



# Eastern Sierra Innovation and Prosperity

An Industry Cluster Approach to  
Economic Sustainability in California's  
Inyo and Mono Counties

September 2012



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## ACKNOWLEDGEMENTS

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*This project was funded through the generous donations of Sierra Business Council members, private funders, and the Donald Slager Foundation of Bishop, California.*

*Joe Marlow of the Sonoran Institute mined considerable economic data and completed the economic analysis.*

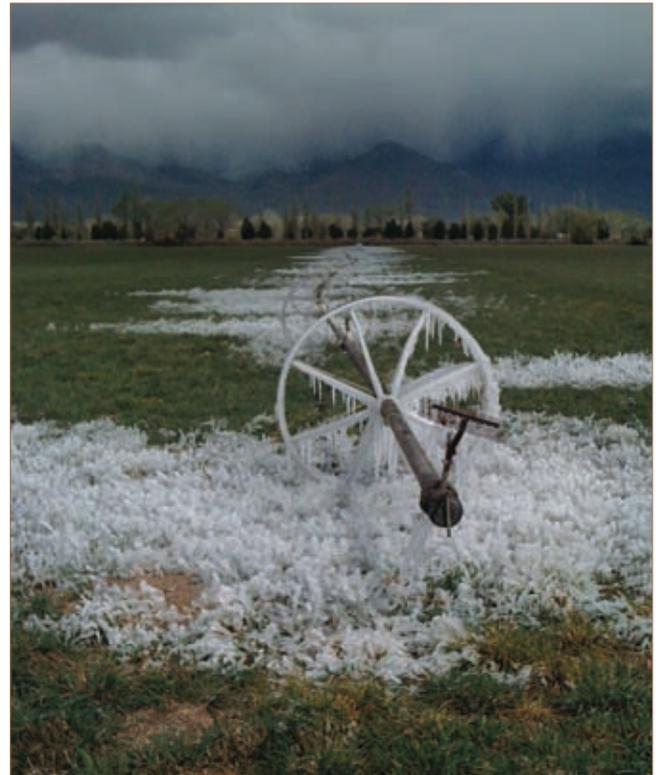
*Los Angeles Department of Water and Power along with Inyo County Superintendent of Schools generously donated conference facilities.*

*Great Basin Bakery fueled the meetings with coffee and excellent baked goods.*

*Simply Delish Catering kicked off the initial meeting with a hearty lunch.*

*And Vickie Taton generously granted use of her photographs to enhance the pages of this report.*

*Without the involvement and interest of many local leaders, this project would not have been possible.*



*photo by Vickie Taton*

### Steering Committee Participants Eastern Sierra November 2010 – May 2011

Dick Arruda  
*TerraGen Power Co.*

Cheri Bromberger  
*June Lake Motel*

Keith Caldwell  
*City of Bishop*

Kevin Carrunchio  
*Inyo County*

Stacy Corless  
*Friends of the Inyo*

Nicole DeJonghe  
*Sierra Business Council*

Chris Ellis  
*Coso Operating Company*

Susan Estrada  
*Consultant: Eastern Sierra Connect*

Steve Frisch  
*Sierra Business Council*

Gary Giacomini  
*Rancher*

Elizabeth Glazner  
*Inyo Contractors & Vendors Association*

Jeff Griffiths  
*City of Bishop*

Tim Hansen  
*Mono County District 4*

Lisa Isaacs  
*ESCIA*

Daniel Johnson  
*TerraGen Power Co.*

Jon Klusmire  
*Inyo Co. Museums*

Bernadette Lovato  
*Bureau of Land Management*

Dan Lyster  
*Mono County Economic Development*

Joe Marlow  
*Sonoran Institute*

Terry McAteer  
*Inyo County Superintendent of Schools*

Sally Miller  
*Mono County Planning Commission*

George Milovich  
*Inyo-Mono Agriculture Commission*

Dave Moose  
*Bishop Paiute Tribe*

Gaye Mueller  
*Mono County Arts Council*

Bob Peters  
*Bridgeport Inn*

Allan Pietrasanta  
*J. Rousek Toy Company*

Chris Plakos  
*LADWP*

Rodger Prominski  
*TerraGen Power Co.*

Jon Ruggelbrugge  
*Inyo National Forest*

Brandon Shults  
*Inyo County*

Jim Southworth  
*City of Bishop*

Dan Stewart  
*Inyo County Planning*

David Stottlemire  
*City of Bishop*

Danna Stroud  
*Consultant*

Vickie Taton  
*Sierra Business Council*

Tony Taylor  
*Eastern Sierra Land Trust*

John Urdi  
*Mammoth Lakes Tourism*

Alicia Vennos  
*Mono County Tourism*

John Wentworth  
*MLTPA*



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*photo by Vickie Taton*

# *Executive Summary*

## EXECUTIVE SUMMARY

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*photo by Vickie Taton*

The Eastern Sierra Innovation and Prosperity report examines historic and current economic conditions in two rural counties situated on the eastern slope of the Sierra Nevada in California: Inyo County and Mono County, and provides recommendations and strategies for the near term designed to improve economic conditions in these two unique rural counties.

The recommendations and strategies included in this report are the result of hundreds of hours of collaborative research and collective effort among steering committee members in conducting interviews, attending workshops, managing surveys, meeting with government officials, participating in site visits, and assessing and deliberating, point-by-point,

the relevance and potential benefits to Inyo County and Mono County of each strategy and recommendation proposed.

Inyo and Mono Counties are rural regions of California's Sierra Nevada. Although economic growth within the two counties has differed over recent decades, both counties continue to lag behind historic growth in the State of California and often counteract state growth and industry trends. In addition, neither county has demonstrated extensive economic diversification beyond the government and hospitality/leisure sectors (U.S. Dept. of Commerce, 2010), while the influence of public lands on the regional economy is extensive and at times controversial.

This report attempts to quantify and qualify historic factors of economic development in Inyo and Mono Counties and to examine current economic conditions to suggest areas of potential, sustainable growth throughout the region. In addition, this report attempts to describe the statewide economic development climate, current thinking in California about strategies for economic growth, and opportunities for Inyo and Mono Counties to leverage that thinking to improve conditions.

While opinions may vary on how to stimulate economic activity within any particular region and sector — as this report’s committee discovered — consensus was easily reached among all those who contributed to completion of this report: Substantial opportunity for economic diversification and growth exists in both Inyo County and Mono County and efforts should focus on areas where the vast majority of stakeholders agree on strategies.

This report begins with a discussion of economic cluster theory including its prevalence in developing successful localized economic strategies, followed by a discussion of this theory’s application in rural regions where population densities are low and geographic distances are vast. The report then identifies in Inyo and Mono Counties five strategic economic clusters with potential to endure and grow, with strategies and recommendations for nurturing endurance and growth within these clusters. Criteria for selection of these five clusters is also detailed. These five clusters identified as economic drivers with potential to endure and strengthen in Inyo

and Mono Counties are: Internet Technology and Broadband Access; Renewable Energy and Energy Efficiency; Tourism, Hospitality and the Arts; Recreation; and Agriculture. These clusters are interrelated in that growth in any one encourages growth in the others, with particular emphasis on Internet technology and broadband access opportunities in growing all five clusters.

The Digital 395 Middle Mile Project will create a potential increase in broadband access to 26,000 households and 2,500 businesses throughout the Eastern Sierra and will enable Inyo and Mono County residents, business owners and visitors to participate in new business, healthcare and recreational activities that without broadband have not been possible. The growth of e-commerce may well be the single most important opportunity to expand sales, profits and employment in rural small business in decades.

Inyo County and Mono County are also well positioned to prosper from investment in meeting California’s strict renewable energy and energy efficiency standards. Solar, geothermal and wind technologies are potential sources of economic growth for Inyo County and Mono County and have elsewhere contributed to local economic diversification and stability.

The recreation cluster is an area where residents and business owners on the ground have already done a great deal of work. National trends in recent decades have shown visitation to public lands increasing.

## EXECUTIVE SUMMARY

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This trend, coupled with the extensive use of private recreational assets and improvements on public lands, such as ski areas, indicates that tremendous additional economic value can be derived in Inyo and Mono Counties from these lands. New opportunities could exist based on increasing competitiveness with other recreation counties or due to the unique diversity of the eastern Sierra landscape.

Additionally, Inyo County and Mono County businesses currently serve several niche markets including agriculture, tourism, hospitality, and the arts. By applying cluster-based economic development theory, with case studies provided, this report suggests Inyo County and Mono County could successfully encourage growth in these niche markets, or cluster industries, to support economic growth throughout the region and to strengthen the region's current business climate. Included at the end of each strategy proposed for the economic clusters discussed are metrics for monitoring progress and measuring results of implementing this report's suggested strategies and recommendations.

This report attempts to describe California's statewide economic development climate, current thinking about strategies for economic growth, and opportunities for Inyo and Mono Counties to leverage that thinking to improve conditions. This report recognizes there is increasing opportunity to leverage new investments to create a place-based and regionally specific economic development strategy. Such a strategy could be critical to enabling Inyo and Mono County residents,

businesses, and local governments to enjoy and prosper from promising growth sectors.

A comprehensive Economic Profile Summary of Inyo County and Mono County follows this discussion of economic clusters in Inyo and Mono Counties but, while this information follows, the data prepared in this portion of the document informed much of the discussion and deliberation that resulted in the proposed strategies and recommendations. An extensive list of federal and state funding sources to leverage private investment in the Inyo County and Mono County economies follows the content of the document. The document concludes with references to supporting documentation and recommended reading, as well as a list of tables and images.

The Eastern Sierra Innovation and Prosperity report is the result of countless hours contributed by a diverse group of people interested in securing prosperity for Inyo County and Mono County. It is the hope of all those who contributed to completion of this report that it may serve to provide stakeholders, decision makers and planners the information necessary to adequately address the economic needs, today and tomorrow, of both Inyo and Mono Counties.

# *Introduction*



*photo by Vickie Taton*

### A VISION FOR EASTERN SIERRA INNOVATION AND PROSPERITY

This report is the result of extensive collaborative research and collective effort among members of a blue ribbon steering committee committed to securing the economic future of Inyo County and Mono County, two rural counties located in the Eastern Sierra of California.

Our impressions of the rural Sierra Nevada are usually dominated by visions of mountain landscapes, grazed pastures, mines, working forests, formidable rivers and canyons, and quaint small towns. However, for much of the

last century, rural regions have struggled with high unemployment, high poverty rates, a low level of financial resources to provide critical services and in many cases shrinking or stagnant populations. Concurrently, demand for natural resources — often a driver of rural economies — has diminished due to a changing global economy, technological innovation and increased awareness of other social and environmental values (Shumway, et al., 2001).

Despite these challenges, many rural communities are experiencing high rates of population growth, increasing incomes and increasing employment. Most of the rural communities that have done well nationally

have been endowed with tremendous natural and cultural amenities, including parks and public lands, access to recreation, scenic vistas, historic and cultural assets, a strong sense of community, and all of the other intangibles that contribute to creating attractive places (McGranahan, 1999).

These communities have discovered how to maintain as many of their working ranches, farms, forests and lands as possible in the face of shrinking demand, and simultaneously have embarked on a new strategy to build a local economy based on quality of life, emergent small businesses and stewardship of natural resources (Johnson, et al., 1995; McGranahan, 1999).

Inyo and Mono Counties have fared better than many rural regions, but only marginally. In recent decades, due partly to the shift in the national economy away from a manufacturing base, the economies of both counties have shifted from a natural resource extraction economy toward a more general- and professional-services-oriented economy. Coinciding with the decline of the grazing, mining and other natural resource based industries, Inyo and Mono Counties have experienced a marked increase in personal income derived from non-labor sources, such as retirement investment and social security payments (U.S. Census Bureau).

Simultaneously, an increasing number of visitors and residents in Inyo and Mono Counties report they are seeking to maintain or improve quality of life standards, as

evidenced by the results of the Inyo 2020 community visioning process. Although economic growth within the two counties has differed over recent decades, with growth demonstrated to varying degrees in both counties in the areas of government, recreation, and hospitality/leisure, neither county has demonstrated extensive increased economic diversification beyond these sectors.

Lack of economic diversification has been an underlying economic issue in Inyo and Mono Counties for many decades. One bad winter, one closed road, or one failed industry can have a disproportionate impact on a rural community. Both counties continue to lag behind historic growth in the State of California and often behave counter to state growth and industry trends. The decline of natural resource industries has also left these two counties vulnerable to economic shock from a decline in any single sector.

To address issues of economic diversification and to help identify clusters of opportunity for expanded economic activity, Sierra Business Council assembled a blue ribbon committee of more than 40 eastern Sierra Nevada residents. These residents met for more than 12 months and were informed by background research conducted by the Tucson, Arizona based Sonoran Institute on the state of the regional economy, existing economic development planning and rural economic development trends and strategies adopted in other inter-mountain west communities.

## INTRODUCTION

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*photo by Vickie Taton*

The committee elected to pursue an “industry cluster” approach to analyze economic development opportunities. Industry cluster economic theory has been around for many years and clusters are called by various names: business clusters, prosperity clusters, clusters of opportunity. Strictly speaking, an industry cluster is a geographic concentration of interconnected companies, specialized suppliers, service providers, and associated institutions in a particular field that are present in a region.

Characteristically, industry clusters share connections on the supply side, the service side, or both, and enhancements or improvements made on the supply side and/

or the service side boost the productivity and economic health of all the firms in the cluster (Porter, 1998).

The committee was further informed by more than 40 interviews conducted with eastern Sierra businesses and industry sector leaders. Interviews were also conducted with economic development professionals at the United States Department of Agriculture-Rural Development Agency; the United States Department of Commerce-Economic Development Agency; the Governors Office of Economic Development; the California Workforce Investment Board; the California Association for Local Economic Development; the California Economic Development Authority; the California Business, Transportation and Housing Agency; and the Inland Empire Economic Partnership.

*Strictly speaking, an industry cluster is a geographic concentration of interconnected companies, specialized suppliers, service providers, and associated institutions in a particular field that are present in a region.*

This report attempts to quantify and qualify the historical factors of economic development in Inyo and Mono Counties and examine

current economic conditions to suggest areas of potential, sustainable growth throughout the region. In addition, this report attempts to describe the statewide economic development climate, current thinking about strategies for economic growth, and opportunities for Inyo and Mono Counties to leverage that thinking to improve economic sustainability.

*...the greatest opportunity for economic diversification exists within five specific industry clusters.*

During the drafting of this report three new statewide economic development strategies were being developed and published: the Think Long Committee for California assembled by the Nicolas Berggruen Institute published *A Blueprint to Renew California* in 2011; Lieutenant Governor Gavin Newsom published *An Economic Growth and Competitiveness Agenda for California* with assistance from the Brookings Institution and McKinsey and Associates; and the California Stewardship Network published *Thriving Regions Lead to a Thriving State* with assistance from Collaborative Economics, a Palo Alto, California-based think tank. Ideas and approaches that may align with these efforts as they are deployed across the state have been incorporated.

The eastern Sierra blue ribbon committee found that substantial opportunity for

economic diversification and growth exist in both Inyo and Mono Counties. The committee further found that the greatest opportunity for economic diversification exists within five specific industry clusters, and that these clusters are interrelated in that growth in any one encourages growth in the others. These five clusters are:

### INFORMATION TECHNOLOGY AND E-COMMERCE

Due to increased access to broadband technologies;

### RENEWABLE ENERGY

To meet the state and national renewable energy goals and mandates;

### TOURISM, HOSPITALITY AND THE ARTS

Due to the size and scope of the existing cluster

### RECREATION

With an emphasis on niche and specialized opportunities, and

### VALUE-ADDED AGRICULTURE

With an emphasis on maintaining access to working lands and expanding products from those lands.

## INTRODUCTION

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This report should not be construed to imply that substantial opportunity for growth in other sectors, such as professional services, health care, manufacturing, transportation services and mining do not exist. All of these, and other sectors, were explored.

The committee further found that the gradual recovery of the national, state and local economies creates an increasing opportunity to leverage new economic investments. New investments will enable Inyo County and Mono County to overcome the challenge of economic decline due to lack of diversification by creating a *place-based* and *regionally specific* economic development strategy. Such a strategy could be critical to enabling Inyo and Mono County residents, businesses and local governments to enjoy and prosper from promising growth sectors.

### INFORMATION TECHNOLOGY AND E-COMMERCE

This opportunity study begins with the Digital 395 Middle Mile Project, a project of tremendous import to both Inyo and Mono Counties, where broadband Internet access has been sparsely available. In fact, survey results compiled by Desert Mountain Resource Conservation and Development Council demonstrate that only 4 percent of respondents in the Inyo-Mono region report broadband service at speeds meeting FCC broadband standards.

High-speed Internet access has become

ubiquitous in today's business climate, yet Inyo and Mono Counties have been left behind. The potential increase in broadband access to 26,000 households and 2,500 businesses throughout the eastern Sierra will enable Inyo and Mono County residents, business owners and visitors to participate in new business, healthcare and recreational activities that have not been possible without broadband access.

The technological revolution, its tools, opportunities and pitfalls — defined by dramatically increased access to and use of the Internet — has also transformed the way many companies do business. This is particularly important on the east side of the Sierra Nevada where business income and particularly sole proprietorship income has been dropping for decades. Twenty years ago owning a small business on the east side usually meant one was squarely in the middle-class, earning above median income, and creating a source of local investment capital for business expansion. Now, after the retail market has consolidated in the last two decades with the growth of big box retailers, sole proprietorship means less than a middle class income. Digital 395 means eastside businesses will have an opportunity to enter the world of online retailing/e-commerce and potentially reverse the multi-decade trend of shrinking incomes.

Businesses employing use of broadband technologies are finding they are no longer constrained by geographic location. Through e-commerce they are afforded access to a full range of market opportunities – from



*photo courtesy Design Workshop*

enhanced local or visitor access to international markets – a condition never before achieved on the east side of the Sierra Nevada.

For many rural entrepreneurs, small business owners, and communities, the growth of e-commerce represents a double-edged sword. While rural businesses can access new markets and serve new customers through the effective use of e-commerce, the growth of e-commerce will thrust them into a whole new marketplace where they will experience increased competition from firms and well-established giants like Amazon.com, Overstock.com and E-Bay that come from well

outside of their current market reach.

However, the growth of e-commerce may well be the single most important opportunity to expand sales, profits and employment in rural small business in decades. In this new competitive e-environment, rural entrepreneurs will need to adopt innovative and informed e-marketing strategies to remain distinct and profitable.

### RENEWABLE ENERGY

Inyo County and Mono County are also well

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positioned to prosper from investment in meeting voluntary federal goals for increasing access to renewable energy, as well as California's Renewable Energy Portfolio Standard, which mandates that 33 percent of California's electricity must come from renewable sources by 2030. One critical strategy for meeting state mandates is investing in energy efficiency and distributed energy networks. Along the eastern slope of the Sierra and into Nevada, investment in renewable energy is escalating and paying off. But renewable energy development faces special challenges and creates specific community impacts; specialized and localized strategies are necessary to ensure successful projects. Three specific areas of renewable energy development are addressed here: solar, geothermal and wind technologies; as well as increased investment in energy efficiency.

### TOURISM, HOSPITALITY & THE ARTS

Recreation, tourism, hospitality and the arts are strongly related industry clusters, and together represent the largest sectors of the local economies, but for the purposes of this report they are addressed separately.

