Legislative direction could be critical to authorizing such pilots, by assigning responsibilities, removing bureaucratic hurdles, and funding the projects.

Develop a statewide or Tahoe-specific vehicle miles traveled (VMT) fee to improve demand management. As gas tax revenues decline due to zero-emission and more fuel efficient vehicles, state policy makers will likely need to transition the gas tax to miles-based (VMT) fee in order to fund existing infrastructure upkeep. Such a VMT fee could be tailored to the Tahoe Basin to encourage alternative optimal travel modes and discourage peak visitation through dynamic pricing.

Ensure more local land use policies allow new compact development near transit. Too often local land use policies restrict development near transit nodes, although the Tahoe Regional Planning Agency and some local governments have made efforts in recent years to relax restrictions in town centers around the Basin. State legislation requiring more compact development near these transit hubs in the Tahoe Basin could reduce congestion and travel demand by allowing more residents, particularly among the workforce, to live closer to their jobs in the Basin (see discussion on barrier #4 below for more details).

Help align federal, state, regional and local policies to ensure efficient deployment of Basin mobility hubs, as well as priced parking management and enforcement. Alternative travel to and from the Tahoe Basin will require mobility hubs for shuttles, transit vehicles, and other alternatives at key locations. Due to multiple overlapping jurisdictions in some of the prime locations for these hubs, such as ski resorts in the summer or Sand Harbor in the winter, policy at all levels of government and potentially in the private sector may need to be aligned to permit and deploy them. Governmental leaders can in tandem promote dynamic pricing on parking in these locations to ensure greater access for transit options like buses and their customers’ vehicles, which may need to park at these hubs.
Fractured and decentralized governance across the Tahoe Basin and larger visitor mega-region

The Lake Tahoe Basin has a fractured and a multi-level governance structure. Most obviously, the Basin straddles two states, California and Nevada, and contains five local jurisdictions within it, while much of its land is under federal ownership. Consensus and shared vision are difficult to achieve in such a multi-jurisdictional environment. Furthermore, much of the visitation to the Basin originates outside of it in the mega-region of the San Francisco Bay Area through Sacramento and Reno. With elected officials in this mega-region located mostly outside of the Basin, in-Basin local leaders face obstacles to securing widespread buy-in for solutions that involve support from outside. In addition, and perhaps as a result, mobility planning and project implementation typically take a long time, often requiring cross-jurisdictional dialogue that slows the process. Finally, the impacts of congestion, as well as the potential benefits of specific solutions, are often disproportionately felt across jurisdictions, leading to a lack of consensus and agreement on the scale of both the problem and needed solutions.

Solutions for Fractured Governance: Develop and harness existing collaborative processes to deploy specific mobility solutions

Federal, state and local leaders can leverage existing processes, such as the Tahoe Regional Planning Agency (TRPA) bi-state transportation planning process, or convene new ones to further specific mobility solutions, such as congestion pricing pilot projects, improved line-haul train service, and bus/shuttle-only lanes.
Specfic Solutions

**Federal leaders could:**

Ensure that reauthorization of the federal transportation bill provides commensurate funding and roles and responsibilities to mitigate recreational travel transportation impacts on federal land in the Tahoe Basin. Congress is in need of reauthorizing the federal surface transportation law for its scheduled expiration after five years in late 2020. The process presents an opportunity to recognize the transportation impacts on federal lands in the Basin and provide funding and clear responsibility for solutions, which could include support for transit options, mobility hubs, and congestion and parking pricing pilot programs for recreational travel.

Support and fund pilot projects that develop demand management programs for recreational travel. Regardless of the reauthorization discussed above, federal leaders could independently support demand management solutions in the Tahoe mega-region, such as congestion pricing, Basin user fees for recreational travelers, and dynamic pricing parking solutions.
California and Nevada state leaders could:

Support and participate in the governance team through the Tahoe Regional Planning Agency’s bi-state transportation consultation process to develop a shared vision and alignment, based on local implementation with sustainable funding to implement.

