



# TAHOE PROSPERITY CENTER

Economic Forecasting and Resiliency Analysis

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August 2020



## ABOUT BEACON ECONOMICS, LLC

Founded in 2007, Beacon Economics, an LLC and certified Small Business Enterprise with the state of California, is an independent research and consulting firm dedicated to delivering accurate, insightful, and objectively based economic analysis. Leveraging unique proprietary models, vast databases, and sophisticated data processing, the company's specialized practice areas include sustainable growth and development, real estate market analysis, economic forecasting, industry analysis, economic policy analysis, and economic impact studies. Beacon Economics equips its clients with the data and analysis required to understand the significance of on-the-ground realities and to make informed business and policy decisions.

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## EXECUTIVE SUMMARY

COVID-19 has created worldwide economic shocks. As a result, regional economists and policymakers are being challenged to create more resilient and sustainable local economies. The severity of the disruptions to regional economies has been due primarily to the lack of industry diversification before the pandemic. Regional economies whose main economic base is tourism, and that therefore rely on leisure-related services consumption, are now in a dire situation.

Development trajectories are the focus as the Lake Tahoe Basin thinks about recovery from the pandemic. A diverse and sustainable economic transition can guard against future economic shocks. By leveraging existing strengths, cultivating promising sectors and budding industry clusters, the Tahoe Basin can boost resilience by transforming its labor force and industry makeup, broadening the tax and development funding bases, and ultimately reconfiguring the economy.

# KEY FINDINGS

- The Tahoe Basin’s population has declined by 7,300 people (12% of its 2000 census population) over the last 18 years, a bad sign for the region’s labor force. Also, the region lacks enough young residents to enter the workforce to replace the increasing number of people aging out of it.
- Employment in the region has not recovered from the Great Recession; its growth has lagged that of California, Nevada, and the nation. At the end of 2019, private-sector employment was still 300 jobs short of its 2006 peak.
- Having the highly sensitive tourism industry as the region’s leading base sector stifles economic resiliency. Meanwhile, the region’s significant seasonal workforce and volatile revenue sources restrain fiscal flexibility.
- COVID-19’s impact on Leisure and Hospitality has dire implications for the rest of the region’s economy through the multiplier effect (the change in economic conditions such as employment and income caused by a change in the economic conditions of a particular section of the economy). In this context, when the tourism industry falters, many jobs created out of demand linked to tourism also become vulnerable.
- The region’s Environmental Innovation cluster has significant growth potential, and its success is contingent on the health of the Construction sector, which outperforms in times of economic prosperity.
- The future of the region’s Health and Wellness cluster is promising, given Health Care’s strong trajectory. The Health Care sector has exhibited long-run growth in the Basin, and should continue to do so as Health Care spending in general constitutes an increasing share of personal outlays. Telemedicine is a great opportunity to capitalize on this trend while attracting medical personnel to the picturesque Tahoe Basin.
- The Sustainable Recreation cluster will be valuable in reinforcing local tourism amid efforts to diversify the region’s industry mix.
- The Tahoe Basin has a higher percentage of college graduates than the California and Nevada state averages; this is promising for skilled industry development.

# RECOMMENDATIONS

- Maintain the strength of the tourism industry while fostering growth in other sectors. This will ensure that resources continue to flow into the economy while sectors are built up to alleviate the overall pressure on tourism.
- Business clusters – concentrations of interrelated industries located in particular regions - are ways both to create and attract high-wage jobs to the region and increase demand for low-wage workers in supporting Retail, Leisure and Hospitality, and related sectors. Therefore, clusters should be cultivated while not replacing current industry. Rather, the goal should be to enhance overall economic output and diversify the industry mix to support low-wage work, encourage high-wage earners, broaden the sales tax base, and weather economic shocks more deftly.
- Remove obstacles to cluster development, including the lack of entrepreneurial activity/startups and cluster-related conferences, no specific cluster anchor centers for the individual clusters, and underdeveloped broadband infrastructure.
- Take advantage of the rise in telecommuting and attract more remote work to the region, especially work with roots in the region. The Tahoe Basin is in a good position, given its proximity to the Bay Area and the exorbitant cost of living there. Tahoe provides a better alternative for many telecommuters.
- Increasing tax rates is not prudent during a recession, so other, existing sources in addition to sales tax and transient occupancy taxes, such as the property tax, present a stable and less elastic alternative to fund economic development.

# INTRODUCTION

Anxiety over the Tahoe Basin's economic viability has widened amid the COVID-19 pandemic. The region's dependence on tourism has led to an increasing focus on economic shocks and resiliency. Although the region succeeded in cultivating its entertainment and recreation base after the Great Recession, the overall tourism industry has not recovered. Furthermore, the current pandemic and recession have sent tourism reeling, which has implications for all economies that have tourism as a base sector<sup>1</sup>. In the long run, the Tahoe Basin's non-tourism industries must be able to prop up the region in times of need. In the near term, efforts should be geared toward the cultivation of a diverse economy, as well as the stability of its funding sources.

The Tahoe Basin has strengths and opportunities to exploit and challenges to meet. The region should maintain the strength of its tourism industry, foster growth in reliable base and non-base sectors, cultivate its industry clusters into large economic contributors, and attract high-earning residents. To build out its clusters, the region can curate and leverage the local knowledge base, enhance worker skills, and train its workforce for employment in growing, less cyclical industries connected to existing clusters. To attract high-earning residents, the region can incentivize remote work, taking advantage of the widespread transition to telecommuting in office-using industries. Further, the region should leverage its lower cost of living relative to the Bay Area and create a welcome environment for startups and incubators.

The region also needs to continue propping up its low-wage workers while it lures a higher-earning population. This can be done by training low-wage tourism workers in growing, less sensitive industries. Lastly, to ensure the success of these programs, the region should enhance broadband connectivity and stabilize and broaden funding for economic development.

This report provides a framework to improve resiliency and to articulate its need. Three important concepts — vulnerability, opportunity, and transformation — guide this report, with the first two concepts fueling the last. Currently, the Tahoe Basin has no protections against future losses, unlike what one might see in more diverse economies such as San Francisco or Los Angeles. This is due to the way in which the Tahoe Basin's economy and demographic base are composed. The goal of this report is to help the Tahoe Basin become resilient and prosperous.

## EXISTING CONDITIONS AND IMPETUS FOR CHANGE

This section discusses vulnerability amid downturns and events such as the COVID-19 pandemic. Special focus is applied to the Tahoe Basin's labor market and funding foundations. The analysis highlights the region's specific opportunities and vulnerabilities and, in the next section, provides context for the findings and recommendations.

## VULNERABILITY, COVID-19, AND RESILIENCY

Historic job loss and suppressed consumer demand in the U.S. have left some local economies in particularly bad shape. The decimation of consumer-driven government revenue such as sales and use tax, and transient occupancy or hotel taxes, have left local jurisdictions with multiyear budget shortfalls. Additionally, plummeting consumer demand is sidelining jobs, especially in visitor-dependent economies. The pandemic has also brought vulnerabilities to the forefront and has posed profound questions. Because the elasticity of local economies largely depends on their workforces and industries and the financial deftness of the local governments, many jurisdictions are assessing whether they can withstand recurring natural disasters and economic shocks.

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<sup>1</sup> Base sectors refer to industries that bring resources into an economy; non-base sectors are involved in the circulation of those resources.

The ubiquitous, unmatched collapse in demand brought on by health concerns and business closures has led to an overwhelming pullback in consumer spending. Consequently, major sources of budget security have effectively vanished in many jurisdictions that rely on revenue generated by Leisure and Hospitality spending. As such, many tourism-driven regions have realized that their economic bases are neither sustainable nor built to weather large, repeated shocks. Having tourism as a base economic sector is a principal vulnerability, especially amid a global pandemic. Base sectors supply the local economy with outside resources, which stimulate activity in all other sectors of the economy. Therefore, a contraction in a highly sensitive base sector, such as tourism, has profound effects on the entire region.

Indeed, tourism has taken the brunt of COVID-19's impact. National hotel occupancy reached a low point, 22.0%, in early April,<sup>2</sup> and seated diner reservations fell 100% year over year that month<sup>3</sup> — both unprecedented effects of the pandemic. This has hurt nearly all economies, but the Tahoe Basin is especially susceptible because of its small resident population and reliance on tourism. The ongoing effects complicate reversing economic losses because: 1) depressed demand translates to job loss and deactivation of a large portion of the local labor force; 2) the collapse in consumer-driven tax receipts reduces local government's discretionary spending power; and 3) the loss of employment reduces consumer spending further, exacerbating the economic forces that work against public revenue. Ultimately, for places like the Tahoe Basin, where a dramatic decline in tourists is due to economic reasons and/or anxiety about a natural event (such as a pandemic), economic shocks are especially pronounced and resiliency is much more challenging.

Tourism-based economies need to become resilient using two methods. The first is to alleviate the burden from the tourism industry by diversifying the economy's overall mix of industry. This would entail turning other industries into large economic contributors, which would require the attraction and retention of a more heterogeneous pool of businesses and talent. The second involves the role of local governments and other stakeholders such as nonprofits, including the Tahoe Prosperity Center. Creating a diverse economy depends on a government's engagement and discretionary spending power. This is true whether government is the economic development stakeholder or is working through an intermediary. In the latter case, the stakeholder works in concert with local government to ensure that resiliency program goals are met and that funding levels are adequate. Economic development stakeholders benefit as governments rely less on tourism revenue by broadening their tax bases and compensating for large financial fluctuations caused by issues such as seasonal variation. What's most important in this process is that the two methods reinforce each other. The cultivation of industry attracts more business and residents to the economy, providing a less seasonal and stable revenue base. In turn, the more stable revenue helps ensure the maintenance of essential services, as well as the efficacy of economic development — each of which support growing industry and population.