Most spending in the tourism, hospitality and arts industry cluster comes in six primary areas; restaurant food, accommodations, transportation/fuel, retail sales, lift ticket sales, and food stores. Due to the seasonality of revenue in this area the committee elected to focus on two primary strategies: expanding the seasons of visitation and expanding the diversity of activities that drive the cluster.

Although there is more direct employment from tourism and hospitality in Mono County, the importance of the local tax generation in Inyo County, specifically related to fuel and lodging taxes, and the point that Inyo County has seen slower growth in this cluster, represent a real opportunity. It is also important to note that these industry clusters largely drive the retail trade sector in both counties, thus improvements in these clusters will have a tendency to have a local multiplier effect.

The role of the arts in rural economic development has been of growing significance. Arts-based economic development can both attract outside dollars to a community by creating products for export, and increase the consumption base by creating products used locally, all while increasing the amenity value of the community by creating a community-based experience. A vibrant arts community has been shown to increase residents' connection to community, improve innovation and entrepreneurial skills, and alter local consumption patterns toward local products outside the arts sector (James Irvine, 2006).

### RECREATION

In a study conducted by the USDA Economic Research Service in 2005, both Mono and Inyo Counties met the federal definition of a "Recreation County," characterized by the share of wealth and salary concentration derived from recreational assets. Only 311 of the 3,130 counties in the United States met the standardized definition. Common characteristics of a "Recreation County," which are



*photo by Vickie Taton*

primarily concentrated in the upper Midwest and inter-mountain west, are high levels of second home ownership, access to winter recreation and access to public lands.

Public lands in Inyo and Mono Counties are now the primary economic development drivers of the two economies, with public lands responsible for an estimated economic value of between \$662.2 million and \$784.2 million per year, between \$124.9 million and \$170.9 million of that associated with the direct use (recreation) of public lands, and

\$98.1 million identified as annual income earned in the counties (Richardson 2002).

Total visitors to public lands in Inyo and Mono Counties are approximately 2,886,747 people per year.

National trends since 1960 when widespread measurement began have shown visitation to public lands increasing. This trend, coupled with the extensive use of private recreational assets and improvements on public lands, such as ski areas, indicates that tremendous

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additional economic value can be derived in Inyo and Mono Counties from these lands.

The Inyo County and Mono County recreation cluster is an area where residents and business owners on the ground have already done a great deal of work. Consequently the steering committee focused on areas where new opportunities could exist based on increasing competitiveness with other recreation counties and capitalizing on the unique diversity of the eastern Sierra landscape.

### VALUE ADDED AGRICULTURE

Agricultural products' share of the national Gross Domestic Product has fallen from 21 percent of the nation's economy in 1910 to less than 5 percent of the economy in 1990. Most agricultural products, both nationally and in the eastern Sierra, are commodity products, or products which have little qualitative difference across markets (U.S. Dept. of Agriculture).

Value added agriculture means adding to and capturing the value in commodities grown and processed locally in a longer value-chain: retaining processing and use in the local community, which can have a significant positive impact on farm households and rural businesses, may create new and higher-wage employment, and may also expand markets for agricultural commodities, leading to more vibrant and resilient rural and regional economies (Rilla, et al., 2011).

The 2002 and 2008 U.S. Farm Bills rapidly expanded federal investment in value added agriculture, and the 2012 Farm Bill, currently in draft form, is anticipated to expand investment even more. Value added agriculture is among the most rapidly expanding rural economic development strategies in the country. Renewed interest in improved human health, development of locally grown products, expansion of access to farmers markets, and experiencing local products while visiting a region are factors driving this movement, making value added products more desirable.

By applying cluster-based economic development theory, with case studies provided, this report suggests Inyo County and Mono County could successfully encourage growth in these niche markets, or cluster industries, to support economic growth throughout the region and to strengthen the region's current business climate.

Inyo and Mono County residents, business owners and visitors will need assistance, however, to fully realize the benefits of the economic opportunities of the region. The following report is the result of extensive collaboration, research and field study regarding recent trends and the current status of the economies of Inyo County and Mono County, with discussions regarding the importance of tourism and public lands in generating revenue in the region.

In addition, this report intends to provide stakeholders, decision makers and planners the information necessary to adequately

address the economic needs, today and in the near future, in both Inyo County and Mono County. Of particular import is connecting Inyo and Mono Counties to the emergent state-level economic development planning.

While the first portion of this report is a discussion of the concept of industry clusters and rural economies, and proposed project areas in which decision makers and planners may choose to focus their efforts in planning for the future of these two unique California counties, what follows is the data that drove the countless hours of discussion and deliberation to produce Part One. The report concludes with a comprehensive list of funding sources available to agencies seeking to advance economic development strategies, references, suggested reading and a list of tables and figures.

### INYO COUNTY AND MONO COUNTY: AN INTRODUCTION

#### GEOLOGIC HISTORY

Geologically, the Inyo-Mono County region is one of extremes. The sedimentary rock of Death Valley was formed more than 1,700 million years ago, while the eastern Sierra's granite is some of the oldest in California, formed more than 200 million years ago (USGS, 2012). Over the course of time, this granite has been crushed, twisted, melted, ground to sand and recompressed into rock through tremendous forces of nature, while the face of Death Valley has been twice wiped clean, leaving no trace of what occurred



*photo by Vickie Taton*

geologically over millions of years (USGS, 2012).

More than 140 million years ago, the collision of an oceanic plate with North America's continental plate resulted in the melting of the continental plate's mantle, while the upper crust was left intact. This melting resulted in magma migration beneath the continental crust, giving rise to volcanoes with large deposits of granite beneath. Eventually, these massive granite remains would be thrust up to form some of California's greatest landmarks: the Sierra Nevada batholiths, to include Yosemite's Half Dome and Inyo County's Mount Whitney.

Before the rise of Mount Whitney — the highest point in the contiguous United States — the formation of the Basin and Range

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Province produced a thickening and thinning of the earth's crust (Salyards and Shoemaker, 1987), something which has led to conflicting theories as to why the future Sierra Nevada would suddenly rise from a mere few thousand feet to its heights exceeding 14,000 feet today (e.g., Unruh, 1991; Wakabayashi and Sawyer, 2001). What is known is that the tremendous rise of the Sierra's peaks is likely not the result of plate movement alone, but also the result of fluid (including magma and water) releasing heat which rises vertically from beneath the earth's mantle, evident in the geothermal activity of Inyo County and Mono County today (Small and Anderson, 1995; Wernicke et al., 1996). This thickening and thinning of the earth's crust is also partly responsible for the sinking elevation of Badwater Basin in Inyo County's Death Valley, the lowest point on North America (Mulch et al., 2006).

About 20 million years ago, tremendous volcanic activity occurred, depositing magma throughout the growing region. Four million years ago a huge mass of earth's crust began to tilt westward, thrusting the eastern edge upward (Mulch et al., 2006; Cassel et al., 2009). This uplift of the eastern Sierra continues today and causes earthquakes like the Lone Pine earthquake of 1872. Huge rivers formed on each side of the newly formed Sierra Nevada, carving deep canyons on either side. And then 2.5 million years ago, ice age glacial activity carved U-shaped canyons throughout the Sierra Nevada, finally exposing the granite batholiths that had so long been buried beneath less enduring rock, positioning the highest point in the contiguous

United States within 84 miles of the lowest point in North America and both in today's Inyo County (USGS, 2012).

As a result of this intense geologic activity, fourteen of California's fifteen peaks that rise above 14,000 feet are within Inyo and Mono Counties and the largest escarpment in the United States lies in Inyo County, separating the floor of Death Valley from Telescope Peak in the Panamint Range. Continents drifting, volcanoes erupting, glaciers advancing and receding together led to the formation of some of North America's greatest tourism, recreation and geothermal assets located in today's Inyo-Mono region.

### GEOGRAPHIC CONTEXT

Inyo County and Mono County are rural areas situated among the rugged terrain of the eastern Sierra Nevada in California.

The official Inyo County website states that Inyo County comprises 10,140 square miles and boasts Mount Whitney as its highest peak at 14,492 feet in elevation and Badwater Basin as its lowest point at 282 feet below sea level. The county seat is in Independence, while the county's largest city is Bishop. While Inyo County is California's second-largest county and the tenth largest in the nation (excluding Alaska), only 1.7 percent of the county's land area is privately owned, with 98.3 percent owned by federal and state agencies and the City of Los Angeles.



Prepared by Sierra Business Council, June 2010

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*photo by Vickie Taton*

The county's other major cities and towns include Big Pine, Cartago, Darwin, Deep Springs, Dixon Lane-Meadow Creek, Furnace Creek, Homewood Canyon, Keeler, Lone Pine, Mesa, Olancho, Pearsonville, Round Valley, Shoshone, Tecopa, Valley Wells, West Bishop and Wilkerson.

Inyo County lies south of Mono County and borders the remaining counties: Tulare, Fresno and Kern to the west; San Bernardino to the south; and Nevada's Esmeralda, Nye and Clark Counties to the east. According to 2010 U.S. Census data, Inyo County has a population density of 1.8 persons per square mile.

The official Mono County website states that Mono County comprises 3,030 square miles,

94 percent which is publicly owned. The County boasts the presence of two popular winter recreation areas: June Mountain and Mammoth Mountain, as well as the unique Mono Lake, which lies at the beginning of a chain of 21 extinct volcanoes. The county seat lies in Bridgeport while Mono County's only incorporated area is Mammoth Lakes, with other major cities and towns including Benton, Chalfont, Coleville, Lee Vining, and Swall Meadows.

Mono County lies north of Inyo County, with Nevada's Douglas County to its north. To the west, Mono County also borders Alpine, Tuolumne, Fresno and Madera Counties; with Nevada's Lyon, Mineral and Esmeralda County's to the east. According to 2010 U.S. Census statistics, Mono County has a population density of 4.7 persons per square mile.

*Industry Cluster  
Concept Overview*

# INDUSTRY CLUSTERS

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## *Concept Overview*

### INDUSTRY CLUSTERS: AN OVERVIEW

The Eastern Sierra Innovation and Prosperity project has focused on the concept, identification and utilization of industry clusters — a well-accepted approach to strategic economic development. This section of the committee report focuses on the classic definition of industry clusters and how the concepts have evolved over time. It seeks to increase understanding of how clusters are used in economic development currently and how to foster industry clusters in a global economy.

Industry clusters have been studied for many years and are called by many names: business clusters, prosperity clusters, clusters of opportunity. Strictly speaking, a business cluster is a geographic concentration of interconnected companies, specialized suppliers, service providers, and associated institutions in a particular field that are present in a region. Characteristically, industry clusters share connections on the supply side, the service side, or both, and enhancements or improvements made on the supply side and/or the service side boost the productivity and economic health of all the firms in the cluster.

The term business cluster was introduced by Michael Porter in *The Competitive Advantage of Nations* (1990), but the underlying concept of the importance of geographic economics dates back to the *Principles of Economics* (1890) and the work of Alfred Marshall, a British economist. A generally accepted definition is that business clusters exist when there is a geographic location that supports enough resources and competencies to reach

a critical threshold, giving the cluster a sustainable competitive advantage over other places (and clusters).

Clusters are in effect regional production systems that include all of the companies and institutions that explain the economic behavior of a place (Regional Technology Strategies, Inc., 2009). All cluster analysis relies on evaluation of local and regional employment patterns based on industrial categorizations such as the North American Industry Classification System (NAICS), but especially in rural communities cluster analysis must incorporate local knowledge, history and culture. Industry clusters work well when they are created out of businesses already present in a region but haven't fared as well when economic development efforts attempt to create new clusters that may or may not resonate with the skills and knowledge of a local work force.

Who gains and who loses in the economy, whether individual or business, depends to a large extent on connections, relationships, and trust. These factors affect the exchange of knowledge — about innovations, markets, and job opportunities — and they affect collaboration. The real strength of clusters lies in the tacit knowledge that resides within the employees of companies in the cluster and its dispersion across companies and institutions.

This is how rural regions develop real expertise and innovation in textiles, design, wine-making, manufacturing, and more. Once a region has agreed to focus economic development efforts on industry clusters, the current

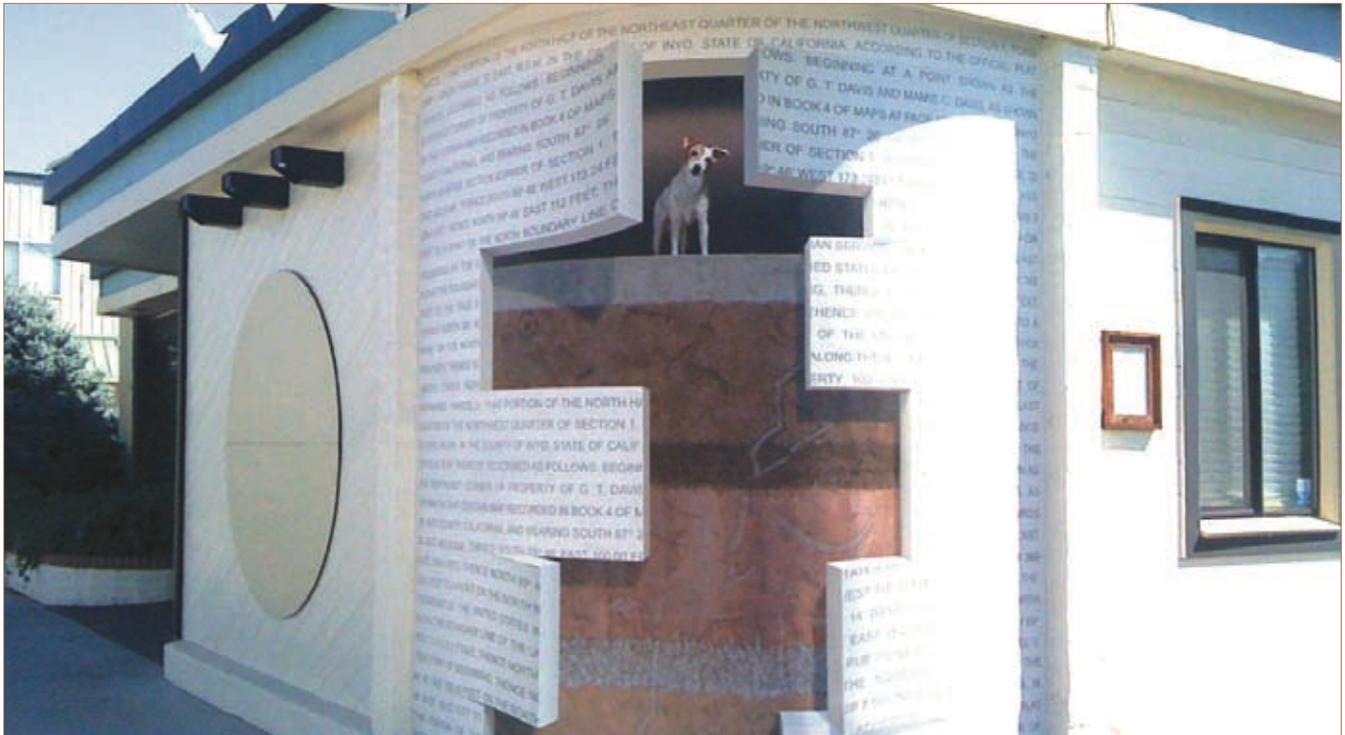


photo by Vickie Taton

and historical trends of the local economy can be examined to identify the existing clusters and evaluate them in terms of health, growth, strength, value and future opportunities. Using NAICS and local knowledge, this evaluation will identify within the region:

- Sectors of the economy identified by growth in one or more areas: value, jobs or wages
- Export-oriented, geographically concentrated and interdependent industry sectors
- Sectors characterized by competing firms and buyer-supplier relationships
- Shared labor pools
- Shared specialized infrastructure

Once identified, work can then begin on identifying opportunities within the clusters and designing strategies to realize the opportunities, whether it be providing workforce training in energy efficiency, encouraging start-up businesses that compliment or support existing businesses, or building a test kitchen for value-added agriculture. Clusters are considered to increase the productivity with which companies can compete, nationally and globally (Porter, 2000).

“Geographic, cultural, and institutional proximity provides companies with special access, closer relationships, better information, powerful incentives, and other advantages that

# INDUSTRY CLUSTERS

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## Concept Overview

are difficult to tap from a distance. The more complex, knowledge-based, and dynamic the world economy becomes, the more this is true. Competitive advantage lies increasingly in local things — knowledge, relationships, and motivation — that distant rivals cannot replicate” (Porter, 1998).

In 1998, Phil Cooke and Kevin Morgan developed a framework for associative behavior, finding that “economic activity is increasingly based on notions of collective learning and that competition increasingly involves partnership and interactive innovation” (Cooke, et al., 1998).

Most clusters have been boosted by some variation on one of two types of strategies. The first, “specialization,” influences the use of public or private sector resources or services in ways that make them more directly relevant to a particular kind of industry. The second, “association,” tries to influence relationships and increase interactions among firms.

Michael Porter asserts that clusters have the potential to affect competition in three ways:

- By increasing the productivity of the companies in the cluster
- By driving innovations in the field
- By stimulating new businesses in the field

Clusters, in recent years, have become virtually synonymous with membership organizations designated to represent them, whether called councils, associations, partnerships, or

networks. These organizations have become powerful voices for their members, mechanisms for engaging industry and aggregating needs and demands, pipelines for information to members and to government, platforms for networking and learning, and, in some cases, pathways of public monies into the cluster.

## FOUR STAGES OF INDUSTRY CLUSTER STRATEGIES

### STAGE 1: MOBILIZATION

Build interest and participation locally.

### STAGE 2: DIAGNOSIS

Assess the industry clusters that comprise the current economy and the infrastructure that supports the clusters.

### STAGE 3: COLLABORATIVE STRATEGY

Convene stakeholders in working groups to identify and prioritize opportunities, challenges and strategies.

### STAGE 4: IMPLEMENTATION

Build commitment within working group participants and regional stakeholders to actions and to building an organization to sustain implementation (Porter, 1998).

# *Applying Clusters to Rural Economies*

## APPLYING CLUSTERS TO RURAL ECONOMIES

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### CLUSTERS AND RURAL COMPETITIVENESS

Rural regions face multiple challenges staying competitive in a global marketplace. Local firms and institutions are faced with the double-edged sword of increased access to a global market but also greater exposure to global competition. Industries and businesses not prepared to compete with high value, innovative products and in a virtual marketplace are struggling to survive. Migration of youth from rural areas and shrinking education budgets contribute to a shortage of qualified workers. Rural businesses and industries are not able to compete with urban and global economies of scale. Rural areas on the whole have lower levels of academic achievement, fewer patents, and less venture capital investment than urban areas, leading to rural underperformance in high-tech industries (Munnich, et al., 2001; Rosenfeld, 2002).

These challenges create a conundrum for rural economic development. How can a rural region best utilize its limited resources — both financial capital and human capital — to maintain a healthy, diversified economy?

Studies have shown that where rural industry clusters exist, they contribute positively to regional economic growth and are also associated with higher wages for rural workers (Gibbs, et al., 1998). Rural industry clusters are not as easily defined as urban clusters and are only partially identified by standard methods and more by tapping into local knowledge of business in the region: what has been working, what is no longer working and what are the most likely best directions for



*photo by Vickie Taton*

future growth. Rural clusters may look different and be described differently than urban clusters. For example, Rosenfeld (2009) described one type of rural cluster as niche “micro-clusters.” Other rural cluster descriptions include a “hub-and-spoke” cluster (one or two large firms surrounded by an array of smaller supply firms) and “satellite platforms” based on abundant local resources, such as timber, that depend on a parent company often located in an urban area (Mishkovsky, et al., 2010; Brookings, 2006).