Support and participate in the governance team through the Tahoe Regional Planning Agency’s bi-state transportation consultation process to develop a shared vision and alignment, based on local implementation with sustainable funding to implement. This ongoing bi-state process presents an opportunity for California and Nevada leaders to discuss a larger vision for solving mega-region congestion to and from Lake Tahoe. Pursuant to this shared vision, state leaders can assist with implementation by dedicating funding to the local solutions, such as expanded transit, shuttles, bus-only lanes, and congestion and parking pricing projects.

Fund regional collaboration across the megaregion on ways to reduce cross-boundary recreation travel through pricing pilot programs. Metropolitan planning organizations (MPOs) in the San Francisco Bay Area, Sacramento, and Lake Tahoe, as well as Reno, are traditionally focused on travel within their regions. Recreational travel originating in this megaregion to Lake Tahoe, however, crosses these jurisdictional boundaries and essentially leaves responsibility for this congestion orphaned. State leaders could solve the jurisdictional issue by authorizing, supporting and funding formal collaboration across these MPOS to implement specific solutions, such as congestion pricing or bus-only lanes projects.

Ensure state leadership at key agencies like Caltrans support congestion pricing and other mobility solutions. Many of the megaregion solutions to mobility to and from Tahoe will require state agency support. State leaders could ensure that key agencies like Caltrans collaborate with regional and local leaders to implement these projects.
Regional and local leaders could:

Convene leaders in the bi-state transportation consultation process to develop a shared vision and alignment, based on local implementation with sustainable funding to implement. As discussed above, this bi-state process offers an opportunity for California, Nevada, and local leaders to develop a larger vision for solving mega-region congestion to and from Lake Tahoe. Local leaders can put this vision on the agenda for discussion and encourage plans for implementation with dedicated funding.

Leverage existing corridor management planning processes to align long-term objectives and advance immediate solutions. As discussed above, local and regional leaders are already engaged in planning processes to address travel demand and alternatives in key corridors to, from and within the Tahoe Basin. They could leverage these processes to develop consensus on long-term mobility objectives and prioritize near-term solutions, with funding and responsibility for implementation.

Assist local agencies within the Basin to achieve a common “win” among these organizations toward long-term mobility improvements. The multi-level governance structure affects local agencies that implement solutions. These agencies often have difficulty acting in a coordinated fashion or with a shared vision for solutions with equitable responsibility for implementation. Continued dialogue with elected leaders’ support could help focus on common areas of need and associated mobility solutions. Near-term “wins” could provide a basis for future long-term collaboration.

Ensure local leaders adopt common messaging on the need for mobility solutions like congestion pricing to address the fundamental causes of excess demand and congestion. Due to the multi-level governance structure, agencies and local leaders do not always have consistent and coordinated messaging on key mobility solutions. Local leaders could convene dialogues and share resources to ensure the public receives consistent and coordinated information on priority mobility solutions like congestion pricing.
Barrier Three

Lack of adequate and modern transit supply and service to, from and within the Tahoe Basin

Basic and convenient mobility options besides the private passenger vehicle are in short supply for recreational travelers to, from and within the Lake Tahoe Basin. To and from Lake Tahoe, these travelers lack reliable and affordable options such as train or bus and shuttle services. Once they arrive in the Basin, they lack sufficient in-Basin transit options, such as frequent, affordable, reliable and comprehensive transit around the Lake and to popular destinations. Some participants cited the lack of funding for these options and need for comprehensive planning. Others felt that transit agencies fail to view travelers as “customers” who need multiple options, while some cited the need for improved communications about the existing options. Finally, participants noted that the region lacks a policy framework for innovative and emerging mobility solutions, such as on zero-emission, shared and autonomous vehicles, and how they can address congestion, parking and equity needs.