The economy of the Tahoe Basin is largely Leisure and Hospitality based and so it is highly vulnerable to economic shocks. Throughout the early 2000s, the region endured a period of underinvestment in visitor-serving attractions and services, which was exacerbated by the Great Recession of 2008-09. The region then grappled with the drought of the 2015-16 winter season, which reduced tourism.<sup>4</sup> Now, the region is facing the pandemic. Because of the region's outsized reliance on tourism, these types of events inhibit long-term economic growth. But the opportunity exists to transform the region into a more sustainable, diverse, and resilient economy that is less sensitive to economic shocks. This report provides context on current conditions and offers recommendations for overcoming prevailing challenges. Because building an entire economy from scratch is not a viable option for any region at any time, the emphasis will be on leveraging strengths and exploiting opportunities.

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<sup>2</sup> STR. (2020, July 16). Retrieved July 16, 2020, from <https://str.com/press-release/str-us-hotel-results-week-ending-11-july>

<sup>3</sup> OpenTable. (2020). Retrieved July 16, 2020, from <https://www.opentable.com/state-of-industry>

<sup>4</sup> Measuring for Prosperity, "Community and Economic Indicators for the Lake Tahoe Basin" <https://tahoeprosperity.org/wp-content/uploads/measuring-for-prosperity-community-and-economic-indicators-for-the-lake-tahoe-basin-2018.pdf>, (retrieved June 15, 2020)

# COVID-19 IMPACT: EMPLOYMENT BY THE NUMBERS

The impact of the pandemic has been dire for both California and Nevada. In April, arguably the worst month of the initial mitigation phase, California lost over 2.4 million nonfarm jobs (14% of total employment in 2019), while Nevada lost over 265,000 nonfarm jobs (18% of total employment in 2019). The widespread job loss was unprecedented and unparalleled in U.S. history. In each state, furloughs were greatest in Leisure and Hospitality with other service sectors such as Retail, Administrative Support, and Health Care following suit.

Both economies did bounce back during May and June, with California and Nevada adding over 558,000 and 98,000 jobs, respectively. Each state may continue to recoup job losses as the sectors most effected by the pandemic early on are pushed to innovate and find creative ways to conduct business. The trajectory of the economic recovery is linked with the trajectory of the virus, and therefore jobs may not fully recover until the U.S. contains the transmission of the disease and/or is able to mitigate the adverse health effects associated with infection.

On a more regional level, the four counties surrounding the Tahoe Basin saw 119,500 layoffs in total from February to April (peak to trough). There is no data available to assess job losses for the Tahoe Basin economy itself, but it's likely that this translated to between a 5,500 and 7,500 drop in local employment over the same two-month period based on historical trends.

Table 1: Employment Change in California and Nevada, In Thousands (2020)

Industry	CALIFORNIA		Industry	NEVADA	
	March-April	May-June		March-April	May-June
Total Nonfarm	-2,415.0	558.2	Total Nonfarm	-265.6	98.9
Utilities	0.3	0.0	Utilities	0.0	0.0
Natural Resources	-1.0	-0.5	Natural Resources	-0.3	0.1
Management	-12.9	3.0	Information	-1.5	-0.3
Financial Activities	-26.1	4.4	Educational Services	-1.6	-0.4
Educational Services	-35.6	7.4	Manufacturing	-1.6	-1.0
Transport/Warehouse	-57.9	12.0	Financial Activities	-2.1	-0.2
Wholesale Trade	-65.5	15.5	Prof Sci and Tech	-2.5	0.9
Information <sup>5</sup>	-76.8	8.2	Wholesale Trade	-5.9	0.6
Prof Sci and Tech	-78.6	15.6	Management	-8.4	0.4
Government	-91.7	-36.3	Construction	-8.6	-3.5
Manufacturing	-121.8	23.4	Government	-9.4	2.4
Construction	-131.6	26.8	Transport/Warehouse	-9.6	-0.4
Admin Support	-142.8	11.7	Other Services	-10.1	2.2
Other Services <sup>6</sup>	-145.0	27.7	Health Care	-14.9	1.9
Health Care	-267.0	76.6	Retail Trade	-25.1	13.9
Retail Trade	-272.5	71.3	Admin Support	-29.0	9.7
Leisure and Hospitality	-887.5	292.5	Leisure and Hospitality	-134.9	72.7

Source: U.S. Bureau of Labor Statistics; Analysis by Beacon Economics.

Note: Table excludes Farm employment; numbers may not be exact because of rounding.

<sup>5</sup> Information is a diverse economic sector, made up of establishments engaged in publishing, motion picture and sound recording, broadcasting, telecommunications, data processing, data hosting and other data related services.

<sup>6</sup> Other Services is an economic sector made up of establishments engaged in repair and maintenance; personal and laundry services; private households; as well as religious, grantmaking, civic, professional, and similar organizations.

# LABOR MARKET AND THE LOCAL ECONOMY: VULNERABILITIES AND OPPORTUNITIES

Conditions in the Tahoe Basin are not conducive to long-run economic growth. In 2000, the census counted 60,295 residents. By 2010 the population had shrunk to 56,709 and declined further, to 52,979, in 2018 (-12% over 18 years). Population declined in all of the region's census-designated places; the population of South Lake Tahoe increased modestly. A shrinking labor force inhibits labor market growth and makes development harder. A sluggish labor market undermines cluster development and hurts public revenue growth. There are bright spots in the region, however. Certain base and non-base sectors can provide future stability if efforts are focused well.

**Table 2: Private-Sector Employment by Industry in the Lake Tahoe Basin (2019)**

Industry	2019 Employment	% Change from 2005
Total	31,190	-0.1
Accommodation and Food	11,930	-9.7
Construction	3,120	-16.0
Arts, Entertainment, and Recreation	2,960	28.9
Retail Trade	2,710	-0.8
Health Care	2,130	16.2
Other Services	1,370	29.9
Real Estate	1,310	3.7
Administrative Support	1,290	32.1
Professional, Scientific, Technical	1,200	-11.0
Finance and Insurance	830	9.7
Education	590	48.0
Logistics	420	46.6
Wholesale Trade	360	-1.4
Manufacturing	280	-25.3
Management	280	52.0
Information	230	10.9

Source: Emsi; Analysis by Beacon Economics

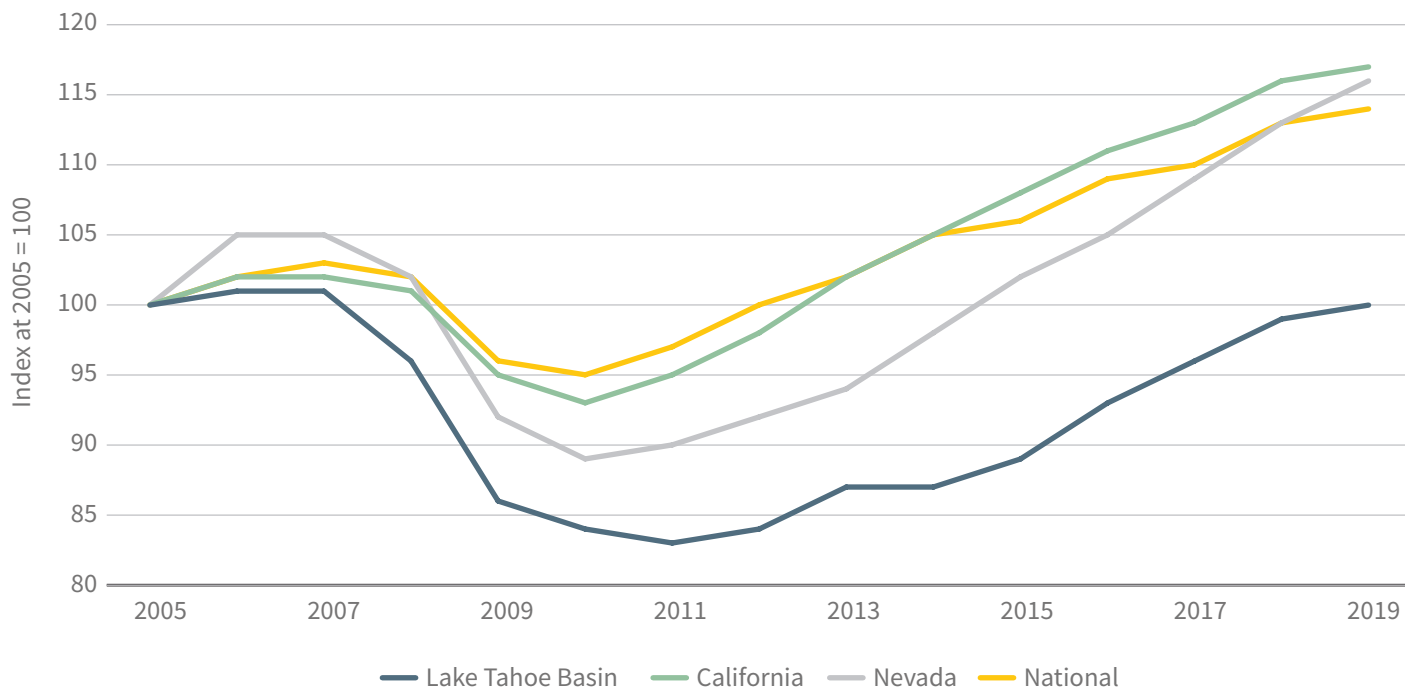
Note: Table excludes Government, Farm, Utilities, and Natural Resources employment; numbers may not be exact because of rounding.





Tourism brings the lion's share of resources into the region's economy. This results in the region's being adversely impacted from shocks to consumer demand, and slow to recover because of the multiplier effect. This is shown by recovery trajectories in the last decade. Although California, Nevada, and the nation as a whole expanded fairly quickly after the 2008-09 recession, the Tahoe Basin economy took 10 years to regain prerecession levels.