Researchers have struggled with the seeming paradox that the cluster concept presents for rural development. If industry clusters are “geographic concentrations of interconnected companies and institutions in a particular field (Porter, 1998)”, with “concentration” implying elements of both scale and critical mass, one is hard pressed to find many examples in rural areas. After all, “rural” is sparsely populated by definition and therefore likely to lack either scale or critical mass in most every industry aside from those that are heavily agricultural or natural resource-based.

The economic fortunes of communities, whether urban or rural, are often driven by industries anchored elsewhere. The most important economic clusters for any given rural place can be local, regional, national, or even global in geographic scope. Rural policymakers would do well to avoid focusing solely on building locally-anchored clusters. Leveraging external linkages — whether with an urban-based cluster nearby or a national or global cluster faraway — is also a “cluster” strategy (Feser, et al., 2007).

Rosenfeld states Feldman and others have shown that most clusters are formed by entrepreneurs based on a natural resource, particular local assets, or serendipitous events, and they continue to develop along paths shaped by past economic activity and expertise. Depending on how the cluster applies its knowledge and skills, this path dependency can become an opportunity to morph into new growth prospects (Rosenfeld, 2009).

The Economic Development Administration lists five key concepts to developing Rural Industry Clusters:

- **Evaluate the Local Economic Base**

What you make, including existing and prospective clusters

- **Evaluate Talent: What you do**

Workforce skills and human capital base

- **Evaluate Entrepreneurship:**

Your capacity to create companies wholly new or from existing firms

- **Evaluate Innovation and Ideas:**

Your ability to innovate and generate new ideas

- **Evaluate Location:**

Infrastructure, Amenities, Factor Costs, Natural Resources

Developing active feedback loops between industry and local educators is an important mechanism for promoting economic competitiveness. Strategies to engage local firms should focus on the emerging work force (through school-to-work and apprenticeship programs), and the incumbent work force (through customized job trainings, continuing education, and training partnerships).

A rural knowledge cluster approach must recognize the need to develop a regional

## APPLYING CLUSTERS TO RURAL ECONOMIES

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vision to guide local activities. All levels of government have a role in promoting regional visions. Although local initiatives may play an important role in promoting rural knowledge clusters, it is the regional interdependencies inherent in successful rural knowledge clusters that make the region the most appropriate scale undertaking action (Munnich, 2002).

Traditionally clusters are identified by examining NAICS codes and historic local economic trends. An alternative, or supplemental, method to the algorithmic approach for identifying clusters is the heuristic approach. This is not a “seat of the pants” methodology; it relies on observation, case studies, and local experience to discover clusters that are small, bridge political boundaries, or are based on unrecognized businesses or unrecorded interdependencies. It also allows groups of companies with common interests that have developed a collective identity to demonstrate they have the attributes of a “cluster.” Gathering this information requires going into communities and talking to people, the work of what New Zealand’s Ifor Ffowcs Williams calls “cluster musters.”

Examples of rural industry clusters in the United States include the fishing gear industry clusters in Woodland, Washington; the sporting goods and apparel industry in Hood River, Oregon; and the creative clusters in Montana. Walla Walla’s wineries, Seagrove’s potters, Branson’s music, Dalton’s carpets, and Udine’s chairs dominate their local economies as well and are internationally recognized in the marketplace (Rosenfeld, 2009).

In the 21st Century, clusters operate in a different economic environment. Globalization has taken on a different meaning for clusters and local economies. The market opportunities are still there, but the threats to employment can no longer be met with new technology and higher productivity (Porter, 2000).

The values and preferences of both consumers and employees — especially more educated young people — appear to be shifting away from just function to meaning. Larger segments of the population are willing to pay more for products that are more authentic, that reflect values or specific places, or that provide a locally rooted experience. Experience-based products often are connected to a specific place, and particularly young, educated people are choosing their work environment carefully, trading off salary for places that provide the kind of cultural and recreational amenities they seek (Rosenfeld, 2009). The value of place is increasing.

*The  
California Context*

# THE CALIFORNIA CONTEXT

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## ECONOMIC EFFORTS STATEWIDE

California's current economic climate provides opportunities for Inyo County and Mono County as business, philanthropic and other leaders across the state have united in a state-wide effort to drive reform.

For more than 10 years the state of California has not had a specific strategic economic development plan. During the first decade of the 21st Century, economic development planning became fragmented between numerous state agencies such as the California Department of Business, Transportation and Housing; the California Labor and Workforce Development Agency; the California Public Utilities Commission; the California Trade and Commerce Agency; and the California Employment Development Department.

Under pressure from structural budget deficits and influenced by the heady days of steady economic growth, California dismantled much of its traditional economic development infrastructure. Many agencies were incorporated into others, had substantive portions of their services privatized, or disappeared altogether in an effort to save money.

Then the state, national and global economies entered a prolonged recessionary period beginning in 2007 and Californians reaped the consequences of their lack of long-term economic planning. California suffered the second-highest state unemployment rate in the nation, losing more than 2 million jobs; experienced the third-highest home

foreclosure rate; saw significant reductions in state and local tax revenues, and millions of Californians became more vulnerable to economic dislocation.

In light of these events there was renewed interest in developing a statewide economic development plan. There was also widespread recognition the problem with California's economy was not solely lack of a strategic economic development plan. A bipartisan majority of state elected officials and key leaders in the private sector agreed the system of governance that has evolved in the state since the passage of Proposition 13 and the historic shift of power from local governments to state government that occurred in the 1990s left California's governance and fiscal structure poorly prepared for the challenges of a 21st Century economy.

There was widespread recognition that empowering regional economic planning to address implementation issues rather than encouraging centralized planning could substantively improve California's long term economic conditions and create more resilience to address future shocks.

Advocates of creating such a plan recognized that the California governor's office needed to be a major player in promoting economic development but there was no longer a central point of contact in the executive branch. Legislative efforts to address this issue began in 2009.



*photo by Vickie Taton*

In 2011, Assembly Bill 29, authored by Assembly Speaker John Perez, was signed by the Governor creating the Governor's Office of Business and Economic Development (GO-Biz) to serve as a single point of contact within state government for economic development and job creation efforts. GO-Biz has programs designed to advance business development, assist with permit streamlining, provide small business assistance,

encourage innovation and entrepreneurship, and promote international trade. Perhaps the most important function of GO-Biz is its mandate to coordinate between all of the disparate state agencies that have some mandate for economic development and ensure that they are operating with a single set of strategic objectives; the first such mandate for a state agency in more than a decade.

## THE CALIFORNIA CONTEXT

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Concurrent with the effort to create GO-Biz, several private sector-led economic development efforts started across the state. Each of these efforts had several common themes: they were led by collections of private sector industry leaders, assisted by economic development professionals, informed by extensive public outreach efforts, and utilized the most current economic development data and strategies culled from best practices identified across the state and the nation.

In recent months the three private sector efforts — as detailed below — have begun to coordinate their activities and strategies with the Governor’s GO-Biz office, and are engaging in joint planning to implement a statewide economic development strategy.

This combined effort could have significant impacts on regional and localized economic development efforts by creating opportunities for coordination and access to technical assistance available through the larger effort, increasing access to state and federal economic development funding that could flow to the efforts, and increasing access to private capital attracted to a more coordinated strategy.

The first of the three efforts summarized here was convened by Lieutenant Governor Gavin Newsom, which culminated in a report issued by the Brookings Institution and McKinsey and Associates titled *An Economic Growth and Competitiveness Agenda for California*. Key partners in the effort included the California Business Roundtable, California Chamber

of Commerce, California Labor Federation, California Manufacturers and Technology Association and Silicon Valley Leadership Group.

The second effort summarized here resulted when the Nicolas Berggruen Institute, an independent, non-partisan, private sector think tank, convened a blue ribbon committee called the Think Long Committee to study the long-term economic development and governance needs of the state.

The Think Long Committee included a bipartisan blend of retired political and judicial leaders such as former Assembly speakers Willie Brown and Bob Hertzberg, and former California Supreme Court Chief Justice Ronald George; business and economic leaders like Google CEO Eric Schmidt, Eli Broad, Yahoo CEO Terry Semel; and former federal level economic leaders like former chair of the President’s Council of Economic Advisors Dr. Laura D’Andrea Tyson, former Secretary of State George Schultz and former National Security Advisor Condoleezza Rice. The committee process culminated in the release of two documents: *A Blueprint to Renew California* and the *Think Long Committee for California Jobs, Infrastructure and Workforce Report*.

The third effort summarized here is that of the California Stewardship Network, which is a collaborative of more than 13 regional economic and community development organizations seeking to create innovative solutions to the state’s economic, environmental and

community challenges.

The California Stewardship Network was convened three years ago with support from private philanthropy with a mission to promote stewardship, or the careful and responsible management of the assets entrusted to communities. The California Stewardship Network promotes place-based strategies with attention to simultaneously stewarding economic, environmental and social dimensions of the regions.

Partners in the effort include the Fresno Business Council, Los Angeles Economic Development Corporation, Joint Venture Silicon Valley, Redwood Coast Rural Action, Valley Vision, Sonoma County Economic Development Board, and the Sierra Business Council, among others. The California Stewardship Network process led to the 2010 publication of a report on key shared values, vision, agenda and principles for kick-starting the state's economy, titled *Thriving Regions Lead To a Thriving State*.

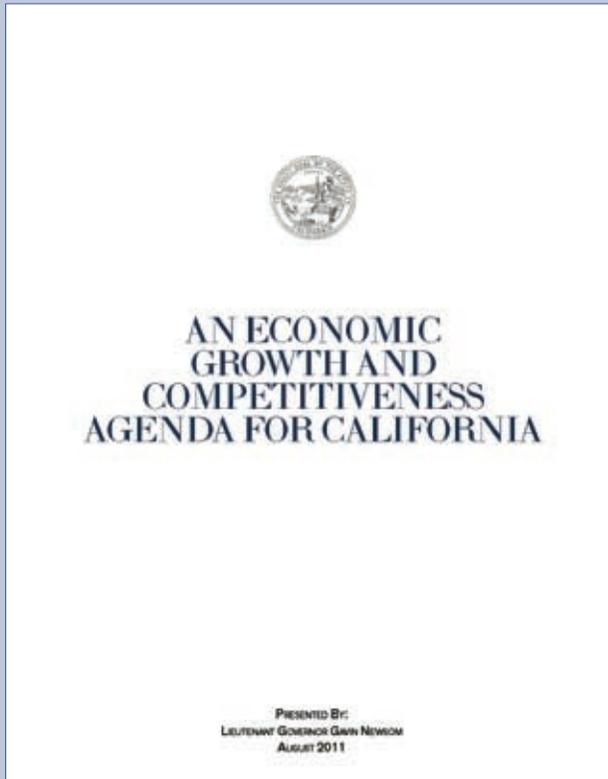
Several common themes are independently identified by these three efforts, all of which are relevant to the identification of clusters and specific strategies in the eastern Sierra. The clear common themes are that efforts should be regional in scale; state efforts should be focused on investments in workforce development, infrastructure and advancing innovation; and state and regional efforts must focus on aligning regulatory policy to meet common goals.

As a result of the growing coordination between these three economic development efforts, and with cooperation of the GO-Biz office, a process has been established to develop and propose a statewide economic development strategy to the Governor's office. The effort is being informed by a series of regional economic development forums, branded as the "Can-Do California" effort. Regional forums were held between March and April of 2012. The purpose of the regional forums is to identify the regional clusters that lead to economic opportunities for job creation and competitiveness, what the priority requirements are to capitalize on these opportunities, and develop a set of state policy actions to support the effort. Input from the regional forums was aggregated at the California Economic Summit held on May 11, 2012, to identify the specific actions the state of California can take (either through the GO-Biz office or individual agencies) to prepare to implement an economic development strategy. One of the outcomes from the California Economic Summit was a specific bipartisan administratively supported legislative agenda to support the state economic strategy. Results from the Summit can be viewed at [www.caeconomy.org](http://www.caeconomy.org).

The following section summarizes some of the guiding principles and key strategies of the three independently developed economic reports that together will influence the outcome of the California Economic Summit: *An Economic Growth and Competitiveness Agenda for California; A Blueprint to Renew California; and Thriving Regions Lead to a Thriving State*.

# THE CALIFORNIA CONTEXT

## *An Economic Growth and Competitiveness Agenda for California: Guiding Principles*



### ***An Economic Growth and Competitiveness Agenda for California:*** **GUIDING PRINCIPLES**

#### **GOVERN FOR GROWTH AND ACCOUNTABILITY**

California must establish an accountable entity to assign performance metrics and measure and report progress.

#### **PRACTICE PARTNERSHIP**

Collaboration is today's approach to competition. State policies should promote public-private partnerships, regional alliances, and boundary-crossing collaboration in all forms.

#### **MANAGE GLOBALLY**

Today's markets for goods, services, investment and talent are global and the measure of success is performance on a global scale.

#### **BUILD ON INDUSTRY STRENGTHS**

Most growth and innovation emerges from interactions across institutions and businesses. Innovation and production are inextricably linked in the generation of economic growth and prosperity.

#### **REMOVE BARRIERS**

Onerous and inconsistent regulations, slow bureaucracies, and misaligned policies at the federal, state, and local levels present real barriers to the speed and agility needed to compete in the global economy.

#### **ACT REGIONALLY**

Each region is blessed with unique strengths and competitive advantages often backed by a strong regional agenda. The state must define a value-added role as a partner and enabler of regional and private sector efforts.

#### **INVEST IN PERFORMANCE**

In this era of fiscal constraint, the state must act prudently, investing in strategies that promise a solid return.

#### **SKILL UP FOR OPPORTUNITY**

Economic renewal results in a sustainable society when it creates broadly shared benefits. It is critical to align skill development and workforce training with economic development to compete in the global economy.

#### **ACT WITH URGENCY**

Global competition and the impact of the Great Recession compel urgent action.

#### **SUSTAIN COMMITMENT**

State leaders, regardless of term limits, must develop and sustain consensus behind a long-term strategy.

***An Economic Growth and Competitiveness Agenda for California:***  
**KEY STRATEGIES**

## GEAR UP EXPORTS

- Create a statewide export strategy
- Re-establish a presence in international markets
- Address critical supports such as freight and infrastructure capacity
- Focus on trade in both goods and services, including non-traditional exports like tourism and education.
- Reinvigorate manufacturing
- Establish regional manufacturing centers of excellence focused on supply chain and value chain development
- Leverage supply chain opportunities by improving access to capital and information exchange
- Streamline or eliminate duplicate or unnecessary regulation
- Align land use planning efforts with anticipated needs for manufacturing and create statewide incentives to encourage investment in manufacturing.

## DRIVE INNOVATION

- Nurture collaborative regional and cluster based economic development strategies
- Develop more extensive business and academic research and development partnerships
- Make research and development resources available to traditionally underserved groups

- Foster co-location and networking between members of industry clusters and across clusters
- Review and reform local and state regulations and requirements, tax credits and incentives to focus on the most likely and desirable industry clusters.

## BUILD INFRASTRUCTURE

Create the infrastructure backbone necessary to have a global reach, including roads, goods movement and high speed communications by: aligning infrastructure decisions with local and regional economic development strategies; pursuing new strategies to finance infrastructure such as public-private partnerships; supporting the development of clean technology complementary infrastructure such as renewable energy and distributed generation

## ACCELERATE THE “CLEAN ECONOMY”

- Focus efforts on renewable energy and new technologies in manufacturing and export-intensive industries
- Apply the purchasing power of the public sector to speed the expansion of clean economy sectors
- Advocate for federal policies that safeguard California’s leadership in emergent clean economy industries
- Increase access to capital by forming public-private capital pools for local or regional investment and capture operating efficiencies in the public sector while supporting the growth and development of new industries.

*(continued page 44)*

# THE CALIFORNIA CONTEXT

## *A Blueprint to Renew California: Key Strategies*

### ***An Economic Growth and Competitiveness Agenda for California:***

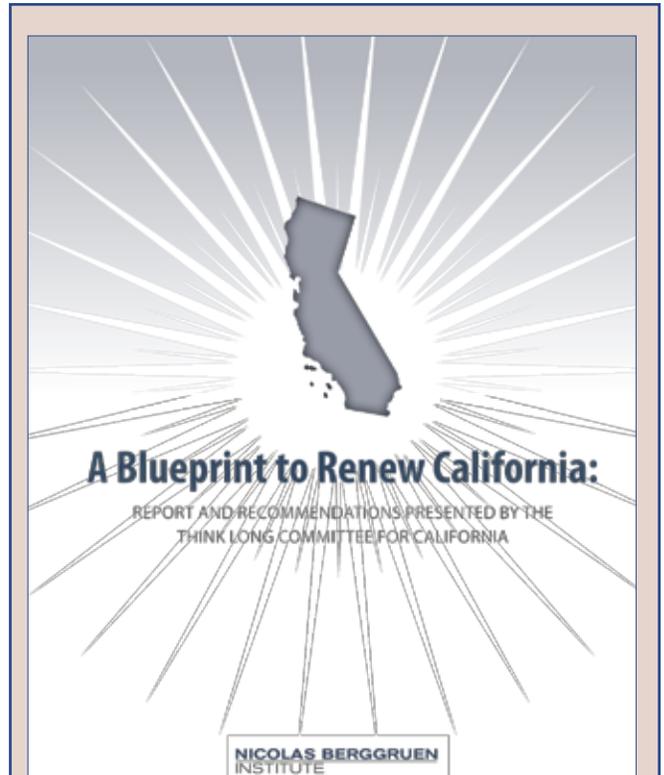
**KEY STRATEGIES** (continued from page 43)

#### SKILL UP FOR OPPORTUNITY

- Leverage the community college system to educate and train the workforce and better align workforce development with economic growth
- Treat education and workforce development as an integral aspect of economic development
- Partner with educational institutions to pursue the national push to build skills for middleskill jobs and community college retention and graduation
- Increase secondary school investment in career technical education.

#### ALIGN WITH REGIONAL STRENGTHS

- Coordinate activities at the regional level, recognizing that California is actually not one economy, but is made up of several distinct, specialized and unique regional economies
- Adopt a “do no harm” approach to state-wide efforts by focusing on value added policies
- Root state policy in regional cluster analysis and align state policy with regional clusters
- Target specific investments in specific clusters that have statewide significance
- Adjust state and regional governance structures to foster collaboration
- Allow the private sector to lead and guide.



### ***A Blueprint to Renew California:*** **KEY STRATEGIES**

#### EMPOWER LOCAL GOVERNMENTS AND REGIONS

Since California is actually made up of several regional economies, and local and regional governance needs to be aligned to regional clusters of opportunity, considerable power to govern should be returned to local government through realignment of state and local functions, and considerable new flexibility for the use of state funds should be encouraged, including advancing statutory changes necessary to provide local governments with program flexibility. An update of the tax system to ensure stable flow of funds to localities to cover the costs

associated with new responsibilities should accompany increased power and authority for local government.

## STIMULATE JOBS, HIGHER EDUCATION AND ECONOMIC GROWTH

The committee found that restoring economic vitality and job growth to California requires both streamlining regulations on business and facilitating public investment in workforce development.

## STREAMLINE REGULATORY PROCESSES

Regulatory streamlining should include both real and perceived regulatory barriers, coordinating overlapping regulatory frameworks at the local, state and federal levels, establishing a single point of contact at the state level to review conflicting frameworks, and accelerating the California Environmental Quality Act (CEQA) permitting process through “smart” CEQA reform. Smart CEQA reform is defined as reform that accelerates the process but keeps the environmental checks and balances process in place through limiting standing time to decide cases, allowing CEQA cases expedited access to the appeals process, and expanding CEQA training for justices.