Solutions for a Lack of Adequate Transit Supply: Fund train and bus-only lane connections to Lake Tahoe and improve in-Basin transit options.

Overall mobility to, from and within the Basin will require enhanced funding and support for long-haul train service and bus-only lane access, with improved in-Basin mobility options for recreational travelers once they arrive in Lake Tahoe.
Specific Solutions

Federal and state leaders could:
Support and develop high-quality transit connections to Tahoe destinations through improved line-haul train service. Recreational travelers will be more likely to travel by train from distant locations to Tahoe if the service is affordable, convenient and reliable. If rail is cheaper and/or faster than driving, ridership will increase, especially if local leaders develop more robust last-mile options. Federal and state leaders can dedicate more funding to existing train services to attract more passengers and also ensure that freight trains do not impede passenger trains on these same rights-of-way.

Bolster Caltrans and BART funding for Amtrak Capitol Corridor train service to extend it to Truckee and Reno from Sacramento. Current commuter-type service for this Amtrak line from San Jose and the East Bay of San Francisco ends in Sacramento. With more funding, the train could continue to Truckee and Reno to serve recreational travelers during peak periods.

Develop priority bus-only lanes in conjunction with demand pricing, including having Caltrans allow buses on highway shoulder or reversible center-running lanes. Bus-only lanes for recreational travelers to Tahoe provide a relatively cheap and fast mass transit option. Buses or shuttles in these lanes will be able to avoid congestion and attract more riders, particularly if congestion pricing makes passenger vehicle travel more expensive and helps provide a revenue source to fund these options. Federal and state leaders should support these programs through funding and by directing transportation agencies to allow bus-only lanes on highway shoulders during periods of peak visitation, as well as reversible center-running bus lanes, as contemplated in Placer County’s draft Resort Triangle Transportation Plan.

Coordinate mobility solutions with delivery vehicles and freight, with initial solutions prioritizing mobility for recreational travelers. Many of the mobility solutions for recreational travelers can also benefit delivery vans and freight, among others, which would provide important co-benefits for the workforce, commerce, and the economy more broadly. However, participants noted that the greatest gains for congestion relief would come from solutions for recreational travelers first and recommended those be prioritized by federal, state, and local leaders.
Regional and local leaders could:

Improve the service and frequency of in-Basin transit through faster headways and more comprehensive routes. In-Basin transit will be essential to encourage recreational travelers to leave their cars for alternatives. Basin transit agencies could bolster existing service by increasing the headways (frequency) and comprehensiveness of the service, particularly to provide more direct access to and from key destinations, such as Sand Harbor or Emerald Bay in the summer months. This improved service will require additional funding, which could come from federal and state sources as well as regional and local congestion pricing programs or user fees. It will also require coordination among multiple agencies.

Implement “One Tahoe” user fee to raise revenue to fund Basin transit needs that incorporate equity. One Tahoe is a plan from the Tahoe Transportation District that identifies a diverse array of transit and mobility needs in the Basin and the dollars required to address them. As one potential option to raise these funds, regional leaders could institute a user fee for private recreational vehicles entering the Basin at key points. The cost of entry could be dynamic, based on peak visitation periods, and adjusted to avoid equity impacts (such as exempting low-income residents and adjusting the fee for local residents).

Bolster existing successes with private resort on-demand shuttles and vans through more federal and state grant funding to pay for complementary mainline buses with priority lanes. Resorts such as Alpine Meadows and Squaw Valley have developed “microtransit” on-demand vans for guests traveling within and between them. Their success could be bolstered with improved transit access so guests can also conveniently travel to other Tahoe destinations and mobility hubs. Local leaders could seek funding for complementary mainline bus service that would have priority lane access for users of these services. One option could be a pilot project to run autonomous electric circulator vans with the ability to access dedicated passing lanes at key congestion points, where topography allows.
Price trains and buses based on peak times to encourage use at peak times to reduce automobile congestion.