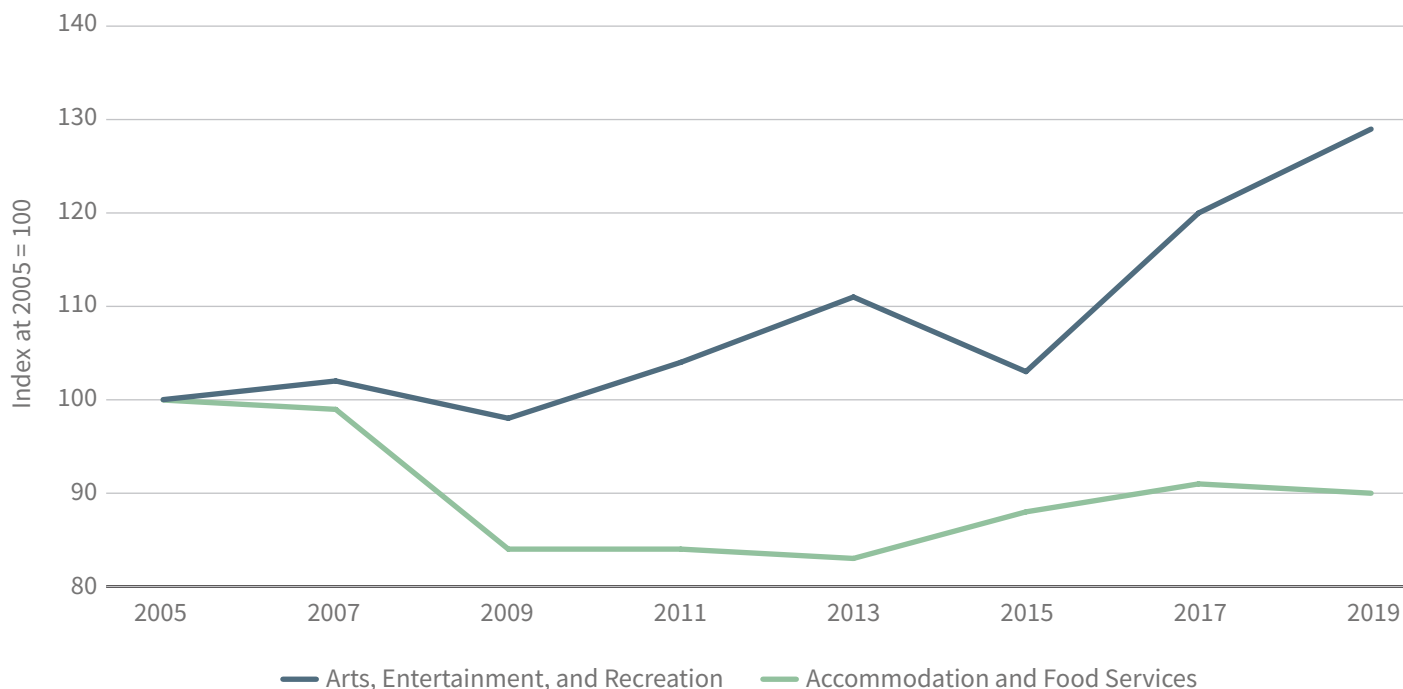
Figure 1: Total Private Sector Change in Employment for Selected Areas (2005-19)



Source: Emsi, U.S. Bureau of Labor Statistics; Analysis by Beacon Economics

Accommodation and Food Services, a component sector of Leisure and Hospitality<sup>7</sup> was greatly hurt by the Great Recession and has not since recovered to its 2005 peak level. From 2005 to 2019, employment in this sector shrank nearly 10%, a loss of roughly 1,270 jobs. The Arts, Entertainment, and Recreation sector has grown consistently, having recovered to prerecession levels by 2016 and expanding 24% above its prerecession peak by 2019. Although in 2019 Accommodation and Food Services constituted 80% of employment in Tahoe Basin tourism businesses, its share had declined since 2005. Thus, the implications are grim. The base sector of the Tahoe Basin is in decline, threatening the overall economic health of the region. This is why it is important to prop up the tourism industry in addition to diversifying the entire economy. Tourism will always bring money into the region, thereby creating the demand for jobs in other industries.

**Figure 2: Employment Growth in the Lake Tahoe Basin: Leisure and Hospitality Sectors (2005-19)**



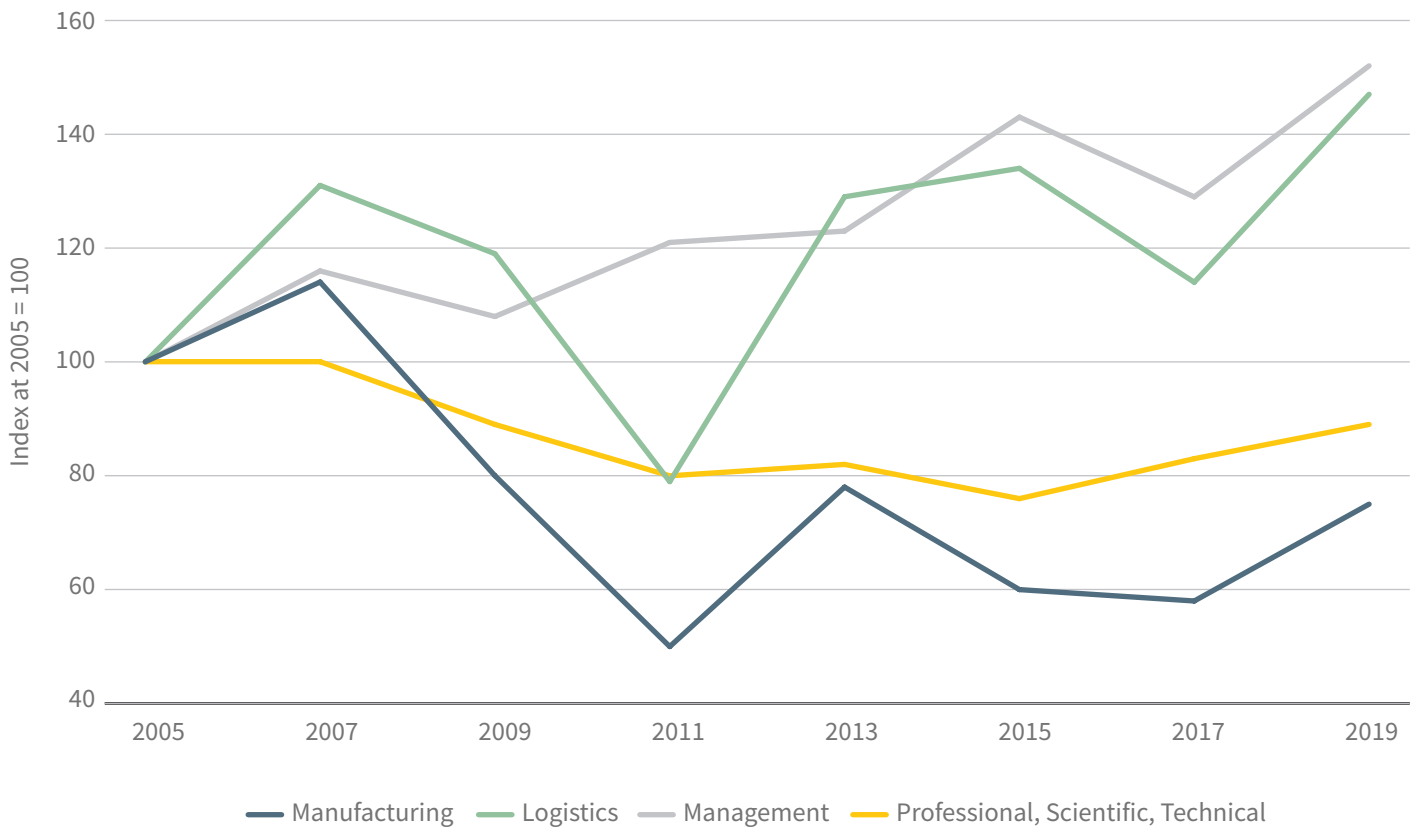
Source: Emsi; Analysis by Beacon Economics

Discretionary spending fuels tourism-based economies, so these economies are highly susceptible to economic shocks. Such spending is the first thing most consumers reduce in a downturn, and the COVID-19 pandemic has only increased vulnerability to tourism economies. Less demand for visitor services makes Leisure and Hospitality particularly vulnerable as consumers reduce their exposure to client-facing environments. Additionally, few jobs in these industries can be performed from home, presenting another layer of occupational risk. Much of the impact falls on low-wage work, which amplifies the need for more low-wage jobs across industries rather than concentrated in vulnerable tourism sectors.

<sup>7</sup> Accommodation and Food Services, and Arts, Entertainment, and Recreation are the two sectors within the Leisure and Hospitality supersector as defined by the U.S. Bureau of Labor Statistics: <https://www.bls.gov/iag/tgs/iag07.htm>

The region’s other base sectors — Manufacturing, Logistics, and Professional, Scientific, and Technical Services — constituted 6% of private employment in the Tahoe Basin in 2019, little changed since 2005. The composition of these industries changed significantly over this period, however. Manufacturing was hit hard by the Great Recession, and employment remains depressed, having fallen 25% from 2005 to 2019. Professional, Scientific, and Technical Services, while not sustaining as sharp a decline, has yet to recover to prerecession levels. What’s important is that these sectors, which bring outside resources to the Tahoe Basin, are also struggling. This makes resiliency more difficult in the long run. Employment in Logistics, including Transportation and Warehousing, has grown 47% since 2005. This tracks the rise in e-commerce, which represented 11.8% of retail sales in the first quarter of 2020, the highest share to date. Employment in Management of Companies and Enterprises, a subsector of Professional and Business Services, has also grown considerably since 2005. Management was relatively unaffected by the Great Recession, which helps in the current situation. Thus, training opportunities should be created for low-wage workers seeking employment in the more resilient Logistics and Management sectors.