## ENCOURAGE WORKFORCE DEVELOPMENT

Workforce development reforms envisioned include promoting career technical training at the secondary and community college level through partnerships with local businesses, coordinating Workforce Investment Board investments with emergent regional labor markets, increasing investment in STEM

(Science, Technology, Engineering and Math) mentorship and internship programs, and aligning workforce development with local and regional needs based on identified clusters of opportunity.

## INVEST IN INFRASTRUCTURE

• The committee found that California faces a \$765 billion infrastructure investment deficit, not including investments needed for local governments and schools, leading to a systematic drain on productivity and economic growth in the state. To address the gap, new efforts to coordinate and prioritize investments between local, state, federal and private entities will be necessary. To increase the efficiency of these investments the committee recommends:

- \* Employ new technologies to manage and reduce demand for infrastructure including promoting energy and water efficiency
- \* Maintain and update the state Strategic Growth Plan (Capital Improvement Plan) with more direct input from and coordination with regional and local entities
- \* Encourage the growth of state, regional and local investment pools, including tapping into public and private pension funds, to finance infrastructure development
- \* Increase the use of the Infrastructure and Development Bank managed by the California Department of Finance to direct low cost loans to local governments and public-private partnerships

*(continued page 46)*

# THE CALIFORNIA CONTEXT

## *Thriving Regions Lead to a Thriving State: Guiding Principles*

### ***A Blueprint to Renew California:***

#### **KEY STRATEGIES** (continued from page 45)

- \* Realign the State Transportation Improvement Program to send more funding to “self help” (locally funded through sales taxes) and rural counties and regional transportation authorities, making local entities the decision-makers on transportation projects
- \* Reorganize and increase vehicle related funding
- \* Increase the private sector component of infrastructure funding through adoption of innovative private sector funding mechanisms
- \* Encourage the development of new information technologies such as high bandwidth communications through expansion of the California Advance Services Fund and the California Emerging Technologies Fund in under-served regions of the state
- \* Task the California Public Utilities Commission with developing model permitting standards to coordinate and standardize permitting between multiple providers and permitters.

# THRIVING REGIONS LEAD TO A THRIVING STATE



### ***Thriving Regions Lead to a Thriving State:***

#### **GUIDING PRINCIPLES**

#### **ECONOMIC REGIONS MATTER**

In today’s economy, economic regions are the key source of competitive advantage and the place where public and private leaders can work together to make a difference in promoting economic vitality and quality of life as part of an essential vital cycle.

# THE CALIFORNIA CONTEXT

## *Thriving Regions Lead to a Thriving State: Guiding Principles*

### DRIVING CLUSTERS ARE CRITICAL TO SUCCESS

Clusters drive regional economies, creating jobs and revenue. Every region has its own clusters of opportunity that it can build on for economic recovery. Good data and economic information help regions identify their own clusters. In turn, regions should work to link clusters in their region with like efforts in other regions so that maximum synergy can be attained for those industries.

### ECONOMY, EDUCATION AND PHYSICAL INFRASTRUCTURE REQUIRE MORE INVESTMENT

Talent and technology as well as physical infrastructure and a positive regulatory environment are critical for strong industry clusters. This means that education and training are important elements of economic recovery. It also means promoting innovation and commercializing technologies to grow future industries. Investment in physical infrastructure should include not only smart transportation but efficient water, advanced communications and energy systems. A 21st century business climate includes investments in economic infrastructure as well as creating a regulatory environment that contains costs.

### INTEGRATED APPROACHES ARE REQUIRED

Regional economic strategies should integrate economic, human and infrastructure development into a comprehensive approach focused on the needs of the regional community. Opportunities should be sought to aggregate common regional issues so that they can be addressed at the highest level possible.

### PRIVATE-PUBLIC PARTNERSHIPS ARE NEEDED AS PLATFORMS FOR CHANGE

To attract the talent necessary for vital clusters, private and public leaders need to work together to invest in the economic infrastructure required for strong industry clusters and a high quality of life.

### CIVIC ENTREPRENEURS MUST LEAD COLLABORATIVE STRATEGIES

To build thriving regions, regional economic strategies require collaborative efforts among public and private leaders to direct investment in critical infrastructure supporting the driving industry clusters in their regions.

### SUSTAINED STATE AND REGIONAL SUPPORT FOR RECOVERY STRATEGIES IS NECESSARY

The state's role is to invest in critical economic infrastructure and work with regions to support regional economic strategies through ongoing partnerships. The state should focus on the basics: Invest in education, transportation and water systems; create a pro-investment tax and regulatory environment; allow regions to develop and implement their own regional economic strategies designed to meet their unique needs. This will require an innovative state-regional partnership based on the principles of distributed governance.



# *Prosperity Clusters*

# PROSPERITY CLUSTERS

## Selection Criteria

### INVESTING IN EXISTING CLUSTERS

As described in the previous chapters, one successful strategy for economic development planning is to identify existing inter-connections, dependencies and competition among businesses within a region to identify the region's existing industry clusters and to promote strategies to strengthen those clusters. For this study, the research team and the committee developed a set of cluster definitions and prioritization factors that could be applied to analyzing a limited set of specific clusters in the region.

Although data analysis identified multiple potential clusters, there was general agreement

that focusing on only what was realistically doable, with an emphasis on areas where some capacity already existed, and where significant opportunity for growth exists, was the appropriate strategy.

### Criteria for selecting clusters and industry sectors within them to target for development included a combination of the following factors:

- Average payroll wages equal to or higher than national industry averages
- Relative immunity to recession
- High total earnings

#### COMMITTEE CRITERIA:

##### INDUSTRY CLUSTERS TO TARGET FOR DEVELOPMENT

- Average payroll wages equal to or higher than national industry averages
- Relative immunity to recession
- High total earnings
- Potential to generate sales tax revenues
- Export products (including tourism)
- Potential to displace services or products from outside the region
- Potential to add value within the region
- Potential to act as a multiplier across multiple sectors
- A cluster that is experiencing both national and regional employment growth
- Positive local employment growth or high potential for positive growth based on planned improvements
- Part of an industry targeted by the state or federal government for investment or capable of attracting state attention
- Potential for rural-urban partnerships
- Achievability, or the ability to affect change on the ground relatively quickly
- Scalability, or the ability to apply the strategies across a broad landscape

## PROSPERITY CLUSTERS

### *Leveraging Internet Technology and Broadband Access*

- Potential to generate sales tax revenues
- Export products (including tourism)
- Potential to displace services or products from outside the region
- Potential to add value within the region
- Potential to act as a multiplier across multiple sectors
- A cluster that is experiencing both national and regional employment growth
- Positive local employment growth or high potential for positive growth based on planned improvements
- Part of an industry targeted by the state or federal government for investment or capable of attracting state attention
- Potential for rural-urban partnerships
- Achievability, or the ability to affect change on the ground relatively quickly
- Scalability, or the ability to apply the strategies across a broad landscape

This list was not intended to be the sole factor in setting priorities, but rather act as a guideline to be augmented by local knowledge from the committee. The committee also looked for areas where industry clusters could be connected together, in order to create a multiplier effect, or for the potential for synergy between clusters, so that improvements made in one could affect others.

It was also recognized by the committee that any cluster selected needs to be able to do four critical things; mobilize support from the local community, be easily identified by stakeholders, have a critical mass of stakeholders working on advancing collaborative strategies, and have specific implementation measures and capacity to implement.

The team identified five industry clusters for further analysis: information technology and broadband access; renewable energy; tourism, hospitality and the arts; recreation; and agriculture.

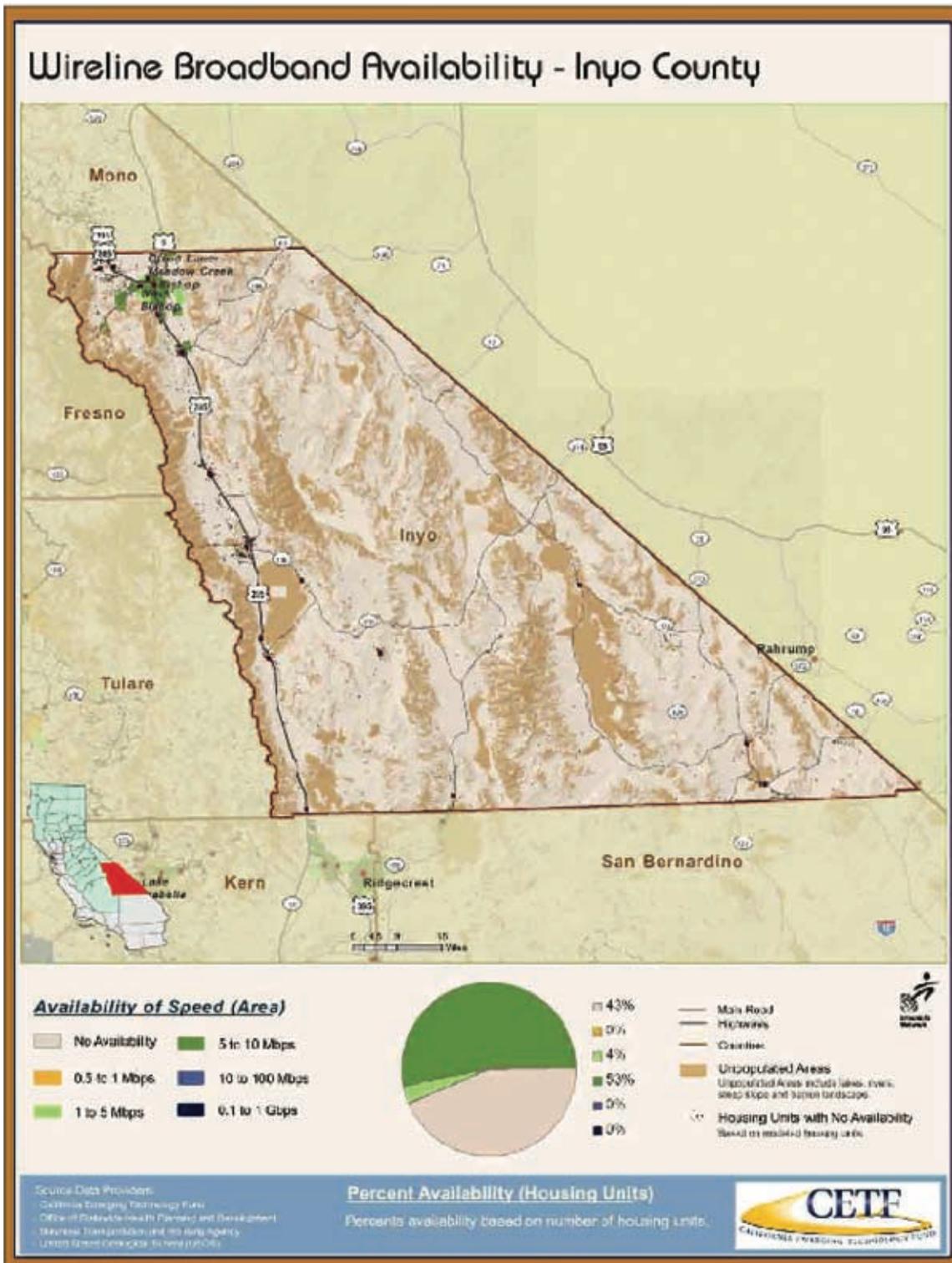
### LEVERAGING INTERNET TECHNOLOGY AND BROADBAND ACCESS

A significant portion of the region between northern Mono County and southern Inyo County has limited, or insufficient broadband access. Much of the current telecommunications system and infrastructure is antiquated. Large areas of the eastern Sierra have little to no cell phone coverage. Over the years out of the region companies who control the telecommunications infrastructure have been unable to make the financial case for updating their systems.

Consequently, what higher speed service does exist is spotty and inconsistent, suffering numerous outages or isolation events. As a result, broadband adoption rates are very low on the east side compared to the rest of the state of California, only about 14 percent overall, compared to more than 50 percent

# PROSPERITY CLUSTERS

*Leveraging Internet Technology and Broadband Access*



*image courtesy California Emerging Technologies Fund*

statewide. In addition, because broadband adoption rates are higher for higher income individuals and businesses, the 'digital divide' often leaves those in lower socioeconomic categories behind as the digital economy develops (RUPRI, 2008).

This condition leaves east side businesses and community assets isolated from access to national and global markets, and travelers isolated from real time digital information about the region. Connectivity has become so much a part of modern life that many families or business people will not even consider traveling to a region that does not offer access to high-speed communications (Advance, 2005).

Fortunately the eastern Sierra is in the process of correcting this condition. The Digital 395 Middle Mile Project proposes to build a new 583-mile fiber network following the Highway 395 corridor from Barstow, California to Carson City, Nevada. The project represents more than a \$100 million investment in broadband infrastructure in the region.

The project is slated to directly connect more than 230 community anchor institutions including hospitals, businesses, local governments, Indian reservations and military bases, in more than 36 communities along Highway 395. The Digital 395 Project will serve an area with almost 26,000 households and more than 2,500 businesses.

Services provided by the project will include dark fiber (or leasable fiber optic cables), IP Ethernet services, public internet access services for local governments and educational facilities, SONET services (for voice, video and data) and co-location availability for those wishing to lease space in the trench. The project will not provide direct to-consumer services.

The committee identified the Digital 395 Project as perhaps the most significant economic development opportunity in the region in generations. Interviews with Digital 395 project implementers indicated the following economic development opportunities:

#### **500 JOBS**

Immediate creation of as many as 500 jobs related to installation of infrastructure

#### **CUSTOMER CHOICE**

Expansion of existing broadband direct service to customers (Cable television and Internet Service Providers)

#### **SAFETY PLUS...**

Expansion of existing telecommunications systems (Wi-Fi, fixed wireless, cellular, satellite and public safety)

#### **INNOVATION**

Expansion of entrepreneurial platforms for new entrants

#### **IMPROVED VITAL SERVICES**

Expansion of existing medical, educational, commercial and military applications

# PROSPERITY CLUSTERS

## *Leveraging Internet Technology and Broadband Access: Committee Recommendations*

### COMMITTEE RECOMMENDATIONS

#### **Interviews with committee members and community leaders identified and prioritized the following economic development opportunities in the region related to the expansion of broadband service:**

- Expansion of Internet Technology support services (web design, computer software, information systems, computer hardware, programming, database services)
- Expansion of computer and telecommunications repair services
- Expansion of networking services (personal and home networks, local area networks, storage networks, campus and institutional networks, server farms and public safety networks)
- Expansion of professional services (home based professionals and firms)
- Online sales and marketing (retail, recreation and value added agriculture)

#### **Specific strategies identified by the committee to leverage the technology infrastructure installation side included:**

- Conduct an inventory of existing infrastructure and services utilizing data already available from the Digital 395 Project, the California Emerging Technologies Fund, and service providers
- Prepare the market by conducting surveys of infrastructure and services desired by residential and business customers

- Include installation of conduit as part of all local government and institutional capital improvement programs
- Install “off ramps” or access points in all eastern Sierra communities and rural centers
- Require new commercial development to install Fiber-to-The-Premises (FTTP) backbone
- Work with residential centers to aggregate demand for FTTP

*...the committee identified the Digital 395 Project as perhaps the most significant economic development opportunity in the region in generations...*

Interviews with committee members, community leaders and economic development professionals also indicated that the single most important action a rural region can undertake as it gains access to new broadband technologies is invest in creating business to consumer (B2C) networks to increase e-commerce and improve customer service.

The primary recommendation of the committee was to immediately embark on a regional e-commerce development and deployment strategy with the goal of boosting market access and increasing the revenue for small

# PROSPERITY CLUSTERS

Leveraging Internet Technology and Broadband Access: Committee Recommendations

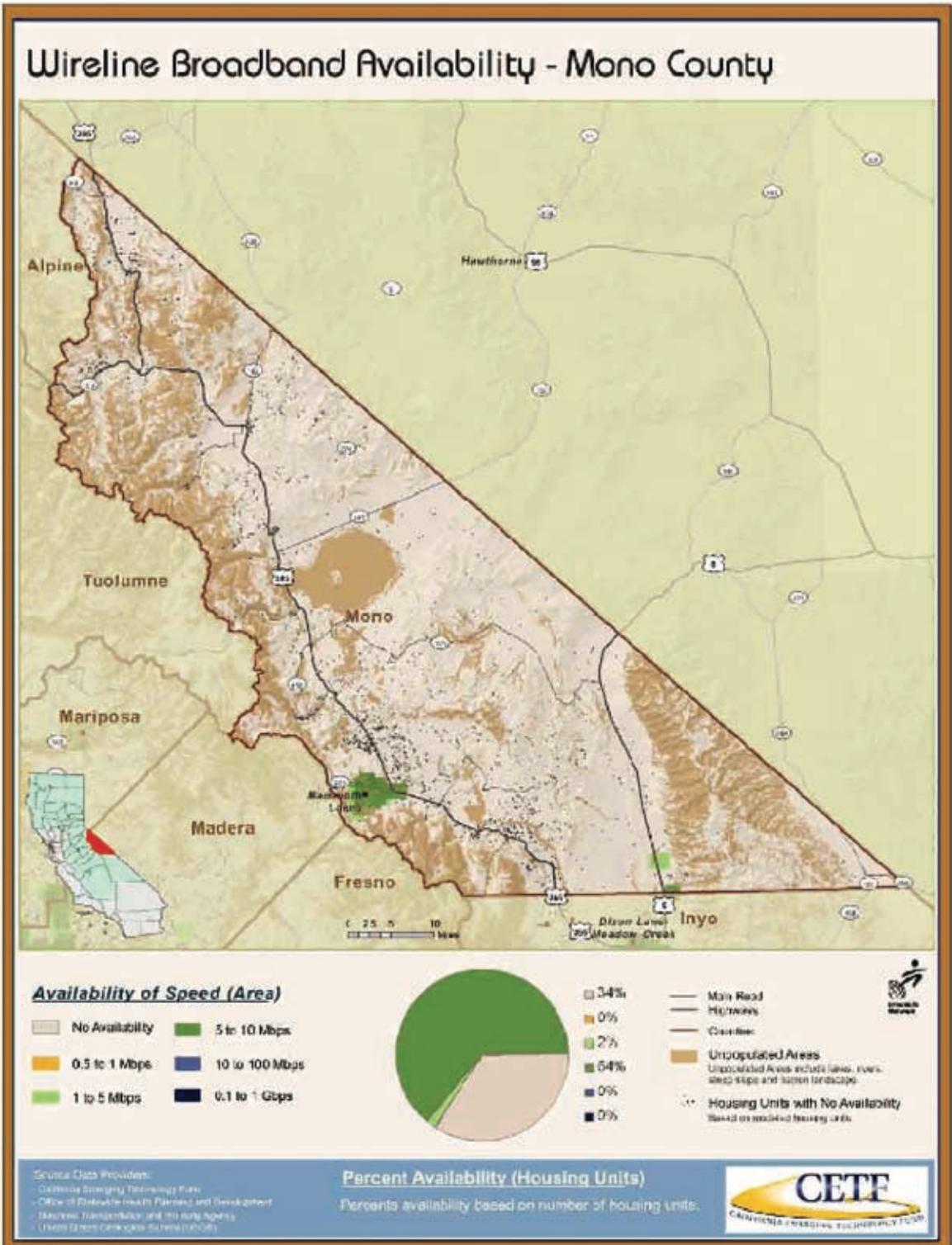


image courtesy California Emerging Technologies Fund

# PROSPERITY CLUSTERS

## *Leveraging Internet Technology and Broadband Access: Opportunities*

businesses and community assets.