In addition to bolstered and improved transit and mobility services to, from and within the Basin, the pricing for these services can help alleviate peak periods of congestion. For example, transit agencies could lower fares during these periods to encourage ridership instead of driving, particularly for trains or buses traveling from the megaregion to Lake Tahoe on holidays, weekends, and other peak times.

Coordinate a wide range of convenient and affordable first/last mile solutions from line-haul hubs. Once travelers arrive at Tahoe destinations on line-haul services like train and buses/shuttles, they will need easy and convenient access to their final destinations. Those first/last mile solutions could include ride-hailing services, public-private partnerships like shuttles, and micro-transit like vans or e-bikes. Transit planners should ensure these options are available, funded and coordinated with line-haul travel, based on accurate and comprehensive travel data.

Encourage and coordinate Greyhound bus service to Lake Tahoe with local transit operators. Low-cost bus service like Greyhound already serves Tahoe and could provide a mobility option for more recreational travelers if service was better coordinated with local transit operations so travelers would have more in-Basin options once they arrive.

Ensure all local jurisdictions help support Basin-wide transit solutions. Given the multiple jurisdictions involved, as well as the need to offer comprehensive, Basin-wide transit solutions, all transit agencies around the Basin will need to contribute to the solutions. As one participant described, they will need to have “skin in the game” to ensure success. This level of coordination may require multi-jurisdictional dialogue and convenings to assess the barriers to greater cooperation and devise solutions.
Barrier Four

Land use policies that fail to foster compact growth to promote affordability.

If more workers and travelers to Lake Tahoe could afford to live within it in transit-friendly locations, their travel would not impact regional congestion. While the Tahoe Regional Planning Agency’s Regional Plan, as implemented by local Area Plans, encourages more compact development in town centers throughout the Basin, significant entitlement and construction costs remain a barrier to compact, transit-oriented land use and housing development. The lack of supply then increases the cost of housing in the Tahoe Basin and encourages off-site living with resulting long commutes. Coupled with a lack of living wages, the Basin workforce often adds to congestion through long commutes to their jobs.

Solutions for Lack of Compact, Transit-Friendly Housing: Reduce legal and permitting barriers to building transit-friendly housing.

State and local leaders could do more to remove any zoning, entitlement and permitting barriers to encourage more multi-family, compact housing development near Tahoe mobility hubs. Coupled with bolstered transit service described above, residents in these areas will not need to add to regional congestion to access their jobs and destinations.
Specific Solutions

State and local leaders could:

Reduce parking requirements for new housing. High minimum parking requirements can add to the costs and therefore the price of new housing while reserving precious land for automobile storage. If housing is built near transit, residents will not need to own a vehicle for mobility and can save costs in the process. Local officials can revise development codes to eliminate or lower minimum parking requirements where robust mobility options are in place.

Deploy more urban-area shared and ride-hailed vehicles. In-Basin residents can save money and have improved mobility if they do not need to own their own vehicles and can access shared and ride-hailed vehicles more easily. These can include Zip cars and access to transportation network companies (TNC) like Uber and Lyft. Developers can offer residents of transit-friendly, urbanized Tahoe areas free or subsidized passes for these services as a more affordable and convenient alternative to providing parking.

Focus incentives to ensure new housing is built near transit and other new mobility options. State, regional and local leaders can plan for and facilitate all new housing growth to occur in existing urbanized areas around the Basin that have transit access. More residents in these areas will be likely to utilize transit if they live close to it and the service is convenient, reliable and affordable.