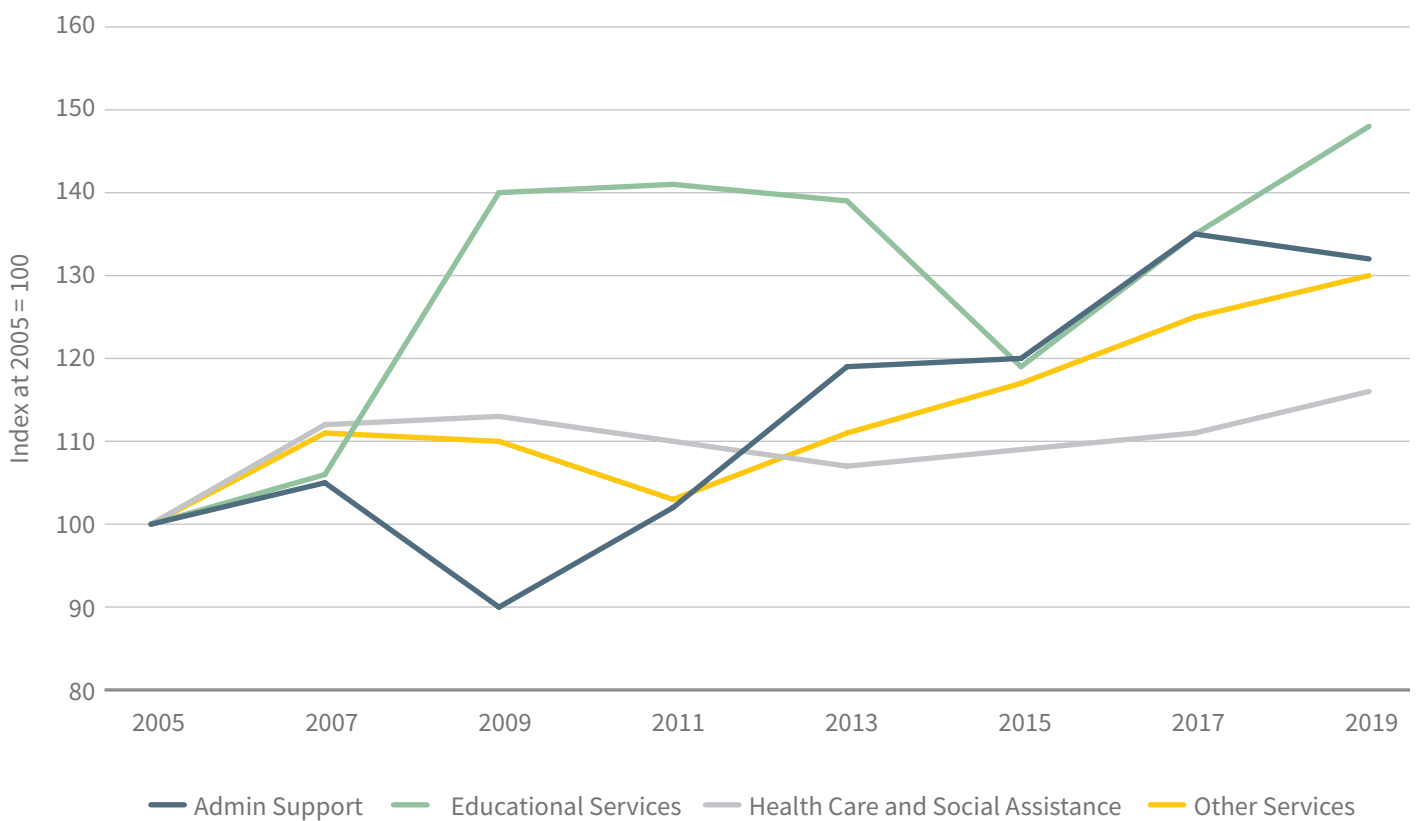
Figure 3: Employment Growth in the Lake Tahoe Basin: Other Base Sectors (2005-19)



Source: Emsi; Analysis by Beacon Economics

The region's leading non-base sectors are Administrative Support, Education, and Health Care and Social Services. Generally, these sectors are less sensitive to recessions and other economic shocks and are relatively quick to reverse job losses. These industries accounted for 13% of private employment in the Tahoe Basin and have grown impressively since 2005. The Education sector led, with employment growing 48% from 2005 to 2019. Following Education was Administrative Support (32%), Other Services (30%) and Health Care (16%). In line with national trends, consumption of these services, primarily Health Care, will continue to constitute an increasing share of overall spending. This makes these industries reliable in the long run, able to manage even when base sectors are struggling. So, it is important to foster growth in this group even though Education and Health Care are demographic-driven industries affected by the Tahoe Basin's declining population. Investment in these industries could wait until more residents are attracted to the region. However, establishing operations such as telemedicine as a part of the Health and Wellness cluster can be how Tahoe builds out these industries while amassing the population needed to fully capitalize. The region's aging population is another motivation for building out industries like Health Care.

Figure 4: Employment Growth in the Lake Tahoe Basin: Non-Base Sectors (2005-19)



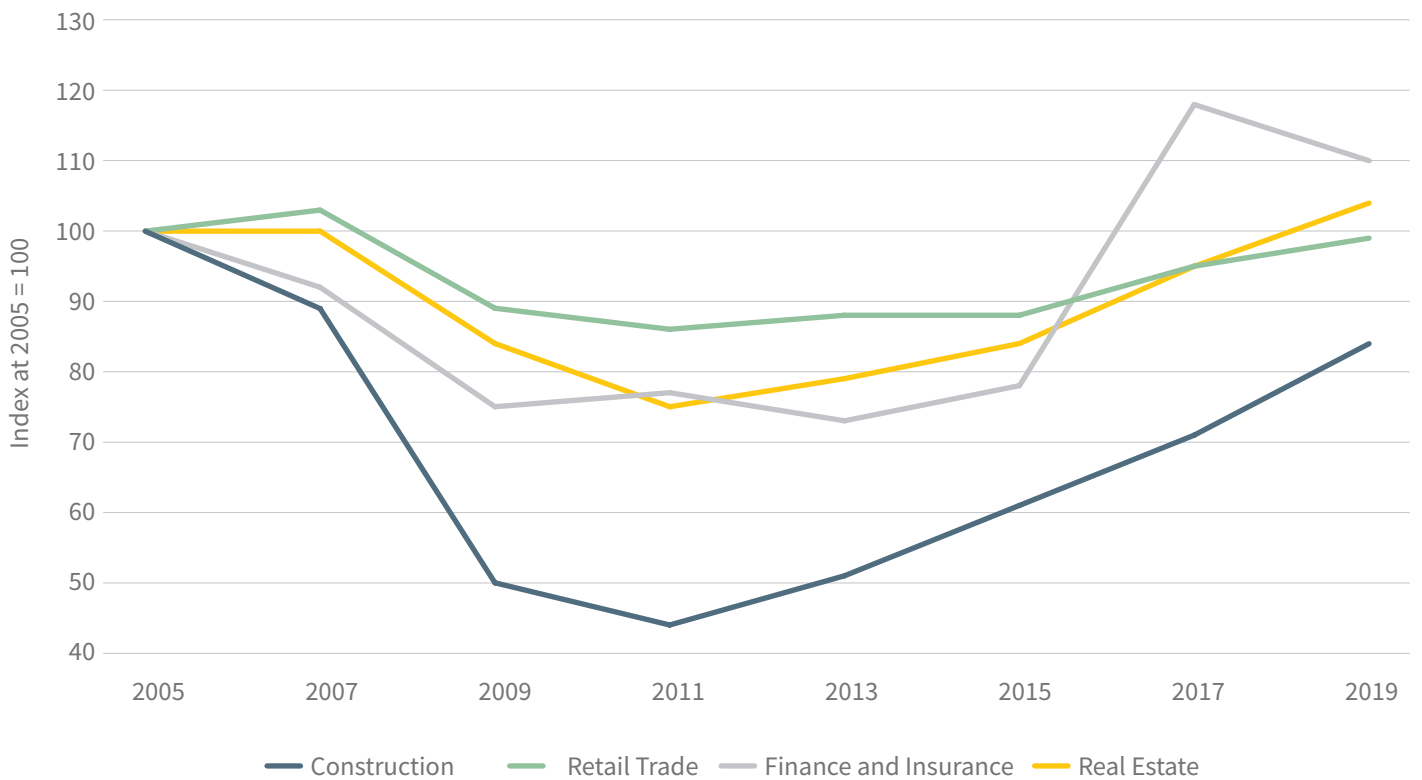
Source: Emsi; Analysis by Beacon Economics

The COVID-19 pandemic also poses unique challenges for other Tahoe Basin industries. In 2019, Retail Trade in the region was close to passing prerecession levels — progress undone by the pandemic — and the industry might never recover. E-commerce has displaced many big-box retailers over the last few years. In fact, retail employment began contracting at the national level in summer 2017, and the industry never regained the jobs.

Construction employment, the region’s second leading employment sector, improved markedly from the recession, nearly reaching prerecession peak levels. What’s concerning is its cyclical nature and the lack of remote work prospects. But Construction generally outperforms in times of economic prosperity, which is good news for the cultivation of the Tahoe Basin’s Environmental Innovation cluster because much of the cluster involves green building.

The Finance Industry has a greater chance to work remotely, which won’t limit output capacity outside of a reduction in demand. Meanwhile, employment in Real Estate is heavily tied to a number of factors, including construction, the health of the Retail sector, and consumers’ overall economic well-being. As a result, employment in the Real Estate Industry could be precarious throughout the COVID-19 recession.

**Figure 5: Employment Growth in the Lake Tahoe Basin: Cyclical Sectors (2005-19)**



Source: Emsi; Analysis by Beacon Economics

# FISCAL SITUATION

The Tahoe Basin spans five jurisdictions in four counties and two states, and each jurisdiction helps fund economic development, typically supported through their general funds.<sup>8</sup> The Tahoe Prosperity Center’s main funding sources from local government are the sales tax and the transient occupancy tax,<sup>9</sup> two of the most vulnerable and downturn-sensitive sources of revenue.

## Sales Taxes

Sales taxes are typically the largest or second-largest revenue source for cities and counties. Local exceptions include the City of San Francisco, where property taxes and business gross receipts taxes are first and second, respectively; and the cities of Avalon, Calif., and South Lake Tahoe where transient occupancy taxes are first, with either property taxes or another source second. Indeed, the principal sales tax payers in every jurisdiction are its residents and businesses. These groups provide a steady flow of receipts that is generally less volatile than other revenue sources such as franchise fees, utility user taxes, and business licenses.