The U.S. Department of Commerce estimates that retail e-commerce sales for the fourth quarter of 2011 increased by almost 5.8 percent. Retail e-commerce is now more than \$250 billion or 7 percent of the total U.S. retail market, and is growing at four times the rate of traditional brick and mortar retail trade. In addition, almost \$1 trillion in retail trade is what is considered “online” influenced retail trade, or in store purchases made after researching a product or retail location online.

### COMMITTEE CONSENSUS:

#### BROADBAND AND INTERNET TECHNOLOGY ECONOMIC DEVELOPMENT OPPORTUNITIES

- Expansion of Internet Technology support services (web design, computer software, information systems, computer hardware, programming, database services)
- Expansion of computer and telecommunications repair services
- Expansion of networking services (personal and home networks, local area networks, storage networks, campus and institutional networks, server farms and public safety networks)
- Expansion of professional services (home based professionals and firms)
- On-line sales and marketing (retail, recreation and value added agriculture)

The committee identified significant opportunity to expand e-commerce in the eastern Sierra. The U.S. Department of Agriculture Rural Development Agency and the U.S. Department of Commerce have extensive e-commerce training resources targeted specifically to rural areas. These services are provided in the eastern Sierra through the California Small Business Development Centers linked to the University of California system.

The committee recognized that e-commerce is a significantly different sales and promotion medium; one that most eastside businesses and community assets are not familiar with. E-commerce often blends retail sales and direct marketing and requires a specific infrastructure and new techniques to be successful.

The committee also recognized that the eastern Sierra represents a niche market, that techniques applicable to retail e-commerce giants, such as Amazon and Google, are not necessarily relevant to their region.

### **The committee’s recommendations toward developing an e-commerce strategy include:**

- Conduct an e-commerce assessment, linked to the inventory of infrastructure and technology assessments mentioned above, to identify business and community asset needs
- Develop a specific regional training partnership program with state and federal agencies geared to speeding adoption of e-commerce as a business development strategy

- Provide targeted e-commerce development training including the following elements:
- Assess business/community asset for e-commerce opportunities
- Regional, state and national co-marketing opportunities
- Regional, national and international market analysis (with focus on value added, supply

### **COMMITTEE CONSENSUS:** **BROADBAND AND INTERNET TECHNOLOGY ECONOMIC DEVELOPMENT STRATEGIES**

- Conduct an inventory of existing infrastructure and services utilizing data already available from the Digital 395 Project and service providers
- Prepare the market by conducting surveys of infrastructure and services desired by residential and business customers
- Include installation of conduit as part of all local government and institutional capital improvement programs
- Install “off ramps” or access points in all eastern Sierra communities and rural centers
- Require new commercial development to install Fiber-to-The-Premises (FTTP) backbone
- Work with residential centers to aggregate demand for FTTP

chain and tourism development as export products)

- Develop a regional tool kit to assist with market analysis
- Provide Search Engine Optimization assistance
- Improve Business systems
  - \* Shipping/drop shipping
  - \* Shopping cart/payment methods
  - \* Business Accounting
  - \* Security
  - \* Website development
- Incorporate e-commerce in business planning
- Improve emergency preparedness
- Link e-commerce to other regional and state clusters of development strategies (specifically the clusters addressing tourism, hospitality and the arts, recreation and value added agriculture)
- Improve and deploy social media tools
- Incorporate e-commerce into business planning
- Develop affiliate marketing tools
- Manage and improve customer service (both online and brick-and-mortar)
- Develop a local capital pool for investment in deployment of e-commerce strategies in businesses and community assets through local banking institutions, social sector organizations and private retail and institutional investors
- Develop a specific set of metrics to measure and evaluate progress and adaptively manage deployment of an e-commerce strategy,

# PROSPERITY CLUSTERS

## *Leveraging Internet Technology and Broadband Access: Enhancing Broadband Access*

potentially including the following:

- \* Broadband adoption percentage of businesses and residential units
- \* Number of businesses surveyed
- \* Number of businesses visited (tracking mechanism)
- \* Number of orders or contacts processed
- \* Percentage of total revenue
- \* Number of jobs created
- \* Average salary of jobs created
- \* Number of retained businesses
- \* Average median income of sole proprietorships
- \* Return on investment for investors

The committee also identified the expansion of broadband access as a key economic development tool to enhance business retention and expansion.

The average community derives 76 percent of new jobs and capital investment from existing businesses, and only 24 percent from business attraction and entrepreneurship. In rural communities the contribution of existing businesses is often higher because attraction and entrepreneurial activities contribute less (Iowa Dept. Econ. Dev., 2007).

### **Specific strategies identified by the committee to enhance broadband access include:**

- Use online surveys to understand how businesses currently use technology
- Provide regular technology training programs for business staff and owners
- Make a wide range of business training and networking programs available online

- Create online Business to Business (B2B) and Business to Consumer (B2C) networks
- Leverage B2B networks to reduce costs by electronically integrating supply chains, expand markets, enhance collaboration and reduce leakage
- Adapt existing business assistance programs (such as those available through the Small Business Development Centers) to support technology investments and technology adaptive companies
- Provide specific online training to improve customer service

Funding the deployment of a regional e-commerce strategy will likely be a significant challenge. To develop regional economic development strategies, and potentially pay for portions of the infrastructure necessary, some funds are available through grant programs from the U.S. Department of Commerce through the Economic Development Administration, or the U.S. Department of



Agriculture through the Rural Business Opportunity Grant/Loan Programs.

Since this is a strategy that assists both public and private entities with economic development activities, development of an e-commerce program would qualify for investment from local government through the Community Development Block Grant program. In such a program investment, much of the revenue invested would come back in the form of increased sales tax revenue.

Resources for individual businesses and community assets seeking to adopt e-commerce will likely require a combination of funding strategies. One source of funds could be the USDA Intermediary Relending Program, which provides funds to local public or private entities (intermediaries) for the establishment of revolving loan programs. These funds could be made available on a competitive or award-driven basis and be utilized to develop a set of best practices or case studies demonstrating successful deployment of broadband technologies. Another potential source of funding is through the California Enterprise Zone (EZ) Tax Credit Program.

Designated Enterprise Zones provide tax incentives, including hiring incentives, the ability to carry forward operating losses, tax credits for the purchase of equipment, interest deductions, and preferential treatment to businesses for state contracts to allow for private sector investment to revive local economies. Although the program is currently undergoing revision and EZs must

be authorized by the state legislature, no California community has created an EZ with a focus on leveraging the installation of broadband technologies.

This would likely be a high profile opportunity to link to emerging state economic development strategies heavily focused on the deployment of broadband technologies. Utilizing local banks to create a micro-lending program may also be successful on the east side. Since these are generally small loans with a low failure rate they should be attractive to local lenders.

Finally, the most likely source of capital for local businesses will be individual investment by individual businesses and community assets. The purpose of the training programs should be to streamline the private development process for those participating, reduce costs by aggregating services, and provide clear metrics to demonstrate both potential and real returns on investment to speed adoption of new technologies.

# PROSPERITY CLUSTERS

## *Leveraging Internet Technology and Broadband Access: Committee Recommendations*

### COMMITTEE RECOMMENDATIONS:

#### LEVERAGING BROADBAND AND INTERNET TECHNOLOGY

- Conduct an e-commerce assessment, linked to the inventory of infrastructure and technology assessments targeted as a strategy, to identify business and community asset needs
- Develop a specific regional training partnership program with state and federal agencies geared to speeding adoption of e-commerce as a business development strategy
- Provide targeted e-commerce development training including the following elements:
  - Assess business/community assets for e-commerce opportunities
  - Seize regional, state and national co-marketing opportunities
  - Conduct a regional, national and international market analysis (with focus on value added, supply chain and tourism development as export products)
  - Develop a regional tool kit to assist with market analysis
  - Assist with search engine optimization
  - Improve Business systems
    - \* Shipping/drop shipping
    - \* Shopping cart/payment methods
    - \* Business Accounting
    - \* Security
    - \* Website development
- Incorporate e-commerce in business planning
- Optimize regional emergency preparedness
- Link e-commerce to other regional and state clusters of development (specifically the clusters addressing tourism, hospitality and the arts, recreation and value added agriculture)
- Improve and deploy social media tools
- Incorporate e-commerce into business planning
- Develop affiliate marketing tools
- Manage and improve customer service (both online and brick-and-mortar)
- Develop a local capital pool for investment in deployment of e-commerce strategies in businesses and community assets through local banking institutions, social sector organizations and private retail and institutional investors
- Develop a specific set of metrics to measure

## COMMITTEE RECOMMENDATIONS:

### BROADBAND AND INTERNET TECHNOLOGY METRICS AND MEASURING SUCCESS

and evaluate progress and adaptively manage deployment of an e-commerce strategy. These metrics might potentially including the following:

- \* Broadband adoption percentage of businesses and residential units
- \* Number of businesses surveyed
- \* Number of businesses visited (tracking mechanism)
- \* Number of orders or contacts processed
- \* Percentage of total revenue
- \* Number of jobs created
- \* Average salary of jobs created
- \* Number of retained businesses
- \* Average median income of sole proprietorships
- \* Return on investment for investors

## COMMITTEE RECOMMENDATIONS:

### STRATEGIES TO ENHANCE ACCESS TO BROADBAND

- Use online surveys to understand how businesses currently use technology
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- Create online Business to Business (B2B) and Business to Consumer (B2C) networks
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- Adapt existing business assistance programs (such as those available through the Small Business Development Centers) to support technology investments and technology adaptive companies
- Provide specific online training to improve customer service

## PROSPERITY CLUSTERS: CASE STUDY

### *Leveraging Internet Technology and Broadband Access: Clear Capital*

#### CLEAR CAPITAL TRUCKEE, CALIFORNIA

Clear Capital has developed technologies that enable it to provide vital services and products to the real estate industry. These products include residential appraisal, broker price opinions, home data index information, property condition inspections, and value reconciliations.

Clear Capital has two locations: one in Truckee and one in Roseville, and employs more than 150 people in its Truckee office, drawing from Reno, Carson City, the North Shore of Lake Tahoe, and the Town of Truckee. Co-founders Duane Andrews and Kevin Marshall say they created Clear Capital® because they liked making peoples' lives better. They also really liked technology. But in addition to really liking technology they love the outdoors, the recreation and sporting opportunities afforded by the Sierra Nevada, and the attraction of raising their families in a rural, amenity rich environment.

In 2000, they started their first venture, REONetwork.com — an online directory that brought together a community of like-minded brokers and asset managers — and still does today. Through REONetwork.com, Andrews and Marshall built strong, mutually beneficial relationships with banks and loan servicers across the country. Through these relationships, they saw that the Broker Price Opinion (BPO) fulfillment process needed a breath of fresh air. In 2001, they co-founded

BPOTracker.com — a new company that focused on providing reliable BPO outsourcing services. In 2004, they changed the company name to ClearCapital.com, Inc. to better reflect the broad range of valuation products and solutions they provided that today includes Appraisals, BPOs, Home Data Indexes, Property Condition Reports and Value Reconciliations.

The company offers a number of highly-skilled job opportunities in financial planning and management, applications development, graphic design, communications, quality assurance and numerous other technology driven career paths, in addition to their core business of BPOs and appraisals.

Andrews and Marshall have been very forthcoming about why they are in a rural community. Access to high-speed data networks has allowed them to work in the region. Access to passenger air service has allowed them to travel to meet clients and investors at will. Access to the quality of life in the region has brought access to highly skilled workers from both within and out of the area. And the high quality of life and recreational access in the region has improved metrics on employee retention and reduced business costs. In exchange, the Truckee community has benefited greatly, not just from increased business activity and tax revenue, but from engagement of Clear Capital's highly skilled staff in the social fabric of the community through service in social sector organizations like the Chamber of Commerce and regional nonprofits.



*photo by Vickie Taton*

### MEETING CALIFORNIA'S RENEWABLE ENERGY STANDARD

With a population of more than 36 million people and the ninth largest economy in the world, California has faced tremendous challenges meeting its energy needs. With carbon-based fuels facing persistent issues of inconsistent supply, dramatic fluctuations in pricing, sensitivity to global competition, and even market manipulation, California has experienced all of the ups and downs of a volatile market in the last two decades. California already leads the nation in energy efficiency and in electricity generation from non-hydroelectric renewable energy sources, including geothermal power, wind power, biomass power, and solar power.

California is a global powerhouse for renewable energy research and development, with

a very strong track record for moving from innovation to commercialization. California's and the east side of the Sierra Nevada's rich resource base, and its early and sustained support for the renewable energy industry, has been successful in attracting and incubating leading renewable energy companies which has in turn created thousands of high quality jobs.

Over 80 percent of U.S. geothermal electric capacity is located in California. Eight of the state's 25 known geothermal resource areas are either in or adjacent to the eastern Sierra region. Already more than 2,500 MW of geothermal electrical generation are on-line in California and the National Renewable Energy Laboratory estimates that there is at least 4,000 MW of additional capacity in the state.

# PROSPERITY CLUSTERS

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## *Meeting California's Renewable Energy Standard: Policy Drivers*

California also has the largest market for solar photovoltaic applications in the country with more than 8,500 MW of solar installed and many hundreds of MW coming on-line every year. The eastern Sierra has many of the state's most desirable solar resource areas and wind resource areas.

However, renewable energy development and transmission in the eastern Sierra can be a double-edged sword. A variety of large-scale projects have been proposed over the years, and local residents are concerned about whether potential long term environmental impacts, and impacts on the recreation economy, have been adequately addressed. In the rush to capture the benefits of renewable energy development often the impacts can be overlooked.

The committee recognized that renewable energy development, and associated transmission, was a tremendous opportunity for strengthening existing industries, new job growth, creating career pathways, local tax revenue generation and promoting sustainable economic development.

Due to the proximity of renewable energy resource areas in surrounding jurisdictions, particularly the Mohave Desert and Kern Plateau, opportunities to partner with neighboring jurisdictions to jointly plan for and capture benefits from renewable energy exist. In short, by extending those adjacent clusters into a similar landscape like Inyo and Mono Counties, benefit can be captured with a lower level of investment and effort.

## POLICY DRIVERS

### RENEWABLE PORTFOLIO STANDARD (RPS):

California's RPS required electric utilities to increase procurement from eligible renewable energy resources by 1 percent of their retail sales annually, until they reached 20 percent by the end of 2010. In 2009, Governor Schwarzenegger issued an executive order increasing the standard to 33 percent by 2020. Governor Brown subsequently extended the RPS executive order.

### RENEWABLE ENERGY CREDITS (RECs):

Renewable energy credits (RECs) are used to demonstrate compliance with state RPS policies. In March 2010, the California Public Utilities Commission (CPUC) ruled that utilities may use unbundled or tradable RECs (TRECs), i.e. using generation sources other than those they own to meet up to 25 percent of their RPS requirement.

The penalty for not meeting annual procurement targets on time is five cents per kWh, capped at \$25 million per utility per year. The REC's represent a powerful incentive to encourage renewable development, and create a commodity that can be thought of as an export product if they are used to assist out-of-region utilities to meet the RPS.

### NET METERING AND INTERCONNECTION:

California's net metering law requires all utilities to provide net metering for solar and

## PROSPERITY CLUSTERS

*Meeting California's Renewable Energy Standard: Policy Drivers*



*photo by Vickie Taton*

wind energy systems up to 1 MW, until the utility meets 5 percent of its customer peak demand.

Net metering, or the sales of excess electricity generated on-site by customers, provides a powerful incentive for the development of distributed, or on-site, generation.

Investor-owned utilities are also required to

offer net metering for fuel cells and for biogas digesters up to 10 MW. After 12 months, customers have the option of rolling over net excess generation (NEG) month-to-month indefinitely or they can receive financial compensation from their utility for the remaining excess generation. The customer retains ownership of RECs.

In 2009, California became one of the first

## PROSPERITY CLUSTERS

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### *Meeting California's Renewable Energy Standard: Policy Drivers*

states to allow virtual net metering for multi-family affordable housing units and municipalities. California's interconnection standards apply to distributed generation systems up to 10 MW in capacity, with simplified rules for small renewable energy systems under 10 kW. Netmetered systems up to 1 MW are exempt from paying costs associated with interconnection studies.

#### CALIFORNIA SOLAR INITIATIVE (CSI):

In 2006, the CSI program was created to provide more than \$3.2 billion over 10 years in on-site, grid-connected solar energy used by customers in the territories of the state's three investor-owned utilities (IOUs) and several municipal utilities.

Most of the eastern Sierra is within the territory of Southern California Edison, one of these three IOUs. Portions of Mono County are within the territory of Liberty Energy, which will be required to comply with similar rules. The program has a goal of reaching 3,000 MW of installed capacity by 2016.

CSI offers two types of incentives for solar PV on existing homes and nonresidential buildings: an Expected Performance-Based Buydown (EPBB) for systems under 30 kW, at \$2.50/W (adjusted for system performance) for residential and commercial systems and \$3.25/W for government entities and non-profits; or Performance-Based Incentive (PBI) payments for systems over 30 kW, offered over a period of five years at \$0.39/kWh for taxable entities and \$0.50/kWh for

government and nonprofit entities.

Systems lower than 30 kW may opt for either the PBI or an EPBB. CSI also offers rebates for solar water heating systems, for \$12.82 per therm of natural gas displaced or \$0.37 per estimated kWh of electricity displaced.

The maximum incentive is \$1,875 for single-family residential systems and \$500,000 for commercial and multifamily residential systems.

The CSI program is funded by electric ratepayers and the CSI-Thermal portion of the program is funded by gas ratepayers.

The program budget is \$350 million, but is anticipated to increase as ratepayer funding expands. The program has separate budgets and administration plans for its low-income single and multi-family programs.

#### OTHER REBATE PROGRAMS:

The CPUC is funding a number of additional rebate or incentive programs, designed in a series of three-year cycles, intended to drive innovation and adoption of energy efficiency or renewable generation.

Several eastern Sierra jurisdictions are already participating in these programs through the Energy Leadership Partnership with Southern California Edison designed to promote energy efficiency in municipal

facilities. Each of these new cycles represents an opportunity to design and support an energy efficiency strategy specific to the eastern Sierra.

The Emerging Renewables Program offers cash incentives of \$3/W to promote the installation of grid-connected small wind and fuel cell electric generating systems. The New Solar Homes Partnership provides incentives for solar on new home construction for customers in IOU service territories, which vary by customer class and system performance. The Self-Generation Incentive Program offers incentives to customers who produce electricity with wind turbines and fuel cells ranging from \$1.50/W - \$4.50/W, depending on type. An additional 20 percent is awarded to projects that utilize systems manufactured in California. Incentive payment is capped at 3 MW, and projects over 1 MW receive reduced rates after the first megawatt.

#### **Feed-in Tariff:**

In 2006, California passed a feed-in tariff law (FIT) that would require IOUs to provide payments to small-scale renewable energy projects up to 1.5 MW in capacity. Additional FIT laws were passed in 2009 and 2011. The FIT rules allow eligible customer-generators to enter into 10-, 15-, or 20-year standard contracts with their utilities to sell the electricity produced by small renewable energy systems at market based prices.

The 2009 program expanded the original FIT to include all publicly-owned utilities (POUs)

that have 75,000 or more customers until the statewide POU cumulative capacity equals 250 MW, for a total program capacity of 750 MW. The eligible project size was increased to 3 MW. The 2011 law created additional pricing incentives. To further incentivize investments by self-generators, the CPUC passed the Renewable Auction Mechanism (RAM) program, which would require California's three IOUs to purchase electricity from renewable energy systems up to 20 MW in size within their service territories.