Ensure coalition advocacy and support from stakeholders for compact land use near transit. Land use changes can be controversial and engender significant opposition from nearby property owners. To accomplish more compact housing growth near transit, advocacy and stakeholder groups will need to mobilize and form coalitions to ensure successful changes in state and local laws and development codes.
Conclusions & Next Steps

The ideas presented in this report from expert participants and stakeholders present some potential solutions that could relieve congestion, improve quality-of-life, bolster affordability and economic gains, and help preserve the world-class Lake Tahoe environment that attracts visitors. Yet these solutions to improved mobility and reduced congestion to, from, and within Lake Tahoe are not necessarily new or novel. Many regions similar to Lake Tahoe have already successfully addressed congestion and have programs that Lake Tahoe and mega-region leaders could emulate. Critical next steps will therefore involve achieving consensus among diverse leaders on the priority solutions and mobilizing coalitions at all levels to support implementation and follow-up assessment of impact. Tahoe Regional Arts Foundation remains committed to a follow-up mobility forum with a focus on implementation. Only then will these priority ideas turn into action and help Lake Tahoe and the surrounding megaregion achieve a more mobile and prosperous future.
End Notes

1Derek W. Morse, P.E., One Tahoe: A transportation funding initiative, Prepared for the Tahoe Transportation District, Morse Associates Consulting, LLC, August 2020, at p. ES-1.

2Id.


4For more information on One Tahoe, please visit: https://www.onetahoe.org/ (accessed September 24, 2020).

5For more information on the Mountaineer microtransit program, please visit: https://squawalpine.com/mountaineer (accessed September 24, 2020).
About the Tahoe Regional Arts Foundation

The Tahoe Regional Arts Foundation is an independent, 501(c)3 non-profit organization incorporated in California and registered in Nevada to serve the entire Lake Tahoe region. The project is in the Environmental Review process and anticipates beginning construction in 2022.

Acknowledgments

The Tahoe Regional Arts Foundation gratefully acknowledges Amy Berry, James Corless, Heidi Drum, Chris Ganson, Cindy Gustafson, Jeffrey Hentz, Tony Karwowski, Jim Lawrence, Robert Liberty, Mark Luster, Christine Maley-Grubl, Whit Manley, Joanne Marchetta, Jack Paddon, David Robinson, Laura Schewel, Dan Sperling, Heidi Volkhardt Allstead, Deirdra Walsh, and Patrick Wright for their insights at the September 9, 2020 Tahoe Mobility Forum that informed this policy brief. Affiliations for all persons are listed in Appendix A.

In addition, Ethan Elkind and Terry Watt provided facilitation and Judy Friedman note-taking assistance at the forum.

This report and its recommendations are solely a product of the Tahoe Regional Arts Foundation and do not necessarily reflect the views of all individual convening participants, reviewers, or observers.

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Participant Biographies

Amy Berry
Tahoe Fund
Amy Berry is currently the CEO of the Tahoe Fund based in Lake Tahoe. She is responsible for working with the Tahoe Fund’s board of directors to operate the organization and raise private and public funds for environmental improvement projects that will restore and enhance the Lake Tahoe region. Prior to joining the Tahoe Fund, Amy was director of marketing and communications for renewable energy giant ACCIONA’s North American holdings. Prior to joining ACCIONA, Amy was director of marketing for Windspire Energy (formerly Mariah Power) where she was responsible for all marketing and communications for the venture capital backed wind start-up. Prior to her work in the renewable energy industry, Amy was director of strategic planning at boutique marketing agency, Bauserman Group, Partner at Ogilvy & Mather working on IBM’s global marketing campaigns, and an account executive at Saatchi & Saatchi working with clients Johnson & Johnson, General Mills, Rodale Press and the National Crime Prevention Council. She holds a Bachelor of Arts degree from Brown University where she was an All-American sailor.