In terms of raising revenue, a significant contrast between the Tahoe Basin and areas such as Los Angeles, the Bay Area, and even the Sacramento Valley involves resident population. As of Jan. 1, 2020, the City of South Lake Tahoe had the fifth-highest housing-unit vacancy rate among cities in California at 40%.<sup>10</sup> This means that 40% of housing in South Lake Tahoe — single-family, multifamily, and mobile homes — was empty. Moreover, the housing-unit vacancy rate for the entire South Shore Region was estimated to be 54% in 2019, up from 39% in 2000 and 45% in 2010<sup>11</sup> – indicating a clear upward trend. In comparison, the rates in Los Angeles and San Francisco are 7.2% and 7.6%, respectively. Housing in unincorporated parts of Placer County was 27% vacant as of January, the ninth highest of all unincorporated county areas in California. Most of these vacant units are probably seasonal residences. In 2017, El Dorado and Placer counties had the highest share of vacant units for seasonal purposes; 85% of vacant housing in El Dorado County was in this category. Placer County had 72% seasonal-related vacancies. Seasonal vacancies in Los Angeles, Sacramento, Santa Clara, and Alameda counties were 15% or less that year. It is difficult to generate stable sales taxes from a populace that is in the taxing jurisdiction only at certain times of year. Efforts to attract more residents to the region will lead to more consistent taxable spending, effectively broadening the sales tax base.

The pandemic has worsened the vulnerabilities brought on by a seasonal revenue base. April 2020 has been the worst month for tax revenue, with much of the nation having restricted economic activity in some form for essential services only. The nationwide reopening efforts of May and June added upside to Beacon Economics’ estimates, but the recent case surges have dampened consumer demand expectations. COVID-19 is affecting all levels of government by a historic magnitude. Meanwhile, depressed consumer demand in tourism-based economies creates revenue vulnerability.

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<sup>8</sup> Multari et al. (2017). *Guide to Local Government Finance in California*. Point Arena, Calif.: Solano Press Books.

<sup>9</sup> Also known as hotel taxes or room taxes.

<sup>10</sup> This is an estimate from the Demographic Research Unit of the California Department of Finance, the body that presides over the state’s official demographic estimates.

<sup>11</sup> Sullivan et al. (2019). *South Shore Housing Needs and Opportunities*. Retrieved from [https://tahoeprosperity.org/?jet\\_download=2189](https://tahoeprosperity.org/?jet_download=2189)

## Transient Occupancy Tax

Transient occupancy revenue is highly seasonal in the Tahoe Basin because of tourism. This is unavoidable and presents the Tahoe Prosperity Center with a highly volatile source of funding. The table below compares the seasonal factors of transient occupancy tax receipts for Douglas County and the cities of Avalon, Los Angeles, and South Lake Tahoe. A seasonal factor measures the percentage amount that on average, a month or quarter is above or below normal.<sup>12</sup> In Los Angeles, transient occupancy revenue tends to rise in August and September and falls significantly by February, when revenue is 24% below an average month. The Tahoe Basin typically experiences dramatic peaks and valleys, with revenue as high as 87% above average in a given month and as low as 64% below average in April.

The Tahoe Basin isn't an outlier with this kind of revenue inconsistency. The City of Avalon on Santa Catalina Island, another tourism-dependent economy, has even higher-than-average receipts in July and August, but they fall dramatically below average in the winter. Revenue volatility complicates planning, especially given specific budget rules,<sup>13</sup> and it makes funding for economic development unstable throughout the year.

**Table 3: Transient Occupancy Tax Seasonal Factors for Select Areas (2012-18)**

	Los Angeles	South Lake Tahoe	Douglas County	Avalon
January	-1.2	-9.1	-9.1	-57.9
February	-24.2	-10.1	-10.1	-57.5
March	0.6	-3.7	-11.2	-32.3
April	0.4	-64.1	-45.2	-17.5
May	4.7	-52.3	-33.9	-9.7
June	0.3	21.2	17.4	32.4
July	4.7	87.4	75.1	108.4
August	18.5	56.7	48.8	98.0
September	12.3	42.3	24.9	29.7
October	-6.0	-56.1	-33.1	2.9
November	-6.8	-60.4	-47.7	-32.9
December	-3.2	48.1	23.9	-63.7

Source: County of Douglas, Cities of Avalon, Los Angeles, and South Lake Tahoe; Analysis by Beacon Economics

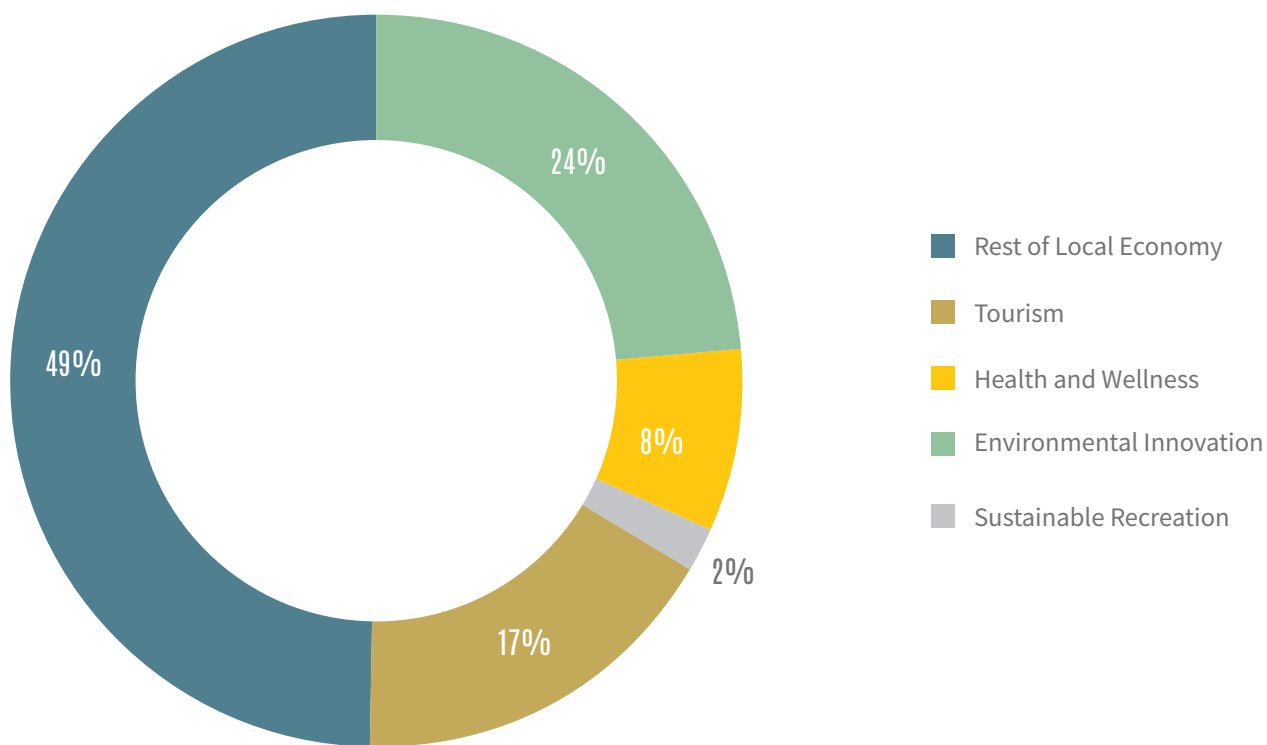
<sup>12</sup> Austin, John S. (1981). How to Use and Interpret Seasonal Factors. *Business Economics*, 16, 40-42.

<sup>13</sup> Madowitz et al (2013). Gasoline taxes and revenue volatility: An application to California. *Energy Policy*, 59, 663-673.

# TRANSFORMING THE REGION'S ECONOMY

Long-term resilience will require local institutions to collaborate in developing policies that promote economic diversification and broaden the regional tax and funding bases. Moving toward a more sustainable economy involves planning beyond pandemic-related disruptions while bolstering an infrastructure that can withstand and/or adapt to shocks and stresses. Specifically, the region should leverage its competitive advantages in tandem with policies that develop local clusters, retrain local workers to service those clusters, attract high-skill and high-wage remote workers to the region, and improve broadband to extend commercial activity and strengthen social cohesion. The following section details the clusters in the region and recommends ways to develop them.

Figure 6: Establishment Concentration in the Lake Tahoe Basin (2016)



Source: U.S. Census Bureau; Analysis by Beacon Economics

## CULTIVATING INDUSTRY CLUSTERS

The Tahoe Prosperity Center recognizes three major industry clusters in the region: Environmental Innovation, Health and Wellness, and Sustainable Recreation. Business clusters can both create and attract high-wage jobs and increase demand for low-wage workers in supporting Retail, Leisure and Hospitality, and related sectors. The key to cluster growth and development is linking companies, government agencies, nonprofits, academic institutions, startups, and funding bodies that operate within the cluster and the regional economy. This section profiles the three major clusters and some of the primary institutions and organizations that operate within them.



## Environmental Innovation

The Tahoe Basin's Environmental Innovation cluster centers on green construction and sustainability research. The main driver of the cluster's growth is the Tahoe Regional Planning Agency (TRPA), which has incentivized green building in the region and contributed to the growth of local construction.<sup>14</sup> The Construction sector accounts for 10% of the region's employment base, is the region's second-largest employment sector next to Accommodation and Food Services, and was on track to reach prerecession levels this year before the pandemic. Indeed, the Environmental Innovation cluster's growth depends on the health of the Construction Industry.

As the Tahoe Basin emerges from the current crisis, local development bodies should leverage TRPA's resources to capitalize on the cluster's growth potential and explore ways to attract firms and workers to build out the region's environmental innovation knowledge base. Diversifying economic activity beyond construction (while still promoting growth in the sector and providing good jobs for low-skilled workers) and facilitating entrepreneurial efforts, research and development, and other disciplines that attract high-skilled work will allow the sector to be more resilient amid market disruptions.