For the initial part of the program, each utility is authorized to acquire up to 1 GW, with each utility allocated a portion of the 1 GW cap. Competitive auctions are to be held twice a year for two years, for 250 MW each. Although FITs are not available to customers who have participated in the California Solar Initiative or other ratepayer-funded generation incentive programs, the existence of the FIT allows customers more flexibility in how they finance generation installation.

#### **Public Benefit Fund:**

California's three major IOUs collect a "public goods surcharge" on ratepayer electricity.

This charge established funds for renewable energy (\$540 million); energy efficiency (\$872 million); and research, development & demonstration projects (RD&D) (\$62.5 million).

The law authorizing these funds was up for renewal in 2010 and failed to pass the

# PROSPERITY CLUSTERS

## *Meeting California's Renewable Energy Standard: Committee Recommendations*

legislature. Subsequently, the California Attorney General's office ruled that the CPUC and the California Energy Commission retain authority to continue to collect the surcharge and authorize programs to meet program goals.

The CPUC is in the process of defining these programs for future rounds of funding, but the consensus opinion is that funds will continue to go to renewable incentive, energy efficiency, and research and development projects.

There has been widespread speculation that the new programs would also include an extensive On Bill Repayment program, allowing customers to finance energy efficiency or renewable installations through future savings on their utility bills. Several successful utility run OBR programs already exist.

One of the under-utilized programs available on the east side that is funded through the Public Benefit Fund is Energy Upgrade California, which provides up to \$4,000 per qualified single-family detached homeowner for upgrades to electrical, HVAC, insulation, hot water, and water systems.

### **Tax Incentives:**

California provides a full exemption from the state's sales and use tax for expenses relating to the industrial design, manufacture, production, or assembly of renewable energy equipment. California provides full property tax exclusion for solar electric and thermal

systems, or for 75 percent of the system's value for dual use equipment.

This is just a sampling of the policy drivers in the renewable energy and generation field. Committee recommendations were based on the understanding that this area of economic development is one of the most rapidly changing and an adaptive strategy designed to rapidly changing markets and incentives is necessary.

### **COMMITTEE RECOMMENDATIONS**

The committee identified strategic, targeted investments in renewable energy as another significant ongoing economic development opportunity in the region.

#### **COMMITTEE CONSENSUS:**

#### **STATE RENEWABLE ENERGY STANDARDS ECONOMIC DEVELOPMENT OPPORTUNITIES**

- Focus on small scale energy efficiency and renewable energy installation
- Focus on growing a distributed generation strategy for the region
- Focus on expanding existing facilities
- Focus on long range planning and leadership development
- Focus on linking a trained workforce to new opportunities

Because large scale energy facility installation often involves long, complicated state and federal licensing processes requiring a higher level of environmental review (as exemplified by the development of the Desert Renewable Energy Conservation Plan which touches portion of this region), the committee elected to focus its attention on smaller scale renewable energy and energy efficiency goals, and the retention and expansion of existing or planned facilities. The committee feels strongly that utility scale renewable energy production should not be ignored. It is simply beyond the scope of this effort.

Interviews with committee members and community leaders identified and prioritized the following five economic development opportunities in the region related to meeting California's renewable energy goals:

- Focus on small scale energy efficiency and renewable energy installation
- Focus on growing a distributed generation strategy for the region
- Focus on expanding existing facilities
- Focus on long range planning and leadership development
- Focus on linking a trained workforce to new opportunities

Due to the existence of numerous state and federal programs to address energy efficiency and renewable generation, and the finding that many of these programs are under-

utilized or unavailable on the east side of the Sierra, the committee elected to expand its focus on small scale energy efficiency and renewable energy installation.

*Distributed generation is a method of generating electricity from multiple small energy sources very near to where the electricity is actually used.*

**Committee recommendations include:**

- Expand availability of the Energy Upgrade California Program through partnerships with existing utilities
- Expand existing On Bill Repayment services available in other Southern California Edison areas to the east side
- Create On Bill Repayment system available through Liberty Energy
- Expand availability of services covered under the Energy Leadership Program to include whole building retrofits and large scale upgrades to municipal facilities
- Create an expanded regional Local Government Partnership program funded through CPUC Public Benefit Funds to focus on whole building retrofits for commercial and multi-family residential facilities
- Secure commitment from Liberty Energy to expand energy efficiency service to match services available in the Energy Leadership Program and Local Government Partnership in northern Mono County

# PROSPERITY CLUSTERS

## *Meeting California's Renewable Energy Standard: Committee Recommendations*

- Develop a regional marketing plan to promote the California Solar Initiative focused on linking residential and business customers to private sector financing for installation through lease back or buy back programs or On Bill Repayment mechanisms
- Develop a regional public education program regarding Feed In Tariff payments as an alternative financing mechanism
- Link to statewide smart meter demand response programs to give local businesses the ability to meter use and receive incentive

payments for reducing use during peak times.

### DISTRIBUTED GENERATION

Distributed generation is a method of generating electricity from multiple small energy sources very near to where the electricity is actually used. Examples of sources might include a municipal building's solar array, a resort's ground source heating system or a small farm's windmill. These sources are aggregated and connected through the transmission grid.

#### COMMITTEE RECOMMENDATIONS:

##### MEETING CALIFORNIA'S RENEWABLE ENERGY STANDARD

- Expand availability of the Energy Upgrade California Program through partnerships with existing utilities
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- Create an expanded regional Local Government Partnership program funded through CPUC Public Benefit Funds to focus on whole building retrofits for commercial and multi-family residential facilities
- Secure commitment from Liberty Energy to expand energy efficiency service to match services available in the Energy Leadership Program and Local Government Partnership in northern Mono County
- Develop a regional marketing plan to promote the California Solar Initiative focused on linking residential and business customers to private sector financing for installation through lease back or buy back programs or On-Bill Repayment mechanisms
- Develop a regional public education program regarding Feed In Tariff payments as an alternative financing mechanism
- Link to state-wide smart meter driven demand response programs to give local businesses the ability to meter use and receive incentive payments for reducing use during peak times

Many people think of distributed generation as the Internet of electricity, giving users and generators the ability to share electricity as part of a local network. Due to the highly favorable conditions on the east side for small-scale energy generation through geothermal installation, photovoltaic cells, and small wind turbines, and the existence of utility scale renewable facilities, the east side is a prime candidate for distributed generation.

Distributed generation offers a softer path to

energy independence and economic development on the east side, where some smart installation of utility scale generation for export can be blended with small scale generation, allowing the self generators to share in the proceeds from energy export.

The State of California already encourages ownership of electric generating facilities by independent energy producers as a statewide strategy to expand distributed generation. Under the Public Utilities Regulatory Policy

## COMMITTEE RECOMMENDATIONS:

### DISTRIBUTED GENERATION STRATEGIES

- Develop a regional distributed energy generation plan that envisions access to the market for both PURPA qualified and small scale residential and commercial generators
- Pursue collaboration with state agencies advancing the State of California Distributed Generation Strategic Plan
- Set a time-specific regional distributed energy generation goal
- Reduce barriers to distributed generation by working with utilities to adopt uniform technical standards for accessing the grid
- Reduce barriers to distributed generation by working with utilities to adopt standard commercial practices for review of interconnection
- Reduce barriers to distributed generation by developing building codes that speed adoption of interconnection
- Reduce barriers to distributed generation by establishing specific streamlined environmental review processes, utilizing best practices from the Urban Consortium Task Force, for distributed generation facilities with a specific focus on emission controls and transmission location
- Work with the Renewable Energy Transmission Initiative to understand the limits to the level of power the grid can absorb without adverse impacts
- Seek funding for research, development, and demonstration programs to advance the development and deployment of distributed generation technologies

# PROSPERITY CLUSTERS

## *Meeting California's Renewable Energy Standard: Committee Recommendations*

Act (PURPA), California guarantees a market for electricity from qualified facilities, such as the Mammoth Pacific facilities in Mono County and the Coso Geothermal Power Plant in Inyo County.

### **The committee elected to focus on growing a distributed generation strategy for the region by encouraging the following actions:**

- Develop a regional distributed energy generation plan that envisions access to the market for both PURPA qualified and small scale residential and commercial generators
- Pursue collaboration with state agencies advancing the State of California Distributed Generation Strategic Plan
- Set a time-specific regional distributed energy generation goal
- Reduce barriers to distributed generation by working with utilities to adopt uniform technical standards for accessing the grid
- Reduce barriers to distributed generation by working with utilities to adopt standard commercial practices for review of interconnection
- Reduce barriers to distributed generation by developing building codes that speed adoption of interconnection
- Reduce barriers to distributed generation by establishing specific streamlined environmental review processes, utilizing best practices from the Urban Consortium Task Force, for distributed generation facilities with a specific focus on emission controls and transmission location

- Work with the Renewable Energy Transmission Initiative to understand the limits to the level of power the grid can absorb without adverse impacts
- Seek funding for research, development, and demonstration programs to advance the development and deployment of distributed generation technologies.

The committee further found that substantial wind, solar and geothermal resources are present throughout Inyo and Mono Counties, and substantial opportunity for expansion of existing facilities exists. Existing transmission facilities through the counties provide some capacity to convey power generated locally to population centers throughout California and the west. However transmission capacity may not be sufficient for expanded production.

Access to the California Independent System Operators network also exists, giving power generated in the region access to Community

### **COMMITTEE RECOMMENDATIONS: LONG RANGE PLANNING AND ENERGY POLICY**

- Target leadership development training for local government leaders, nongovernmental organizations, business leaders and environmental leaders to focus on energy policy and energy economic development opportunities
- Coordinate development of a regional Climate Action Plan

Choice Aggregators across the state, thus allowing access to more favorable pricing opportunities. However, efforts to advance general plan amendments to specifically plan for expansion of existing or new facilities has been held up by lack of environmental review.

**The committee recommends the following actions:**

- Develop a strategy to advance approval of an amended or redesigned Inyo County Solar and Wind Renewable Energy General Plan amendment
- Coordinate efforts to seek funding for an Environmental Impact Report for a Solar and Wind Renewable Energy General Plan amendment
- Develop strategies to coordinate development of a similar general plan amendment in Mono County

One of the key tools deployed in California for long range planning in adapting to climate change is the development of regional Climate Action Plans. Climate Action Plans include components that describe existing conditions regarding greenhouse gas emissions, specific climate action strategies, implementation strategies, mitigation strategies, and actions to increase awareness of climate issues. Although a Climate Action Plan is not statutorily required in the eastern Sierra, opportunities for substantial state funding are enhanced with the adoption of such a plan.

The committee further recognized that one barrier to advancing renewable energy

economic development strategies is a lack of long range planning and informed leadership in the region regarding energy policy. The committee recommended the following actions:

- Targeted leadership development training for local government leaders, nongovernmental organizations, business leaders and environmental leaders, focusing on energy policy and economic development.
- Coordination of the development of a regional Climate Action Plan

Finally the committee recognized that all of these efforts represent a significant opportunity to leverage and expand existing vocational education and workforce development programs, or create new programs, to increase opportunities for a skilled workforce.

**COMMITTEE RECOMMENDATIONS:  
DISTRIBUTED GENERATION STRATEGIES &  
REGULATORY POLICY**

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- Coordinate efforts to seek funding for an Environmental Impact Report for a Solar and Wind Renewable Energy General Plan amendment
- Develop strategies to coordinate development of a similar general plan amendment in Mono County

# PROSPERITY CLUSTERS

## *Meeting California's Renewable Energy Standard: Metrics and Measuring Success*

The renewable energy cluster in the eastern Sierra is well concentrated but interviews with energy companies indicate that a substantial portion of the new hires come from out of the region because it is difficult to find skilled workers, particularly mechanical engineers, skilled laborers and skilled mechanics.

### **The committee recommends the following actions:**

- Expand energy related vocational education training at the community college level with a primary focus in four specific areas:
  - \* Energy efficiency technologies and installation to drive cost savings to local businesses and residents
  - \* Green building technologies and installation to facilitate re-entry of idled workers in the construction workforce
  - \* Geothermal and solar power technologies and installation to leverage small scale and utility scale regional opportunities
  - \* Customized training programs in partnership with local businesses to meet specific needs
- Expand partnerships with Workforce Investment Boards on the Green Building and Clean Energy Pre-Apprenticeship Program
- Actively recruit new partnerships with organized labor to expand apprenticeship training programs and streamline the assimilation of pre-trained workers into union programs
- Create a regional online renewable energy internship program linking local businesses with students at colleges and universities specializing in renewable energy, including the University of Nevada at Reno, the University of Oregon, Stanford University, and the

### **COMMITTEE RECOMMENDATIONS:**

#### **MEETING CALIFORNIA'S RENEWABLE ENERGY STANDARD — METRICS AND MEASURING SUCCESS**

- Number of businesses, municipal facilities and community assets served by energy efficiency programs
- Number of businesses, municipal facilities and community assets served by On Bill Repayment programs
- Number of businesses or residential customers served by Energy Upgrade California
- Number of residential and commercial solar installations
- kWh electricity
- Number of jobs created
- Average salary of jobs created
- Financial contribution or avoided energy costs to local businesses
- Reduction in per capital greenhouse gas emissions
- Number of potential employees trained
- Actual number of employees placed
- Average median income of employees placed



*photo by Vickie Taton*

University of California and California State University programs.

**The committee also recommends developing a specific set of metrics to measure and evaluate progress and adaptively manage deployment of a renewable energy strategy, potentially to include the following:**

- Number of businesses, municipal facilities and community assets served by energy efficiency programs
- Number of businesses, municipal facilities and community assets served by On Bill Repayment programs
- Number of businesses or residential customers served by Energy Upgrade California
- Number of residential and commercial solar installations
- kWh electricity comparisons
- Number of jobs created
- Average salary of jobs created
- Financial contribution or avoided energy costs to local businesses
- Reduction in per capita greenhouse gas emissions
- Number of potential employees trained
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## PROSPERITY CLUSTERS: CASE STUDY

*Meeting California's Renewable Energy Standard: Fowler, Colorado*

### TOWN OF FOWLER FOWLER, COLORADO

The Town of Fowler is located in the Lower Arkansas River Valley in southeastern Colorado. The town of 1,200 has coined itself “Community Powered,” exemplified by the community’s goal of energy independence by taking advantage of the region’s wind, solar, and biomass resources while maintaining a strong culture of land stewardship.

In early 2009, the community of Fowler adopted the Rocky Mountain Land Use Plan to outline the community’s vision for future growth. As stated in the plan, a major part of Fowler’s goal is to stabilize, reduce, and ultimately eliminate utility rates.

Town leaders have so far been able to reduce and stabilize utility rates by providing ample opportunity for discussion and by enabling relationship building between national labs, equipment developers, local universities, the community, utility providers, local government, state government, federal agencies and private developers. At a cost of \$1.2 million, Denver-based VibrantSolar installed seven solar panel arrays on different municipal sites in Fowler and sells the electricity generated back to Fowler at half the rate of the current utility (about 15 cents per kilowatt hour).



*Photo by Anthony A. Mestas — The Pueblo Chieftain*

While plans to install an additional 2 MW solar array south of town are still in the town’s sights, the town delayed moving forward when state incentives that would have helped offset costs were eliminated. When the 2MW system is installed, Fowler officials expect an electricity rate closer to six cents per kilowatt hour.

Officials and residents in Fowler are also working toward building a regional anaerobic digester to produce methane gas as a source of energy. In Fowler, cattle far outnumber humans: Fowler’s thriving ranching industry produces 2,400 tons of cow manure daily. The planned digester will provide aesthetic, economic and environmental benefits throughout the community.



*photo by Vickie Taton*

### FINDING NICHES IN TOURISM, HOSPITALITY AND THE ARTS

Rapid growth in the tourism industry worldwide and within the United States has created the possibility for economic growth in regions that often have few assets to trade in a global economy. Review by the committee of North American Industry Classification Codes for the region indicate that the tourism,

hospitality and the arts are already among the strongest industry clusters in the eastern Sierra region, representing the number one and two industries in Mono County and Inyo County respectively. This activity comes primarily from the sales of restaurant food, accommodations, fuel, and retail food store sales. A significant portion of revenue also comes from ski lift ticket sales.

Tourism, hospitality and arts based clusters

## PROSPERITY CLUSTERS

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### *Finding Niches in Tourism, Hospitality and the Arts*

are subject to the same development principles as other clusters, that is the creation of a virtual cycle, where investments in one area amplify investments in other areas. However, there are some notable distinctions.

Consumers of tourism, hospitality and the arts must first come to the region where tourism related goods and services are provided, which means the development of a strategy needs to focus on competing effectively against other similar regions offering similar amenities. In addition, because of the diversity of tourism products there are important established intermediaries — local visitors bureaus, chambers of commerce, local/regional/state and national tourism promotion programs, tour operators, sales agents, and air carriers — that guide visitors to desirable locations.

Just as the appetite for tourism in the United States is expanding rapidly these distribution systems are undergoing significant and disruptive transformations, with more and more people planning their own trips, using online travel planning tools, and doing self-guided tours. The export portion of the tourism, hospitality and arts cluster also consists of a wider variety of both products and experiences than other clusters. Unlike conventional industry clusters that are defined by a specific product, this cluster offers a mix of tangible (places) and intangible (experiences) that are often interdependent and aggregate together to create a unique feeling about a place in the consumer. The ability to clearly define



*photo by Vickie Taton*

the product is sometimes difficult when the product combines visiting a historic site, bicycling through a forest, eating a meal of local agricultural products and attending live music under the stars. The eastern Sierra has benefited greatly from this blend of the tangible and intangible, but is also susceptible to subtle changes in the blend of the two.

The eastern Sierra is uniquely situated to expand in this cluster because it already has a strong infrastructure in place for tourism, hospitality and the arts. Local governments, institutional and federal partners understand and have made key investments in the physical infrastructure including roads, airports, water and sewage systems, parking and way finding plans, and event venues to meet the region's needs. A strong marketing infrastructure is in place through regional tourism promotion organizations, hotel and resort associations, travel agencies and expositions, and

## PROSPERITY CLUSTERS

### *Finding Niches in Tourism, Hospitality and the Arts*

joint marketing plans with state and national organizations. There is a strong base of local suppliers, a wide variety of experiences, and no shortage of destinations on the east side.

The committee also recognized a growing interest among visitors in local cultural and artistic amenities, including native American history, local crafts, and the performing arts. Arts based strategies are particularly attractive because they have the potential to both attract outside dollars and alter local

consumption patterns toward local products, in effect creating a double benefit by reducing leakage.

This tourism, hospitality and arts cluster is also uniquely situated to leverage the changes anticipated in several other clusters identified here. The development of widespread broadband access creates the opportunity to connect tourism, hospitality and arts based assets to the B2B (business-to-business) and B2C (business-to-consumer) networks,



*photo by Vickie Taton*

# PROSPERITY CLUSTERS

## *Finding Niches in Tourism, Hospitality and the Arts: Committee Recommendations*

engage in new training opportunities, link to social networks and engage in new inbound marketing strategies that attract prospective customers by offering useful information. The development of value added agricultural products creates new opportunities for experiences like farm stays or ranch tours, protects the places that people travel to, and creates local products for the table. The development of niche recreation, extreme recreation, and recreation accessible to diverse ability levels — all strategies postulated

here — builds the market for hospitality and tourism based sales.