James Corless
Sacramento Area Council of Governments (SACOG)
James Corless is the executive director of the Sacramento Area Council of Governments (SACOG). In his less than two years leading the organization, he has seen the launch of the Connect Card, JUMP bikes, and lead the initiation of the Civic Lab, the region’s first government solutions accelerator. In Civic Lab’s inaugural year the SACOG invested $1 million to pilot various transportation solutions which then leveraged an additional $1 million in external investment. Civic Lab projects include the recently launch Olli Autonomous Shuttle at Sac State. Other milestones include the launch of the regional prosperity partnership together with Greater Sacramento Economic Council, Sacramento Metro Chamber, and Valley Vision. This group is working collectively to position the region higher in the global marketplace by creating implementable strategies that reduce income inequality, preserve natural resources, and increase quality of life for all.
Chris Ganson
Governor’s Office of Planning and Research
Chris Ganson is the Senior Advisor for Transportation at the Governor’s Office of Planning and Research, where he led California’s transition from LOS to VMT. He previously held positions at the Lawrence Berkeley National Laboratory, the World Resources Institute, and US EPA Region 9. Chris holds master’s degrees in City Planning and Transportation Engineering and a bachelor’s degree in Environmental Sciences from UC Berkeley.

Heidi Hill Drum
Tahoe Prosperity Center
Heidi Hill Drum has more than 25 years' experience in public policy, communications and collaboration with government agencies, non-profit organizations, academia and business associations. Her background includes facilitating consensus-based solutions with government agencies and the public on issues ranging from California water disputes, public lands grazing, natural resources, transportation and economic planning. She has expertise implementing collaborative solutions, which make her especially suited to the role of CEO and the Tahoe Prosperity Center’s mission of uniting Tahoe’s communities to strengthen regional prosperity. She helped start the Spanish two-way bi-lingual program at Lake Tahoe Unified School District and both her sons are fluent in Spanish and English. She and her husband John volunteer with numerous organizations in the community.

Cindy Gustafson
Placer County Supervisor
Cindy Gustafson is a thirty-five year resident of Placer County. Prior to being appointed to the Board of Supervisors on April 11, 2019, Cindy had careers in the public and private sectors. She joined the Tahoe City Public Utility District in 1991 where she worked for 26 years, including serving her final eight years as the General Manager, overseeing the full operations of the District. In 2017, she retired from local government and took over as the Chief Executive Officer of the North Lake Tahoe Resort Association and North Tahoe Chamber, a position she held until she was appointed as the District 5
Supervisor for Placer County. She has served on the California Fish and Game Commission, chaired the Marine Life Protection Act Blue Ribbon Task Force, and volunteered on multiple boards and commissions for public agencies and nonprofit organizations that serve a broad range of issues.

Jeffrey Hentz
North Lake Tahoe Resort Association
Mr. Hentz is the CEO of the North Lake Tahoe Resort Association. Prior to this position, he served as President/CEO of Mustang Island/Port Aransas CVB, Chamber of Commerce and Chamber Foundation since 2016. Prior to that, Hentz held positions at FINN Partners/Catalyst Destinations International and the Volusia County Florida/Daytona Beach Convention & Visitors Bureau. He also worked with the Park Service and Yosemite Gateway Leaders to help establish the Yosemite Area Regional Transportation System. Hentz brings 30 years of experience as a destination marketing and tourism industry executive.

Jim Lawrence
Nevada Department of Conservation and Natural Resources
Jim Lawrence became Deputy Director of the Nevada Department of Conservation and Natural Resources in 2015, previously serving as Special Advisor to the Director and before that as the Administrator of the Nevada Division of State Lands. Jim currently represents the Department on the Tahoe Regional Planning Agency Governing Board. Jim has more than twenty years of resource protection and land use planning experience in Nevada. He has been responsible for coordination of Nevada’s environmental improvement efforts at Lake Tahoe, implementation of a multi-agency statewide conservation and natural resource protection grant program, efforts for the protection of Nevada’s sagebrush ecosystem, administration of the Conservation Districts program, and served as Executive Officer for the Nevada State Land Use Planning Agency.
Mark Luster
Sierra Pacific Industries
Mark is the Community Relations Manager for Sierra Pacific Industries. He represents the company to the community with key community groups, external agencies, and/or other interested parties. Sierra Pacific Industries is a third-generation family-owned forest products company based in Anderson, California. The firm owns and manages nearly 1.9 million acres of timberland in California and Washington, and is the second largest lumber producer in the United States.