## Health and Wellness

The Health and Wellness cluster comprises community-serving (traditional health and emergency services) and tourist-serving sectors (holistic health and sports therapy). Like the Environmental Innovation cluster, it has strong growth potential, which is largely due to the burgeoning Health Care sector, which accounts for 7% of regional employment and which has grown 16% since 2005. Although tourism will always be a part of the local economy, it is important not to orient the Health and Wellness cluster only to tourists and seasonal residents. As such, cluster diversification should include not only alternative therapies, wellness retreats, and holistic health but investments in higher-value chain science, technology, and innovation (STI) occupations and emerging areas like telemedicine that can serve both local and external populations year-round.

The case for telemedicine is particularly compelling. In addition to attracting medical personnel who may wish to live in the Tahoe Basin but may otherwise not find it feasible to move, pivoting toward more innovation-focused sectors may attract other information professionals whose contributions could bridge multiple clusters. In other words, the same attractions that traditionally bring tourists to the region on a seasonal basis may be leveraged to bring in permanent residents. An increase in population means more demand for local goods and services, which in turn leads to more stable jobs for workers who may currently be in tourism. Moreover, embracing telemedicine and the broader information economy also means expanding high-speed internet access, which will improve public health and social cohesion.

## Sustainable Recreation

The Sustainable Recreation cluster, formed in 2017 by the Lake Tahoe Sustainable Recreation Working Group, focuses on outdoor recreation and the preservation and restoration of natural and cultural resources in the Tahoe Basin.<sup>15</sup> Even as this cluster addresses the negative effects of over-tourism and environmental degradation, it can serve as a model for ecologically friendly tourism practices and help support the existing tourism infrastructure. Like the previous two cases, cluster development should diversify into other sectors and attract new workers to the region.

The Sustainable Recreation cluster can bridge the Environmental Innovation and Health and Wellness clusters, creating a potential competitive advantage. Policies should drive collaboration through startup incubators, joint-research grants, and similar initiatives that promote cross-sector engagement, knowledge spillover, and economies of scale.

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<sup>14</sup> Tahoe Regional Planning Agency. Retrieved June 15, 2020, from <https://www.trpa.org/get-involved/sustainability/tahoe-green-building-toolkit/>

<sup>15</sup> Tahoe Regional Planning Agency. Retrieved June 15, 2020, from <https://www.trpa.org/programs/sustainable-recreation/>

## Cluster Participants

In addition to the Tahoe Prosperity Center, other firms and institutions play key roles in each cluster. Policymakers and economic development stakeholders should encourage collaboration and cooperation among local firms and institutions to expand the local clusters' knowledge pool, which in turn may foster new and emerging sectors.

**Table 4: Selected Local Cluster Participants in the Lake Tahoe Basin**

	Health and Wellness	Environmental Innovation	Sustainable Recreation
Nonprofits	Barton Healthcare System, Carson Tahoe Health, Osana Health Innovation	Tahoe Regional Planning Agency, Truckee Donner Public Utility District, Sierra Green Building Association, North Tahoe Environmental Education Coalition, Clean Tahoe, South Tahoe Environmental Education Coalition	Tahoe Regional Planning Agency, City of South Lake Tahoe, Tahoe City Public Utility District, California Tahoe Conservancy, and others
Private Firms	Tahoe Orthopedics & Sports Medicine, Tahoe Natural Medical Center, NaturaMed Natural Family Medicine, Yoga Om Tahoe, Kona Chiropractic, Wellness Neighborhood & O2 Yoga & Wellness	NCE Engineering and Environmental Services, Midkiff & Associates, Ascent Environmental, Design Workshop, and Lumos and Associates	The early life cycle of this cluster means that there are fewer private-sector firms involved. The local firms involved primarily offer services around eco-friendly hotels, bike rentals, and other services that revolve around sustainable tourism.
Education and Academic Institutions	Barton Health offers health and wellness courses such as community wellness education, graduate medical education (GME), and more.	The Great Basin Institute, Lake Tahoe Community College, Sierra College, Sierra Nevada University, and UC Davis – Tahoe Environmental Research Center.	Tahoe Science Advisory Council, UC Davis – Tahoe Environmental Research Center.
Funding	The Barton Foundation has been a source of funding in the region and awarded \$50,000 in grants in 2019. <sup>16</sup>	The Tahoe Fund serves as a source of private funding for environmental projects in the Tahoe basin, with an emphasis on Sustainable Recreation. <sup>17</sup>	The Lake Tahoe Environmental Improvement Program focuses on developing hiking trails and improving lake access and recreation facilities. <sup>18</sup>

Analysis by Beacon Economics

<sup>16</sup> Barton Health. Retrieved June 16, 2020, from <http://www.bartonorthopedicsandwellness.com/tahoe/news/barton-foundation-funds-50000-in-grants-benefiting-435.aspx>

<sup>17</sup> Tahoe Fund. Retrieved June 18, 2020, from <https://www.tahoefund.org/about-us/>

<sup>18</sup> Lake Tahoe Info. Retrieved June 20, 2020, from <https://eip.laketahoeinfo.org/EIPFocusArea/Detail/4>

# LEVERAGING THE KNOWLEDGE BASE AND ATTRACTING HIGH-WAGE EARNERS

Regions have a greater chance of transformation if they build on industry and workforce strengths and branch into areas that are technologically related to existing sectors.<sup>19</sup> A good way to measure technological relatedness in the region is to examine the local knowledge base by educational attainment rates and college degree type. The Tahoe Basin has higher postsecondary educational attainment than the California and Nevada averages. The share of bachelor's degree earners among residents aged 25 and older is 25% in the Tahoe Basin, compared with 21% in California and 16% in Nevada. Furthermore, over 65% of residents have at least some college experience, and 15% have advanced degrees.

**Table 5: Educational Attainment in the Lake Tahoe Basin (2018)**

Education	Total (Absolute)	Total (Proportion %)
Total	40,830	100
Less Than High School	3,206	8
High School/GED	7,426	18
Some College Experience	13,844	34
Bachelor's Degree	10,399	25
Master's Degree	4,012	10
Doctorate	1,943	5

Source: U.S. Census Bureau; Analysis by Beacon Economics

**Table 6: College Degrees by Field of Study in the Lake Tahoe Basin (2018)**

Education	Science and Engineering	Business	Education	Arts and Humanities
Total (Share)	48%	20%	9%	23%
Total (Absolute)	8,326	3,478	1,549	4,032

Source: U.S. Census Bureau; Analysis by Beacon Economics

The distribution of college degree types in the Tahoe Basin reveals the type of knowledge and whether the region has a workforce with the appropriate skill sets to foster targeted cluster development. For instance, the Tahoe Basin may find it easier to cultivate the Environmental Innovation cluster since there are high rates of scientific and engineering knowledge among its residents. Conversely, if there is a lack of knowledge in particular fields, steps can be taken to bolster a knowledge base (either through training or recruitment) to facilitate emerging cluster growth. It is also important to address areas with lower educational attainment to promote opportunities for all and to maintain equitable development during the regional transformation.

COVID-19 has changed the structure of the workforce, and more people than ever are working remotely. This enables the region to leverage its strengths to attract high-wage remote earners. The Tahoe Basin should focus on attracting workers in fields related to the clusters that exist in the region. Attracting outside talent can bolster the clusters by injecting new sources of human capital, which in turn can create value in the region. The region must also invest heavily in improving its internet infrastructure to meet the needs of the remote workforce.

<sup>19</sup> Wiley Online Library. Retrieved June 24, 2020, from <https://onlinelibrary.wiley.com/doi/abs/10.1111/j.1944-8287.2011.01121.x>

# REMOTE WORKER CASE STUDIES

Here are programs that other regional governments have used to attract remote workers to build and transform their employment bases. The Tahoe Prosperity Center should consider implementing such programs in tandem with other local jurisdictions and stakeholders.

## REMOTE WORKER GRANT PROGRAM EXAMPLES

### Attracting Remote Workers - Relocate to Vermont

The State of Vermont created a Remote Worker Grant Program<sup>20</sup> in 2019 that helped reimburse remote workers with the costs associated with relocation. The purpose of the program was to promote the relocation of remote workers to the region. The initiative garnered media attention and increases in web traffic and inquiries. Over 4,000 applications were submitted. The Agency of Commerce and Community Development earmarked \$320,834 to attract 84 remote workers. Over 96% of the relocators had previously visited the region, and 81% cited access to outdoor recreation and nature as factors in deciding to move<sup>21</sup>. The Tahoe Basin should consider leveraging its image in sustainable outdoor recreation and large tourist base to attract a remote work base.

### Attracting Remote Workers and Community Building - Tulsa Remote

The Tulsa (Okla.) Remote program goes beyond attracting remote workers by trying to integrate them into the local community and facilitating knowledge spillovers and networking. The program offers eligible participants an initial upfront payment for moving expenses, a monthly stipend, and a cash payment at the end of a 12-month contract, which amounts to a total of \$10,000. The program also offers participants access to office space that links up remote workers to exchange ideas. The program includes resources for finding accommodations in the area and a job board for finding both local and remote work. They also have created a program around community building that aims to set up events and meetups that connect remote workers with local organizations.<sup>22</sup>

### Attracting Remote Workers and Community Building - Remote Shoals

Alabama's Remote Shoals initiative, like Tulsa Remote, offers \$10,000 to workers who make more than \$52,000 to move to one of the cities in the region. Participants receive 25% of the funds upfront, 25% after being in the region six months, and the remaining 50% after 12 months.