### COMMITTEE RECOMMENDATIONS

**Interviews with committee members and community leaders identified and prioritized the following economic development opportunities in the region related to the expansion of tourism, hospitality and the arts:**

#### COMMITTEE CONSENSUS:

##### TOURISM, HOSPITALITY & THE ARTS ECONOMIC DEVELOPMENT OPPORTUNITIES

###### DEVELOP WEB BASED MEDIA AND MARKETING TOOLS TO EXPAND VISIBILITY AND ACCESS TO LOCAL ASSETS AND THE ARTS

- Create a regional marketing and branding plan for the eastern Sierra that aggregates plans from local entities
- Focus on creation and strengthening of an “identity brand” for the eastern Sierra that can be implemented by all stakeholders
- Focus on an inbound marketing strategy that electronically aggregates data on people interested in the region by sharing information and access to the region through, disseminating games, contests, itineraries, stories, etc.
- Create and implement a collaboratively designed set of social media based outreach tools that encourages engagement through multiple information sources and services

- Link social media and other marketing tools to existing local, state and national branded efforts such as the Sierra Nevada Geotourism Project the Visit California platform, and the U.S. Department of Commerce Office of Travel and Tourism Industries
- Develop an eastern Sierra specific set of mobile and handheld applications and maps
- Create a regional staffed Destination Marketing Organization with a purview to promote the eastern Sierra as a destination
- Establish a specific set of Destination Marketing Organization performance metrics based on the implementation of the regional marketing and branding campaign
- Link marketing effort to regional e-commerce initiative

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### COMMITTEE CONSENSUS:

#### TOURISM, HOSPITALITY & THE ARTS ECONOMIC DEVELOPMENT OPPORTUNITIES

##### EXPAND AND CREATE NEW SPECIAL EVENTS

- Engage arts, agricultural, native American, recreation and other community stakeholders in the development of a regional events schedule
- Provide community training on the creation and development and management of special events including:
  - \* Fundraising
  - \* Budgeting
  - \* Promotion
  - \* Location management
  - \* Create comprehensive special events online calendar linked to social media tools
- Increase profile of niche tourism opportunities such as Ecotourism, Agri-tourism, and Geotourism

- Link media and marketing tools and social media tools to existing efforts to promote agricultural tourism
- Create on-line database of Ecotourism, Agri-tourism, and Geotourism opportunities
- Develop site specific farm and ranch tours in agriculturally intense areas such as Bridgeport Valley, Antelope Valley and Owens valley
- Link farm and ranch tours to local, regional and out of area educational programs through partnerships with school districts and classes
- Create zoning ordinances that expand opportunities at local sites such as farm stays, value added production facilities and special events

# PROSPERITY CLUSTERS

## *Finding Niches in Tourism, Hospitality and the Arts: Committee Recommendations*

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### COMMITTEE CONSENSUS: TOURISM, HOSPITALITY & THE ARTS ECONOMIC DEVELOPMENT OPPORTUNITIES

#### CUSTOMER SERVICE/HOSPITALITY TRAINING

- Develop and widely disseminate online hospitality and customer service training courses focusing on
  - \* Telephone etiquette
  - \* Describing a businesses products and services
  - \* Trust and rapport building
  - \* Active listening skills
  - \* Problem solving
  - \* Giving effective directions
  - \* Defusing anger
  - \* Customer expectations
  - \* Customer loyalty
  - \* Creating a culture of cooperation

#### EXPAND AVAILABILITY OF LOCAL PRODUCTS THROUGH LOCAL RETAILERS

- Create online B2B networks to speed the adoption of local products in retail markets
- Create model local sourcing policies for government agencies, institutions and large businesses in the region
- Create a database of local sourcing opportunities with clear descriptions of source capacity

# PROSPERITY CLUSTERS: CASE STUDY

## *Finding Niches in Tourism, Hospitality and the Arts: Metrics and Measuring Success*

media tools to existing efforts to promote agricultural tourism

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- Create zoning ordinances that expand opportunities at local sites such as farm stays, value added production facilities and special events

### COMMITTEE RECOMMENDATIONS: TOURISM, HOSPITALITY & THE ARTS METRICS AND MEASURING SUCCESS

- Number of businesses, municipal facilities and community assets served by programs
- Number of hits, unique visitors and clicks through on web and social media platforms
- Reach of brand
- Number of people trained as special events volunteers
- Number of special events held
- Number of employers and employees participating in customer service/hospitality training

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### METRICS AND MEASURING SUCCESS

**The committee also recommended developing a specific set of metrics to measure, evaluate progress and adaptively manage deployment of a tourism, hospitality and arts strategy, potentially including the following:**

## PROSPERITY CLUSTERS

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*Finding Niches in Tourism, Hospitality and the Arts: Metrics and Measuring Success*



*photo by Vickie Taton*

- Number of businesses, municipal facilities and community assets served by programs
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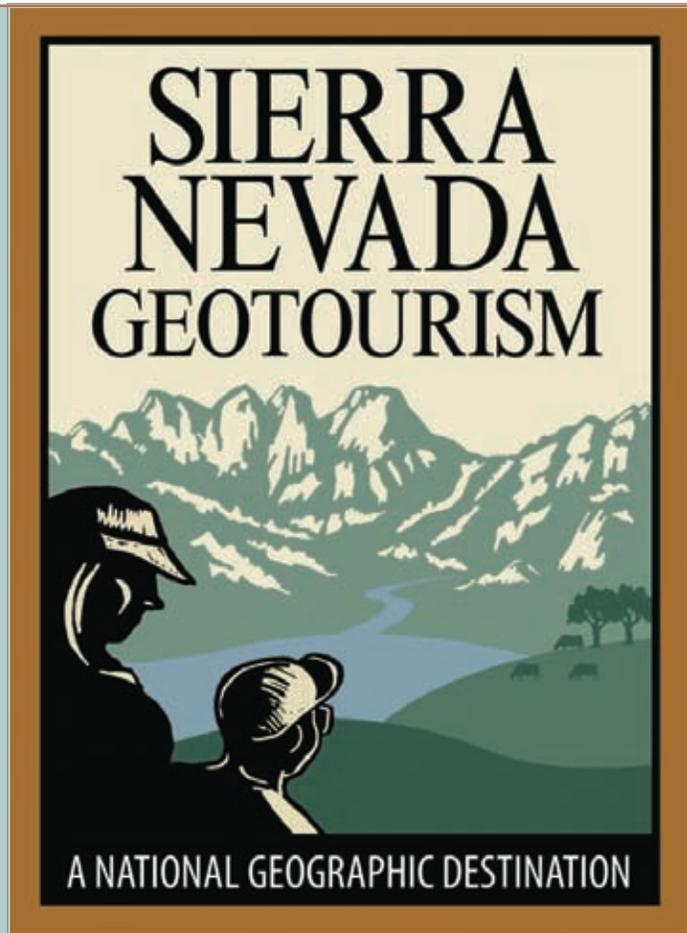
## PROSPERITY CLUSTERS: CASE STUDY

*Finding Niches in Tourism, Hospitality and the Arts: Sierra Nevada Geotourism*

### SIERRA NEVADA GEOTOURISM PROJECT, SIERRA NEVADA

The Sierra Nevada Geotourism Project is a multi-stakeholder initiative promoting destination stewardship. The project's MapGuide and interactive website offer trip planning tools that highlight the Sierra Nevada's natural, cultural and historic attractions. The Sierra Nevada Geotourism maps define what makes the Sierra a special place to visit, providing information on attractions and points of interest sourced through grassroots efforts. Geotourism is designed to maintain, and when possible enhance, a special place's attributes.

Together the Sierra Business Council, Sierra Nevada Conservancy, and National Geographic are partners in the Sierra Nevada Geotourism project and with the help of many volunteers produced the Sierra Nevada Geotourism interactive website, WebMap, print map and mobile apps to function as consumer-centric trip planning tools. The Sierra Nevada Geotourism Project promotes the need to preserve and enhance the Sierra's cultural, social, historic and environmental assets and was designed to revitalize its small, rural communities through an economic development strategy of sustainable tourism. Each of the more than 1,200 attractions highlighted on the Sierra Nevada Geotourism maps was nominated for inclusion through local sources and was evaluated according to the geotourism principles of sustainability by volunteer members of the Sierra Nevada Geocouncil.



The Sierra Nevada Geotourism Project also promotes geotourism as a model that combines sustainability with responsible economic growth. The project serves the traveling public by providing rich information on hundreds of select destinations across the Sierra, offering options that encourage expansion of tourism and its benefits into underserved areas such as Bridgeport Valley, Antelope Valley, Benton, Crowley Lake, and southern Inyo County. At the same time, the project serves to disperse tourism from sensitive, high volume areas to decrease negative impacts of high-volume tourism.

# PROSPERITY CLUSTERS: CASE STUDY

## *Finding Niches in Tourism, Hospitality and the Arts: Sierra Nevada Geotourism*

Geotourism promotes sustainable practices that protect and respect natural habitats, heritage sites, scenic appeal, and local culture; that enhance local communities' social, environmental, and economic quality of life; that produce economic and social incentives for conservation, protection, and restoration; that increase appreciation and understanding of the tourism value of public and tribal lands, particularly in gateway communities economically linked to those lands; and that promote sustainable travel as an educational experience for all visitors.

### The Sierra Nevada Geotourism Project

*“The Sierra Nevada Geotourism maps define what makes the Sierra a special place to visit, providing information on attractions and points of interest sourced through grassroots efforts.”*

has begun to demonstrate its effectiveness. During the eighteen month period from January 2011 through June 2012, the

website drew more than 1.5 million content views from 92 countries, has grown steadily to attract more than 20,000 unique visitors per month, now features more than 1,300 points of interest, and has garnered well over 1,800 registered users and more than 1,000 Facebook fans.

The screenshot shows the Sierra Nevada Geotourism MapGuide website. At the top is a banner image of snow-capped mountains. Below the banner is the title "Sierra Nevada Geotourism MapGuide" and the National Geographic logo. A navigation bar includes links for HOME, MAIN MAP, EVENTS, PARTICIPATE, MY FAVORITES, EXPLORATION TRACK, and ABOUT. The main content area features a "Nominate Here!" call to action, "Featured Nominations" with three categories: Accommodation (Wuksachi Village and Lodge), Community (Redbud), and Local Points of Interest (Yosemite Gifts). There is also a "Virtual Tour" section for Nevada State Museum Carson City, NV, and a "Sierra Geotourism Click to Play" video player. On the right side, there is a search bar, an "INTERACTIVE MAPGUIDE DISCOVER PLACES" section with a map and "GET STARTED" button, and links for "What is Geotourism?", "Sign Up for eNewsletter", and "Subscribe to the RSS Feed". At the bottom right, there are social media icons for Facebook and Twitter, and a "DONATE" button.

### DIVERSIFYING RECREATION

A major redistribution of population continues across the United States with a continuing shift of population from rural areas to urban centers. Today more than 80 percent of the nation's 310 million people live in a metropolitan area. Many rural regions, like the eastern Sierra, are either declining or remaining stable in population. This fundamental shift is a response to the concentration of wealth in cities coupled with reduced economic opportunity in many rural areas. As urban populations rise, wealth accumulates, leisure time increases and demand for recreation

increases beyond the ability of urban centers to provide for the needs.

In general, urban and rural problems are usually seen as separate. Most of the historic effort to address declining rural economies has been based on trying to entice urban oriented production or manufacturing to rural regions, often in direct competition with urban centers. In the case of the recreation cluster it is the ability of the rural region to solve a problem of the urban region that is driving growth.



# PROSPERITY CLUSTERS

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## *Diversifying Recreation*



*photo by Vickie Taton*

Time has shown that as urban populations rise, residents' desire and appreciation for access to the outdoors, recreation, and the experiences of nature have increased. There is a counter trend to the concentration of population in urban centers — areas rich in natural amenities and recreational attractions have been growing as well. Increased recreational activity, the desirability of second homes, and the influx of former urban dwellers — often people who were engaged in creative or intellectual capital driven economic activities — creates a demand for housing, expanded business and professional services, and more recreation.

In a study conducted by the USDA Economic

Research Service in 2005, both Mono and Inyo Counties met the federal definition of a "Recreation County," characterized by the share of wealth and salary concentration derived from recreational assets. Only 311 counties in the United States met the standardized definition.

Common characteristics of a "Recreation County," which are primarily concentrated in the upper mid-west and inter-mountain west, are high levels of second home ownership, access to winter recreation and access to public lands.

Rural counties specializing in recreation assets generally have higher rates of income

growth than non-recreation counties, but due to cold winters some may not attract as many year round residents, leading to dramatic seasonal fluctuations in population, and thus economic activity. They suffer a very special set of related problems as well. Often they struggle to achieve higher income job growth, are more dependent upon and sensitive to changes in the real estate market due to high levels of retirees and second homeowners, and have problems with seasonality of employment. Recreation development can involve significant economic leakages since many of the goods and services used come from outside the community, temporary workers may be required to fill jobs at ski resorts and hotels, and many retail establishments may be national chains, meaning money from residents and tourists leaves the community. The eastern Sierra has suffered from all of these problems in the past.

Across the country changes in demographics, preferences and leisure time are driving recreation economies. No place is this more true than in regions rich in public lands.

The economic benefits of public lands in Inyo and Mono Counties are now the primary economic development drivers of the two economies, with public lands responsible for an estimated economic value of between \$662.2 million and \$784.2 million per year, between \$124.9 million and \$170.9 million of that associated with the direct use (recreation) of public lands, and \$98.1 million identified as annual income earned in the counties (Richardson, 2002). Total visitors to public lands in Inyo and Mono Counties are

approximately 2,886,747 people per year. National trends since have shown visitation to public lands increasing.

This trend, coupled with the extensive use of private recreational assets and improvements on public lands, such as ski areas, indicates that tremendous additional economic value can be derived in Inyo and Mono Counties from these lands.

Increases in population in the inter-mountain west among the Latino community who are discovering the unique American experience of visiting public lands is accelerating the rise of regional recreation economies. Approximately 12 million Latinos live in California, or about one-third of the population, expected to grow to more than 40 percent by 2025. Public lands provide a unique experience for Latinos who are drawn by scenery, sightseeing, and special events, and who often use facilities as a larger family unit and prefer developed sites with services. Public lands also have a tendency to attract private recreational development as well.

The eastern Sierra has benefited from this fundamental dynamic for generations, with an ample supply of not only public lands, but also privately developed recreational lands, and an amazingly diverse set of recreational opportunities, including everything from traditional pursuits like hiking, golfing, fishing, hunting, skiing, boating, and camping, to more extreme pursuits like high altitude running, bike racing, ice climbing, winter camping, big wall climbing, and extreme Nordic skiing.

## PROSPERITY CLUSTERS

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### *Diversifying Recreation*



*photo courtesy Mammoth Mountain*

The eastern Sierra is often the testing ground for the creation of new sports, like extreme off-roading, kite snowboarding, snow kayaking and wing suit base jumping. The diversity of opportunity covers almost every demographic and preference represented in the current and emerging marketplace. No one can deny the eastern Sierra is rich in recreational assets and experiences.

The committee looked at all of these issues and recognized that coupled with the attractiveness of arts and cultural amenities,

and the increase in broadband accessibility — all activities with a tendency to attract and inspire entrepreneurial activities — an opportunity exists to jumpstart a virtual cycle of economic development. The consensus of the group was that recreational demand in urban areas, and increased demand by local residents, offers a major opportunity, if not the major opportunity, for economic expansion.

There was some significant discussion around the idea that expanding the recreational economy is dependent upon the concept

of creating a new relationship between the co-dependent rural and urban regions. Regardless of national recreational tourism trends, and due to the relatively remote location, the eastern Sierra is going to be more connected and dependent upon the specific urban-rural linkages, such as the southern California market and to a lesser degree the Nevada market, than are many other competing recreational areas. The advent of air service has begun to reduce this dependence, but the simple fact remains the eastern Sierra competes head-to-head with the Tahoe Basin for California's second largest market: the Bay area.

In addition, there was agreement that although urban customers are seeking to remove themselves from the discomforts of the city they are not seeking to leave all of the amenities of the city. The scope of the committee's work did not address large-scale long-term public or private sector capital improvements, such as ice rinks, new parks, or entirely new facilities.

The committee recognized that the recreation cluster is an area where residents and business owners on the ground have already done a great deal of work. Consequently our group focused on areas where new opportunities could exist based on increasing usage by existing or emerging markets due to the unique diversity of the eastern Sierra landscape primarily, and increasing our competitiveness with other recreation counties secondarily.

Finally, the committee recognized that there

were many different categories or types of recreation available in the eastern Sierra, from extreme to sedate, from winter to summer, from passive to active, as mentioned above. Any strategy to expand or fill underutilized niches will require micro-targeting activities within specific categories.

### COMMITTEE RECOMMENDATIONS

**Interviews with committee members and community leaders identified and prioritized the following economic development opportunities in the region related to the expansion of recreational tourism:**

#### INCREASE FOCUS ON RECREATIONAL ACCESS FOR DIVERSE ABILITY AND AGE LEVELS AND UNDERSERVED GEOGRAPHIC AREAS

- Conduct an existing conditions gaps analysis to identify categories of recreation available by geographic location modeled on the Mono County Recreation Access Toolkit
- Utilize existing inventories of recreational access points to identify and classify assets based on categories and ability levels
- Identify gaps in geographic areas, categories and access for specific ability levels
- Assess and prioritize existing categories and access points relative to new, emerging, or growing areas of recreational activity
- Produce a community based prioritized list of category and access improvement projects by ability level (trail systems, parking, access points)
- Link mobility plan and recreational access goals

# PROSPERITY CLUSTERS

## *Diversifying Recreation: Economic Development Opportunities*

- Link access improvement goals to boosting off-season and mid-week access where significant underutilized capacity exists
- Identify potential parties responsible for implementation
- Develop capital improvement plans in partnership with public and private entities to fill gaps in access
- Link funding sources to capital improvements

### IMPROVE “WAY FINDING” AND EXPAND ACCESS TO INFORMATION ABOUT ITS USE

- Increase coordination with USFS and BLM to partner on way finding processes
- Develop a regional way finding master plan in partnership with federal land management agencies (utilizing processes already in place in Mammoth Lakes)
- Develop regional way-finding brand
- Develop way finding print maps
- Develop online way finding tools, including applications, online databases, downloadable directions, and printable maps, with a special emphasis on “How to get to what I see.”
- Network online way finding tools to local, regional, state and national online tools such as National Park Service maps and apps, Geotourism apps and maps, etc.
- Focus portion of way finding effort on dramatically improving outreach and access for

the Latino community

### DEVELOP OPPORTUNITIES FOR NON-TRADITIONAL ACTIVITIES

- Use gaps analysis to identify top priority recreational activities

*“A Way-finding system incorporates branding, signs, maps and directional devices that tell us where we are, where we want to go, and how to get there. Symbols can contribute simplicity, clarity and personality to a way-finding system.”*

*~ Courier News, January 6, 2008  
“Wayfinding: New Directions for NJ Signage”*

- Increase coordination with USFS and BLM to develop and market joint recreation opportunities:
- Extreme sports
  - \* Create specific way finding materials for extreme sports activities
  - \* Provide better information or online “one stop shop” for permitting extreme activities
  - \* Develop regional film and social media



*photo courtesy Mammoth Mountain*

campaign to promote and market extreme sports opportunities

- Day Trips and Picnicking

Develop picnic areas with running water, fireplaces, large picnic tables, interpretive opportunities in Spanish

- High altitude training

Create a coalition to support the development of a high altitude training/campus/facility for athletes in Mammoth Lakes

- Enhanced Nordic opportunities

Create way finding system to identify and promote public lands Nordic skiing

### IMPROVE INFRASTRUCTURE TO IMPROVE ACCESS TO RECREATIONAL ASSETS

- Develop regional mobility plan designed to coordinate multi-modal transportation opportunities across the eastern Sierra landscape, with specific linkages to outside markets (with draft policies for incorporation by local jurisdictions)

- Develop trails and recreation master plans in under served geographies and link to existing master plans in developed areas (focus on northern Mono County and southern Inyo county)

- Develop capital improvement plans in

# PROSPERITY CLUSTERS

## *Diversifying Recreation: Metrics and Measuring Success*

partnership with public and private entities to fill gaps in access

- Link mobility plan and recreational access goals
- Identify potential parties responsible for implementation
- Link funding sources to capital improvements

### LINK RECREATIONAL ASSETS AND HISTORICAL CULTURAL ASSETS FOR A TOTAL EXPERIENCE

Coordinate operations, management and marketing between the recreation, arts, agriculture, and retail experience to provide consistent and co-branded information across clusters

#### COMMITTEE RECOMMENDATIONS: DIVERSIFYING RECREATION METRICS AND MEASURING SUCCESS

- Number of assets mapped
- Number of capital improvement projects added to long range planning documents
- Number of capital improvement projects completed
- Number of hits, unique visitors and clicks through on web and social media platforms
- Number of recreation visitors to regions served with way finding programs
- Actual number of employees placed
- Average median income of employees placed

### METRICS AND MEASURING SUCCESS

**The committee also recommended developing a specific set of metrics to measure and evaluate progress and adaptively manage deployment of a diversified recreation strategy, potentially including the following:**

- Number of assets mapped
- Number of capital improvement projects added to long range planning documents
- Number of capital improvement projects completed
- Number of hits, unique visitors and clicks through on web and social media platforms
- Number of recreation visitors to regions served with way finding programs
- Actual number of employees placed
- Average median income of employees placed

Funding the deployment of a regional recreation tourism strategy will be a difficult challenge considering the continuous reductions in funding for federal land management agencies.