Christine Maley-Grubl
Truckee North Tahoe Transportation Management Association
Christine Maley-Grubl is Executive Director of the Truckee North Tahoe Transportation Management Association. She has a Master’s degree in Marketing and is a Certified Association Executive (CAE). Christine’s career has included operating a San Francisco Bay Area public agency, Commute.org, whose mission is to reduce traffic congestion and improve air quality, by connecting commuters with resources to alleviate solo driving. Through the Metropolitan Transportation Commission in San Francisco, Christine also oversaw the marketing aspects of a regional pilot program, the Bay Area Commuter Benefits Program, based on a Bay Area Air Quality Management District regulation requiring employers to provide commuter benefits to their employees. The program was signed into law by Governor Brown in 2016 as a permanent program, Bay-Area wide.

Whitman F. Manley
Remy, Moose & Manley
Mr. Manley is a partner at Remy, Moose & Manley, where he focuses on advising and representing public agencies, project applicants and citizen’s groups both during administrative proceedings and in trial and appellate litigation. Upon graduation from law school in 1987, Mr. Manley spent a year clerking for the late Chief Judge Robert F. Peckham of the Northern District of California. He then joined the environmental section of McCutchen Doyle (now Bingham McCutchen) in San Francisco. In 1991 he moved to Sacramento and joined Remy and Thomas as an associate. He joined the partnership in 1996, became a
named partner in 2003, and served as managing partner from 2007 through 2011. Along with Tina Thomas and Jim Moose, he is co-author of Guide to the California Environmental Quality Act (11th ed. 2007, Solano Press Books). He received his J.D. from Cornell University (Order of the Coif, Magna Cum Laude) and A.B. in Philosophy from the University of California, Berkeley.

Joanne Marchetta
Tahoe Regional Planning Agency
Joanne Marchetta is the Executive Director of the Tahoe Regional Planning Agency, a bi-state Compact agency whose mission is to cooperatively lead the work to preserve, restore, and enhance the natural and human environment of the Lake Tahoe Region. She came to Tahoe in 2009 to serve as TRPA’s General Counsel before taking on the leadership role as Director. Following graduation from the University of Michigan with a forestry degree and Catholic University with a law degree, she started her professional career in Washington DC as a litigator for the Department of Justice. She worked for US EPA during the Bush and Clinton administrations where she negotiated some of the largest hazardous waste cleanup agreements in the state of California. Later at the Presidio Trust in San Francisco, she helped to transform the Presidio from an Army base to a financially self-sustaining national park. Joanne serves on the Board and Executive Committee of the Tahoe Prosperity Center.

David Robinson
Fehr & Peers
David B. Robinson, PE, is a Principal with over 24 years of transportation planning experience and is a registered traffic engineer. Dave has an extensive background in travel demand model development and application, and has applied his knowledge in travel forecasting to numerous project types including transportation impact analysis for CEQA and NEPA, land use transportation planning, traffic operations analysis for project development studies, and transportation, land use, and policy development planning studies. He provides his clients with expert advice on changing policies and environmental regulations, such as the shifting focus from Level of Service to Vehicle Miles Traveled.
and to help quantify and mitigate impacts related to land use decisions. He received his B.S. in Civil Engineering from California State University, Sacramento.

Jack Paddon AIA LEED AP
Williams + Paddon Architects + Planners

Jack Paddon is a founding principal of Williams + Paddon Architects + Planners which provides sustainably focused architectural, community planning and interior design services. His experience includes the design of community housing, educational, workplace and lifestyle projects. Under his direction the firm has become recognized as a leader for innovative design, with an emphasis on regionally influenced sustainable projects for public and private clients. Consistent with the firm’s core values, Jack continues to volunteer his time for a variety of community and professional activities to create local and global benefit. His desire to improve communities has extended to Karatu, Tanzania where has provided pro bono services to secure land and design a medical campus for FAME (Foundation for African Medicine & Education) over the last 15 years. He has B. Arch with Honors from California Poly San Luis Obispo.