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<sup>20</sup> Vermont Official State Website. Retrieved June 26, 2020, from <https://www.thinkvermont.com/remote-worker-grant-program-2019/>

<sup>21</sup> Remote Worker Grant Program. Retrieved June 26, 2020, from <https://accd.vermont.gov/sites/accdnew/files/documents/DED/Remoteworker/2019RemoteWorkerReport.pdf>

<sup>22</sup> Tulsa Remote. Retrieved July 2, 2020, from <https://tulsaremove.com/#benefits>

## POLICY ASSESSMENT

Early feedback from the Tulsa Remote program has been optimistic; remote workers are expected to launch startups and bring new knowledge and networks to the region. Outside income flowing in is expected to create a multiplier effect that will benefit local businesses that are not part of the program.<sup>23</sup>

The Vermont State Auditor's office outlined some structural flaws in the Remote Worker Program such as applicants' need to prove residency in Vermont before applying, and the agency's lack of control methods that would show whether the applicants might have moved to the region without the grants.<sup>24</sup>

Given that these remote work programs are new, there have been few indications of their overall efficacy. But they have attracted remote workers. In creating a long-term sustainable and resilient economy, the Tahoe Prosperity Center should launch a similar program and continue workforce development. Incentives such as relocation compensation or moving cost reimbursement may be productive avenues to explore. There should also be a focus on linking new workers to the local workforce, communities, and business clusters to facilitate smooth transitions.

## FUNDING

Funding is one of the main hurdles in creating remote worker programs. The Vermont initiative was created by the state's legislature, Remote Shoals was created by the Shoals Chamber of Commerce and Shoals Economic Development Authority, and Tulsa Remote was funded through the George Kaiser Family Foundation.<sup>25</sup> The Tahoe Prosperity Center should explore various funding options in designing initiatives that best fit the needs of the regional economy.

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<sup>23</sup> Bloomberg CityLab. Retrieved July 2, 2020, from <https://www.bloomberg.com/news/features/2020-02-28/the-great-tulsa-remote-worker-experiment>

<sup>24</sup> Vermont State Auditor. Retrieved July 2, 2020, from <https://auditor.vermont.gov/sites/auditor/files/documents/Remote%20Worker%20Grant%20Program%20Report%20-%20Final.pdf>

<sup>25</sup> EMSI. Retrieved July 6, 2020, from <https://www.economicmodeling.com/attract-and-retain-remote-workers/>

# RECOMMENDATIONS

## Conferences

Industry and cluster-specific conferences are key to putting regional clusters on the global radar. A key component in creating high-wage jobs in a cluster is by fostering innovation and entrepreneurial activities via mobility and through industry insiders. Conferences present an opportunity to lure key talent and remote workers to the region. Conferences are also a great way to link investors with innovative startups. Conferences are now done digitally because of the pandemic, robbing them of a central benefit: physically bringing key industry and cluster figures to the region, which creates linkages and networks among the clusters and the broader community.<sup>26</sup> However, one positive change in the digital conference environment is that international CEOs, financiers, and startups have more time to engage in digital conferences and webinars. The Tahoe Prosperity Center should help organize digital conferences and webinars around key clusters to attract high-wage remote workers to the region. These conferences should be annual and should become physical events after pandemic-related health threats and countermeasures have eased.

## Entrepreneurial Activity and Startups

Along with attracting high-wage remote workers should be an effort to create high-wage opportunities. High-wage workers are attracted to high-wage regions, and the Tahoe Basin should implement science, technology, and innovation policies. How the region can encourage entrepreneurial activity in the region:

- Foster and encourage the creation of innovative startups and research and development that lead to patents.
- Local economic development centers and research institutes should work with academic institutions in the region (Sierra College and Lake Tahoe Community College, for example) to widen cluster bottlenecks.
- Establish a formal academic entrepreneurial competition that addresses key issues in the cluster and awards the winners funding and/or incubator space.

## Incubators

Incubators and shared office space for local clusters and remote workers encourage knowledge transfer, spillovers, and networking. They also create an anchor for the cluster, which is important for bringing community members together. How to use incubators in the facilitating of knowledge creation in industry clusters:

- Create incubators that act as hubs for the clusters that exist in the region.
- Consider linking cluster incubators with remote workers, which can aid collaboration between the cluster and new workforce in the region. The Tulsa Remote initiative, for instance, offers remote workers a working space that brings together local entrepreneurs and other remote workers.<sup>27</sup>
- The Tahoe Basin should create value in local clusters by leveraging the knowledge base of attracted remote workers to ease cluster growth and development.

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<sup>26</sup> Regional Studies Association. Retrieved July 6, 2020, from <https://rsa.tandfonline.com/doi/full/10.1080/08985626.2020.1736184>

<sup>27</sup> Tulsa Remote. Retrieved July 7, 2020, from <https://tulsaremove.com>

## Broadband and Internet Availability

Key to cluster growth and development is the transmission of information via spillovers, mobility, and connectivity. Attracting high-wage remote workers to the region will be contingent on adequate broadband infrastructure. The Tahoe Prosperity Center's Connected Tahoe initiative addresses this issue. A report based on information from the California Public Utilities Commission noted that the region's broadband speeds and infrastructure are substandard.<sup>28</sup> Some findings:

- The lack of sound broadband infrastructure is hampering cluster development; clusters have greater growth potential when knowledge can be exchanged easily and fast. Slow internet speeds are constraining the Telemedicine subsector of the Health and Wellness cluster and the potential growth of certain industries.
- Broadband infrastructure in the Tahoe Basin was significantly inferior to that of the California state average, and no service in the area meets the Central Coast Broadband Consortium/Monterey Bay Economic Partnership minimum.<sup>29</sup>
- The region will find it hard to attract remote workers with the current internet infrastructure, so a commitment to improvement should be signaled to potential remote workers.
- Sound broadband infrastructure is key to taking advantage of innovations in communication technology and emerging technologies.
- It is estimated that a home with multiple residents working remotely should have a download speed of 25 Mbps<sup>30</sup> or higher.

## REVENUE SOURCES

More stable revenue sources are needed to fund economic development. The current revenue streams that fund the Tahoe Prosperity Center are the sales tax and the transient occupancy tax, which aren't robust. The sales tax base is not broad; the number of year-round residents isn't enough to support optimal tax on spending. Further, the transient occupancy tax base is seasonally erratic. Remedies could include voter-approved, short-term increases in the sales tax or transient occupancy tax rates, and a restructuring of how much tax revenue is given to the Tahoe Prosperity Center from jurisdictions. But raising taxes during a recession is not constructive economic policy and should be delayed until the broader economy resumes a healthy trajectory.

Ideally, other discretionary, general fund sources should be used for development. First, property tax revenue, generally a jurisdiction's largest discretionary revenue source, should be directed toward development where possible. Property tax revenue is among the least sensitive to economic shocks, and negative effects usually run on a two-year lag, depending on the state. Therefore, the property tax is generally a reliable source of funding even into the first couple of years of a new economic cycle. Second, other auxiliary taxes should be considered, including the utility user's tax, business license tax, and documentary transfer or real property transfer taxes. Although these are generally less stable than the sales tax, they would provide needed supplemental funding. These streams would generate tax liability for groups invested in the economy, so strong outreach would be needed to articulate the costs and rewards of paying taxes for economic development. Additionally, local governments could contribute revenue from sources such as the admissions tax. MTV's annual Snow Globe Festival in South Lake Tahoe, and the Lake Tahoe Outdoor Arena in Stateline, would be perfect opportunities for this when large entertainment venues reopen.

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<sup>28</sup> Tellus Venture Associates. Retrieved July 7, 2020, from <https://www.tellusventure.com/blog/taohes-broadband-speeds-lag-far-behind-californias-average/>

<sup>29</sup> South Lake Tahoe Broadband: Status & Policy. Retrieved July 14, 2020, from [https://www.tellusventure.com/downloads/tahoe/tva\\_south\\_lake\\_tahoe\\_wireless\\_study\\_session\\_2apr2019\\_rev1\\_reduced.pdf](https://www.tellusventure.com/downloads/tahoe/tva_south_lake_tahoe_wireless_study_session_2apr2019_rev1_reduced.pdf)

<sup>30</sup> Speed Test. Retrieved July 14, 2020, from <https://www.speedtest.net/insights/blog/work-from-home-learn-remotely-setup/>

# REVENUE FORECASTS AND ECONOMIC OUTLOOK

The tables below present Transient Occupancy Tax and Sales Tax revenue forecasts for the Lake Tahoe Basin's five jurisdictions. Table 7 projects sales tax receipts in one baseline and two recovery scenarios. The rapid recovery scenario assumes a resumption of consumer demand to pre-crisis levels during the second half of calendar year 2020, with local sales tax revenues close to pre-crisis levels by calendar years 2021 and 2022. The protracted recovery scenario assumes a significant impact on consumer demand, tracking below baseline levels throughout the forecast. Table 8 projects hotel and room tax receipts based on pre-pandemic (baseline) and recovery (protracted) assumptions. Beacon Economics expects a longer time horizon for consumer occupancy to fully return to the lodging industry, which is why rapid recovery analyses for hotel and room taxes were not performed.

The recovery of the lodging industry, and lodging-generated tax revenue by extension, is expected to be more drawn-out compared to consumer spending and sales tax revenue. Indicators of consumer demand, such as national retail sales, are exhibiting the quintessential V-shape recovery. Indeed, high-frequency credit and debit card spending data corroborate this phenomenon - down only 4% relative to the start of 2020 as of August 9th.<sup>31</sup> This bodes well for the recovery of sales tax bases especially amid the rise of e-commerce, which made history by jumping to 16% of total retail sales in the second quarter of this year.

In contrast, nearly half of all Leisure and Hospitality employment was either permanently or temporarily lost in April, and national hotel occupancy fell to its lowest point of the crisis. Recent credit and debit card spending trends reveal that spending at restaurants and hotels has declined nearly 30% relative to pre-crisis levels, though much improved from -66.5% on March 30th. Total traveler throughput at TSA checkpoints fell by 70% from the year before (as of August 25th), and domestic air and hotel bookings were down 66% year-over-year for the week ended August 20th.<sup>32 33</sup> While hotel gross operating profit per available room turned positive in July<sup>34</sup> - the first time since February - industry analysts predict the return of demand to pre-crisis levels is still likely to be sometime in 2022<sup>35</sup>.