Robert Liberty
Cascadia Partners LLC

Robert Liberty has been working on the development, implementation and evaluation of transportation and land use plans since 1981. He has pursued this work as a public interest attorney, the director of a nonprofit organization, a policy advisor to a member of Congress, a county hearings officer, a consultant, a university program administrator and an elected member of the Portland metropolitan regional government. He conceived the idea of a land use alternative to a proposed bypass freeway (an alternative that was adopted) and helped develop new regulations requiring the integration of land use and transportation planning in Oregon. Since 2013 he has been assisting local governments in the Sacramento region including helping to organize a workshop on responses to congestion in the Tahoe Region. Between 2016 and 2019 he managed a project for California state agencies and metropolitan planning organizations to test the application of the new CEQA transportation impacts analysis under California Senate Bill 743.
Laura Schewel
StreetLight Data
Laura Schewel is co-founder and CEO of StreetLight Data, the leader in Big Data analytics for mobility. As CEO of StreetLight she has helped hundreds of transportation agencies, engineering firms, and private transportation companies put big data to work. Prior to founding StreetLight, Laura worked at the Federal Energy Regulatory Commission and Rocky Mountain Institute on vehicle electrification and other transportation sustainability topics.

Dan Sperling
UC Davis
Dr. Daniel Sperling is Distinguished Professor of Civil Engineering and Environmental Science and Policy, and founding Director of the Institute of Transportation Studies at the University of California, Davis (ITS-Davis). He holds the transportation seat on the California Air Resources Board and served as Chair of the Transportation Research Board (TRB) of the National Academies in 2015-16. He served twice as lead author for the IPCC (sharing the 2007 Nobel Peace Prize), testified 8 times to the US Congress, and provided 20 keynote presentations in the past year. He has authored or co-authored over 250 technical papers and 13 books, including Three Revolutions: Steering Automated, Shared, and Electric Vehicles to a Better Future (Island Press, 2018), is a regular contributor to Forbes and Energy Expert contributor for Wall Street Journal, is widely cited in leading newspapers, and in 2009 was featured on The Daily Show with Jon Stewart.

Heidi Volkhardt Allstead
Martis Fund
Heidi is the Executive Director of the Martis Fund. She has over 20 years of non-profit experience across a variety of sectors. During her tenure in the non-profit community, she has assisted organizations with developing grants management processes, financial best practices, increased donor & community relationships, lead organizations through strategic planning, succession planning, audited organizational processes, and created board development strategies. She is also the owner of HVA Consulting – a non-profit consulting & coaching business. Heidi earned a Bachelor of Science degree in Environmental Conservation with a minor in Biology from Northern Michigan University.
Deirdra Walsh
Northstar California Resort
Deirdra Walsh is vice president and general manager of Northstar California Resort. Deirdra oversees all ski area operations at Northstar. She was formerly senior director of mountain dining at Park City Mountain in Utah. She has had a 17-year career in the travel and tourism industry with a decade of resort operational experience prior to her role in Tahoe. She joined the resort team at Park City Mountain in 2007 as banquets sales manager and was later promoted to director of mountain dining in 2010 followed by senior director of mountain dining in 2016. During that time, she was responsible for overseeing multiple major capital improvement projects at the resort including Miners Camp, Cloud Dine and Mid Mountain Lodge – projects that shaped the resort as an industry leader in the restaurant and culinary experience.
We are already planning for our next forum, To-From Tahoe Mobility Forum II, when we'll develop action plans to move forward with specific goals, strategies and implementation plans recommended in this report.