Although the pandemic continues to affect the national economy overall, the recovery of the lodging industry is more sensitive to the trajectory and severity of the virus. A recent traveler sentiment tracking survey reported that 52% of respondents were hesitant to travel due to unclear travel restrictions at potential destinations, while 40% generally felt unsafe traveling outside of their communities. The loss of demand will remain depressed as long as the virus is still prevalent and will be compounded by confusion surrounding the varying restrictions or fear of overall well-being.<sup>36</sup> The timeline for a mass-produced vaccine is still unknown, and another surge of cases is possible. Unfortunately, the lodging industry (and the tax revenues it generates) will likely stay at lower levels for the next six to eighteen months given this uncertainty.

In a broader sense, there are a number of reasons for the Tahoe Basin to be optimistic. For one, the trough of the COVID-19 recession has come and has passed (as of April 2020); the rapid contraction in the region's economy was driven more by ubiquitous postponements of elective health care procedures than by the decline in leisure and goods spending. As the nation continues to recoup jobs losses, consumer spending may recover by the end of 2020 - given conscientious containment of the virus and responsible social behavior - at the absolute earliest. A protracted recovery is still possible for consumer spending (and taxable spending by extension) although this case depicts a worst-case scenario. The recent case surge of June and July did not mirror the initial surge that preceded the mitigation phase in terms of business closures and economic loss. Jobs and consumer spending continued to recover throughout June and July, suggesting that future surges could also have less of an impact on labor and consumption than initially conjectured, which bodes well for the economy as a whole.

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<sup>31</sup> The trough for national debit and credit card spending was -33% on March 30th. See: The Opportunity Insights Economic Tracker. (2020). Retrieved August 26, 2020 from <https://tracktherecovery.org/>

<sup>32</sup> U.S. Department of Homeland Security. TSA checkpoint travel numbers for 2020 and 2019. (2020). Retrieved from <https://www.tsa.gov/coronavirus/passenger-throughput>

<sup>33</sup> COVID-19 Travel Industry Research. (2020). Retrieved August 26, 2020 from <https://www.ustravel.org/toolkit/covid-19-travel-industry-research>

<sup>34</sup> STR. (2020, August 24). Retrieved August 26, 2020 from <https://str.com/press-release/us-hotel-pl-turned-positive-july>

<sup>35</sup> CBRE. (2020, May 21). Retrieved August 1, 2020 from [https://www.cbrehotels.com/en/about-us/press-center/cbre-hotels-research-forecasts-full-demand-recovery-by-late-2022?utm\\_medium=email&utm\\_source=ExactTarget&utm\\_campaign=Hotels+2020+Newsletter++June+2020+Edition&utm\\_content=https%3F%2Fwww.cbrehotels.com%2Fen%2Fabout-us%2Fpress-center%2Fcbre-hotels-research-forecasts-full-demand-recovery-by-late-2022](https://www.cbrehotels.com/en/about-us/press-center/cbre-hotels-research-forecasts-full-demand-recovery-by-late-2022?utm_medium=email&utm_source=ExactTarget&utm_campaign=Hotels+2020+Newsletter++June+2020+Edition&utm_content=https%3F%2Fwww.cbrehotels.com%2Fen%2Fabout-us%2Fpress-center%2Fcbre-hotels-research-forecasts-full-demand-recovery-by-late-2022)

<sup>36</sup> Longwoods International. (2020, August 18). Retrieved August 26, 2020 from <https://longwoods-intl.com/news-press-release/covid-19-travel-sentiment-study-wave-18>



Although employment is increasing in some parts of the region (El Dorado, Douglas, Placer, and Washoe Counties in particular), the next six to eighteen months will be a challenge for more tourism-dependent economies. At this point in time, Beacon Economics does not have a working hypothesis for what normalcy will look like for the regional economy. Still, the issues and recommendations enumerated in this report are relevant during this time of uncertainty, if not more so. Efforts aimed at economic development and increasing income streams through diversification are urgent and will be crucial over the next six to eighteen months as the Tahoe Basins plans for an optimal recovery and the establishment of a more resilient economy.

**Table 7: Sales Tax Forecasts for Jurisdictions of the Tahoe Basin (2018-2023)**

Calendar Year	2018	2019	2020	2021	2022	2023
<b>Baseline, Pre-COVID</b>						
Douglas County (\$, Mil)	18.6	19.1	19.3	19.6	20.0	20.3
Growth	2.6%	2.2%	1.4%	1.7%	1.7%	1.9%
El Dorado County (\$, Mil)	25.1	26.5	28.0	29.0	30.0	31.1
Growth	7.3%	5.7%	5.6%	3.7%	3.5%	3.4%
Placer County (\$, Mil)	101.2	105.0	111.0	117.4	124.1	131.1
Growth	6.2%	3.8%	5.7%	5.8%	5.7%	5.6%
South Lake Tahoe (\$, Mil)	5.5	5.5	5.7	5.9	6.0	6.2
Growth	4.3%	-0.6%	4.7%	2.5%	2.4%	2.4%
Washoe County (\$, Mil)	180.3	188.2	197.5	206.6	215.8	225.1
Growth	6.2%	4.4%	5.0%	4.6%	4.4%	4.3%
<b>Rapid Recovery Scenario</b>						
Douglas County (\$, Mil)	18.6	19.1	18.4	19.7	20.0	20.4
Growth	2.6%	2.2%	-3.3%	6.8%	1.7%	1.9%
El Dorado County (\$, Mil)	25.1	26.5	25.4	28.5	29.9	31.0
Growth	7.3%	5.7%	-4.2%	12.3%	4.9%	3.7%
Placer County (\$, Mil)	101.2	105.0	99.6	114.8	123.5	130.9
Growth	6.2%	3.8%	-5.1%	15.2%	7.6%	6.0%
South Lake Tahoe (\$, Mil)	5.5	5.5	5.1	5.8	6.0	6.2
Growth	4.3%	-0.6%	-6.1%	13.3%	3.2%	2.4%
Washoe County (\$, Mil)	180.3	188.2	185.4	202.9	214.6	224.8
Growth	6.2%	4.4%	-1.5%	9.4%	5.8%	4.7%
<b>Protracted Recovery</b>						
Douglas County (\$, Mil)	18.6	19.1	17.4	19.0	19.9	20.4
Growth	2.6%	2.2%	-8.5%	9.1%	4.5%	2.5%
El Dorado County (\$, Mil)	25.1	26.5	22.8	25.1	27.7	29.4
Growth	7.3%	5.7%	-14.2%	10.4%	10.4%	5.8%
Placer County (\$, Mil)	101.2	105.0	88.1	99.0	112.6	122.4
Growth	6.2%	3.8%	-16.2%	12.4%	13.8%	8.7%
South Lake Tahoe (\$, Mil)	5.5	5.5	4.5	5.1	5.6	5.8
Growth	4.3%	-0.6%	-17.0%	12.4%	9.6%	4.2%
Washoe County (\$, Mil)	180.3	188.2	171.3	186.7	204.1	217.7
Growth	6.2%	4.4%	-9.0%	9.0%	9.3%	6.7%

Source: City of South Lake Tahoe, HdL Companies, Nevada Department of Taxation; Forecast By Beacon Economics

Note: Douglas and Washoe County receipts reflect payments from both the Basic City-County Relief Tax and the Supplemental City-County Relief Tax

**Table 8: Transient Occupancy Tax Forecasts for Jurisdictions of the Tahoe Basin (2018-2023)**

Calendar Year	2018	2019	2020	2021	2022	2023
<b>Baseline, Pre-COVID</b>						
Douglas County (\$, Mil)	13.6	15.5	16.8	17.9	18.7	19.5
Growth	14.8%	13.5%	8.7%	6.3%	5.0%	4.3%
El Dorado County (\$, Mil)	4.8	5.8	6.8	8.0	9.2	10.6
Growth	22.8%	19.8%	18.2%	16.8%	15.6%	14.5%
Placer County (\$, Mil)	20.0	22.0	23.0	23.8	24.5	25.3
Growth	3.7%	9.9%	4.4%	3.4%	3.2%	3.2%
South Lake Tahoe (\$, Mil)	17.8	18.0	18.4	18.8	19.4	19.9
Growth	7.9%	0.9%	2.2%	2.6%	2.8%	2.8%
Washoe County (\$, Mil)	26.3	27.4	28.3	29.2	30.1	30.9
Growth	6.6%	4.1%	3.5%	3.2%	2.9%	2.7%
<b>Protracted Recovery Scenario</b>						
Douglas County (\$, Mil)	13.6	15.5	8.0	10.2	14.6	18.1
Growth	14.8%	13.5%	-48.3%	27.6%	43.7%	23.8%
El Dorado County (\$, Mil)	4.8	5.8	4.6	5.4	7.0	8.7
Growth	22.8%	19.8%	-21.2%	18.3%	29.9%	24.1%
Placer County (\$, Mil)	20.0	22.0	6.7	12.0	19.3	22.3
Growth	3.7%	9.9%	-69.3%	77.1%	61.3%	15.5%
South Lake Tahoe (\$, Mil)	17.8	18.0	8.0	11.4	16.6	19.3
Growth	7.9%	0.9%	-55.4%	42.8%	44.7%	16.6%
Washoe County (\$, Mil)	26.3	27.4	19.8	20.5	23.7	26.7
Growth	6.6%	4.1%	-27.5%	3.7%	15.6%	12.4%

Forecast By Beacon Economics

Note: Data for 2018 and 2019 are estimates based off of budget and financial documents; Washoe County receipts reflect payments from the 6% Washoe Room Tax and the 5/8% State Room Tax.

## CONCLUSION

The Tahoe Basin faces a long road to recovery. If the region’s experience following the Great Recession hinted at the need to diversify its economy, the current public health and economic crisis has only amplified it. Yet there is cause for optimism. Cluster development in non-tourism sectors has already taken root, and organizations such as the Tahoe Prosperity Center are actively brokering new relationships and fostering growth opportunities. A full transformation of the economy will not happen overnight. But by understanding historical trends, adapting to current conditions, and recognizing the need to change, Tahoe residents can expect a bright future.

# TAHOE PROSPERITY CENTER

Economic Forecasting and Resiliency Analysis

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