However, because there is already considerable private sector investment in recreation on the east side, and opportunity to leverage additional private sector investment is high, the challenge may be as much one of coordination as it is funding.

This is another area where existing grant programs at the United States Department's of Commerce, Interior, Agriculture,

Transportation and the Environmental Protection Agency have a direct nexus.

There is also significant potential for local public sector investment coming through a combination of impact fee programs, transportation mitigation fee programs, or through existing parks and recreation fee programs. Since this is a strategy that assists both public and private entities with economic development activities, investment from local government through the Community Development Block Grant program may be possible.

Due to the high profile nature of recreation in the eastern Sierra there is also significant potential for corporate sponsorship, perhaps through major companies like the Los Angeles Department of Water and Power which maintains several private facilities, or the Outdoor Industry Association.

On public lands dedication of user fees may be a potential source of income. Finally there are numerous nongovernmental organizations, user groups, and volunteer organizations working in the sector that can be partners in meeting mutual objectives.



*photo by Anne Grogan*

# PROSPERITY CLUSTERS

## *Diversifying Recreation: Committee Recommendations*

### COMMITTEE RECOMMENDATIONS: DIVERSIFYING RECREATION ECONOMIC DEVELOPMENT OPPORTUNITIES

#### INCREASE FOCUS ON RECREATIONAL ACCESS FOR DIVERSE ABILITY AND AGE LEVELS AND UNDERSERVED GEOGRAPHIC AREAS

- Conduct an existing conditions gaps analysis to identify categories of recreation available by geographic location modeled on the Mono County Recreation Access Toolkit
- Utilize existing inventories of recreational access points to identify and classify assets based on categories and ability levels
- Identify gaps in geographic areas, categories and access for specific ability levels
- Assess and prioritize existing categories and access points relative to new, emerging, or growing areas of recreational activity
- Produce a community based prioritized list of category and access improvement projects by ability level (trail systems, parking, access points)
- Link mobility plan and recreational access goals
- Link access improvement goals to boosting off-season and mid-week access where significant underutilized capacity exists
- Identify potential parties responsible for implementation
- Develop capital improvements plans in partnership with public and private entities to fill

gaps in access

- Link funding sources to capital improvements

#### IMPROVE “WAY FINDING” AND EXPAND ACCESS TO INFORMATION ABOUT USING

- Increase coordination with USFS and BLM to partner on way finding processes
- Develop a regional way finding master plan in partnership with federal land management agencies (utilizing processes already in place in Mammoth Lakes)
- Develop regional way-finding brand
- Develop way finding print maps
- Develop on-line way-finding tools, including applications, on-line databases, downloadable directions, and printable maps, with a special emphasis on “how to get to what I see”
- Network on-line way finding tools to local, regional, state and national on-line tools such as National Park Service maps ad apps, Geotourism apps and maps, etc.
- Focus portion of way finding effort on dramatically improving outreach and access for the Latino community

## COMMITTEE RECOMMENDATIONS: DIVERSIFYING RECREATION ECONOMIC DEVELOPMENT OPPORTUNITIES

### DEVELOP OPPORTUNITIES FOR NON-TRADITIONAL ACTIVITIES

- Use gaps analysis to identify top priority recreational activities
- Increase coordination with USFS and BLM to develop and market joint recreation opportunities

### Capitalize on Extreme Sports Attractions

- Create specific way finding materials for extreme sports activities
- Provide better information or online “one stop shop” for permitting extreme activities
- Develop regional film and social media campaign to promote and market extreme sports opportunities

### Encourage Day Trips and Picnicking

- Provide developed picnic areas with running water, fireplaces, large picnic tables, interpretive opportunities in Spanish

### Spotlight High Altitude Training

- Create a coalition to support the development of a high altitude training/campus/facility for athletes in Mammoth Lakes

### Enhance Nordic Opportunities

- Create way finding system to identify and promote public lands Nordic skiing

- Improve infrastructure to improve access to recreational assets

- Develop regional mobility plan designed to coordinate multi-modal transportation opportunities across the eastern Sierra landscape, with specific linkages to outside markets (with draft policies for incorporation by local jurisdictions)

- Develop trails and recreation master plans in under served geographies and link to existing master plans in developed areas (focus on northern Mono County and southern Inyo county)

- Link mobility plan and recreational access goals

- Identify potential parties responsible for implementation

- Develop capital improvements plans in partnership with public and private entities to fill gaps in access

- Link funding sources to capital improvements

### LINK RECREATIONAL ASSETS AND HISTORICAL CULTURAL ASSETS FOR A TOTAL EXPERIENCE

- Coordinate operations, management and marketing between the recreation, arts, agriculture, and retail experience to provide consistent and co-branded information across clusters

## PROSPERITY CLUSTERS: CASE STUDY

### *Diversifying Recreation: Tahoe Mountain Sports*

#### TAHOE MOUNTAIN SPORTS KINGS BEACH, CALIFORNIA

Tahoe Mountain Sports was founded in 2004 by three avid outdoor adventurers looking to change the way outdoor retail was conducted in Tahoe. An e-commerce operation from the start, TMS operated solely online for its first three years, sprouting a loyal clientele from the founding trio's trademark customer service and contagious love of the outdoors. Along with his wife Pam Jahnke, David Polivy acquired ownership from his business partners on May 1, 2007, and threw open the doors of the first TMS retail store, located on the North Shore of Lake Tahoe in Kings Beach, California. TMS expanded to its current 2,500 square feet in late 2009, and employs a staff of five to keep operations simple and smooth.

Since its inception, TMS has branded itself



*photo courtesy Tahoe Mountain Sports*



*photo courtesy Tahoe Mountain Sports*

strategically. The company is owned and operated by people who play hard outside and love to share stories of their adventures. They personally test the outdoor gear, footwear and clothing they market to true outdoor enthusiasts and are quick to remind folks: "Our retail business doesn't just thrive on the outdoors. We do."

Tahoe Mountain Sports operates an award-winning, low-impact business; actively promotes the seven guiding principles of the Leave No Trace ethic; supports multiple nonprofits, events and "Local First" initiatives in its community; and has continually invested in advanced technology to maintain its e-commerce site and market itself through social media. Despite the investment in advanced technology, whether via phone, email, instant messaging or in the shop, customer service is always personally provided by owners Dave and Pam or their avid staff.

Perhaps what has most set Tahoe Mountain Sports on the path of success is a creative approach to expanding its customer base

## PROSPERITY CLUSTERS: CASE STUDY

### *Diversifying Recreation: Tahoe Mountain Sports*



*photo courtesy Tahoe Mountain Sports*

while diversifying recreation opportunities in the Kings Beach community. Long ago, Tahoe Mountain Sports recognized disc golf as a fun, affordable, low-impact sport and embraced the sport. Tahoe Mountain Sports advocated, fundraised and sponsored construction of a disc golf course on the North Shore of Lake Tahoe. In 2007 TMS sponsored its first disc golf tournament with 35 participants. Several years later, that same tournament sold out with 96 players and a waiting list of 35, and has now become part of the Sierra Tahoe Series of seven disc golf tournaments. In 2012, forty-five percent of the tournament's participants came from outside the Tahoe area and required lodging overnight, directly contributing to the local economy. Tahoe Mountain Sports is looking to expand the disc golf tournament series even further by bringing it to the national or world level by 2015.

Forging creative partnerships has also been important to the Tahoe Mountain Sports business strategy. By aligning with organizations like the nonprofit Tahoe Rim Trail Association, Tahoe Mountain Sports has found a way to reach what is primarily an "REI customer" to help "close the loop on outdoor recreation in Tahoe." Tahoe Mountain Sports co-sponsors hikes in partnership with the Tahoe Rim Trail Association and offers free demonstration gear for participants' use. This hands-on approach to marketing has "seen a lot of success," Dave says, as have other nontraditional retail marketing efforts, such as intimate wine-and-cheese book signing affairs and Ladies Night sales events. "It's all about giving added value, expanding the tourism market and opening the door to people," Dave says.

# PROSPERITY CLUSTERS

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*Encouraging Wellness through Value Added Agriculture*



*photo by Vickie Taton*

## ENCOURAGING WELLNESS THROUGH VALUE-ADDED AGRICULTURE

Agriculture remains one of the leading economic sectors within Mono and Inyo Counties. Although not as strong as the tourism, hospitality, arts and recreation sectors a strong case can be made that the tourism related sectors are strongly dependent upon agriculture for creating the rural sense of place of the region. The two counties' agricultural histories included a wide variety of products, including row crops, hay, honey, livestock and orchard crops and, recently, aquaculture.

Agricultural products' share of the national Gross Domestic Product has fallen from 21 percent of the nation's economy in 1910 to less than 5 percent of the economy in 1990. Most agricultural products, both nationally and in the eastern Sierra, are commodity products, or products which have little qualitative difference across markets.

Value added agriculture means adding to and capturing the value in commodities grown and processed locally in a longer value-chain, retaining processing and use in the local

community, which can have a significant positive impact on farm households and rural businesses, create new and higher-wage employment, and expand markets for agricultural commodities, leading to more vibrant rural and regional economies. The 2002 and 2008 US Farm Bills rapidly expanded federal investments in value added agriculture, and the 2012 Farm Bill, currently in draft form, is anticipated to expand investment even more.

Value added agriculture is among the most rapidly expanding rural economic development strategies in the country. A recent study by the market research firm Packaged Facts estimates that the U.S. demand for local food increased from \$4 billion in 2002 to \$7 billion in 2011; only representing a tiny fraction of the market with a very high growth rate.

Ranchers and farmers have traditionally been price-takers; commodity markets have set their prices. Today, a new wave of alternative marketing channels is enhancing the potential for ranchers and farmers to increase revenues by offering products with specific qualities or production processes not commonly available. Examples of this on a local and regional level are High Sierra Beef, a value added beef operation using Sierra Valley beef, located in Oregon House, California, or the production of locally aquacultured trout by Mono County resident Tim Alpers.

Typically practices that add market value at the source include heirloom varieties, organic certification, sustainable farming methods, or just plain locally grown products. Alternative

market channels can generally be divided into two categories: farm-to-consumer and farm-to-firm marketing.

The committee recognized that much of the region's agriculture would likely remain similar to existing conditions so the focus of our work should be on a specific set of recommendations designed to increase farm-to-consumer and farm-to-firm interactions and the development of place based agricultural tourism programs designed to link to adjacent markets.

### COMMITTEE RECOMMENDATIONS

**This report looks at niche agricultural opportunities available in Inyo and Mono Counties and makes recommendations to:**

- Provide marketing and product development assistance to farmers and ranchers
- Advocate for increased funding for assistance programs through the UC Coop Extension Programs
- Assist farmers and ranchers by identifying market opportunities, particularly in adjacent urban markets
- Assist in the development of regional farmers market and retail opportunities
- Develop model agreements to give locally produced agricultural products preferential treatment in local procurement processes
- Develop a regional source of secondary position capital for new ventures that will create added value or support the development of new agricultural products

## PROSPERITY CLUSTERS

### *Encouraging Wellness through Value Added Agriculture*



*photo by Vickie Taton*

- Add value to existing products by creating opportunities for production, processing, packaging and on- and off-site sales
- Advocate for technical and financial support for the development of a regional “general use” facility that can process meats, dairy, and poultry products from farmers and ranchers in the region
- Focus the attention of regional jurisdictions on reducing barriers to agricultural diversification through favorable zoning policies or ordinances
- Link local farmers and ranchers to technologies and funding to convert agricultural wastes to energy
- Link agricultural operations with ranch and farm recreation, tourism and hospitality
- Maintain a database of regional agricultural tourism activities, including all tours, special events, training opportunities, and lodging opportunities,
- Link media and marketing tools and social media tools to existing efforts to promote agricultural tourism
- Link regional opportunities to all other regional, state and national opportunities, including co-marketing agricultural tourism with recreation and e-commerce activities
- Develop site specific farm and ranch tours in agriculturally intense areas such as Bridgeport Valley, Antelope Valley and Owens Valley
- Provide training on launching and operating an agri-tourism enterprise
- Link agricultural community to special events training
- Link farm and ranch tours to local, regional and out-of-area educational programs through partnerships with school districts and other youth organizations
- Create zoning ordinances that expand opportunities at local sites such as farm stays, value added production facilities and special events
- Link value added products with direct marketing and e-commerce opportunities
- Develop a regional e-commerce agricultural products buying club
- Link e-commerce farm-to-consumer opportunities to the Reno and Inland Empire markets

## PROSPERITY CLUSTERS: CASE STUDY

*Encouraging Wellness through Value Added Agriculture: Oregon House Farms and High Sierra Beef*

### OREGON HOUSE FARMS/HIGH SIERRA BEEF OREGON HOUSE, CALIFORNIA

Oregon House Farms, also home to High Sierra Beef, is located in the North Yuba foothills. In its idyllic setting of black oaks, Ponderosa pines and lush meadows, Oregon House Farms believes that when small family ranchers achieve sustainability on their land, the threat of encroaching development is minimized. High Sierra Beef was created to support small family ranchers from Yuba, Nevada, Placer, Sierra and El Dorado Counties with the mission to provide a distinctive, high-quality, and safe grass-fed and finished product. High Sierra Beef serves discriminating and conscientious consumers and proudly states that High Sierra Beef's cattle never receive grain, growth hormones nor are ever fed antibiotics. Reverence for the land is pivotal to the farm's operation.

Owner Jenny Cavaliere has lived in Oregon House, California for more than twenty-two years and has cultivated the land not only for beef production, but also for poultry, pasture-raised eggs, honey, and a bountiful garden of fresh vegetables and fruits. Recently, the 63-acre Oregon House Farms was awarded organic certification through the California Certified Organic Farms Association. Part of the land is a Certified



*photo courtesy Oregon House Farms/High Sierra Beef*

Family Tree Farm, as well as a riparian restoration of Indiana Creek and a five-acre lake. The riparian restoration was part of a California Forestry Incentive Program (CFIP) Grant, awarded to restore and replant parts of the farm that were destroyed by the Williams Fire of 1997. The "Tree Farm" was restored with a massive dead brush removal and replanting of over 2,500 Ponderosa pines and Douglas fir.

Oregon House offers farm tours with an emphasis on wildflower tours in the spring, the site's rich history, and year-round outdoor education for children. In the spring, children are invited to plant a hill of pumpkin seeds with their name on the hill. In early October, they are invited to return and harvest their pumpkins, which has become

## PROSPERITY CLUSTERS: CASE STUDY

*Encouraging Wellness through Value Added Agriculture: Oregon House Farms and High Sierra Beef*



*photo courtesy Oregon House Farms/High Sierra Beef*

a Halloween tradition for many children. In December, Oregon House is unseasonably busy with festivities, antique decorations and activities for all ages during the region's "Christmas in the Foothills Tour," held annually during the first weekend of December.

In capitalizing on the site's rich heritage and history, Oregon House Farms has converted the old dairy stanchion section of the barn to serve as a museum with historic photographs and antique dairy milking equipment while the entire property offers a glimpse into California history. Oregon House Farms has been a cattle ranch since the time of the California gold mining era when Oregon House was known as the party town of the foothills where miners congregated on weekends for entertainment and good times.

Prior to the arrival of cattle and miners, the Maidu Indians lived in the fertile valley of Marysville in the summer months and migrated north to the Yuba foothills in the winter where they would grind acorns from the black oaks for flour to make their bread. Many Native American Maidu grinding rocks are located on the Oregon House property and are recorded with the State of California. The Indian culture is preserved and honored by Maidu descendants at Oregon House Farms. Their baskets are still woven of willow and redbud, and acorns are still a staple of their diet. Today, Oregon House and the neighboring town of Dobbins have the largest population of Maidu residents in California.

Recently, a 100-year-old barn at Oregon House Farms was converted into the Oregon House Farm Store where Jenny sells her High Sierra Grass Fed Beef, poultry, eggs, honey, vegetables, fruits and other locally raised agricultural products. Her favorite specialty crop is a French pumpkin, Rouge Vif d'tampe (Cinderella Coach Pumpkin). The shop is open weekends throughout the year. Jenny has also made High Sierra Beef readily available to customers by offering mail, phone and online ordering services with easy-to-comprehend, competitive pricing and shipping arrangements. Oregon House Farms and High Sierra Beef also accept Electronic Benefits Transfer (EBT) cards for those enrolled in the federal Supplemental Nutrition Assistance Program (SNAP), helping to assure the health of the Oregon House community.

**Committee Commentary:**

*Prosperity Clusters  
and Mining*

# PROSPERITY CLUSTERS AND MINING

## *Committee Commentary*

### COMMITTEE COMMENTARY:

#### PROSPERITY CLUSTERS AND MINING

The committee considered seriously the matter of addressing mining as a specific potential economic cluster for the purposes of our report. After significant discussion we opted not to identify mining as a potential cluster due to a number of special considerations.

First, since many of the larger scale mining operations envisioned in the eastern Sierra are primarily focused on public lands, and the public lands permitting processes have their own special set of circumstances and timelines, the committee recognized that its influence on these issues was relatively limited, within the timeline envisioned for implementation of the recommendations in this report.

Second, although mining is a significant industry, it is an industry whose price sensitivity is driven by global demand and markets, consequently a focus in this area was likely to produce a strategy that would be more subject to the vicissitudes of the market than the region's direct actions. Finally, the committee did see some significant potential for localized mining activities, specifically in the area of aggregate mining to meet local needs for road building and construction as the economy recovers, but since it was a relatively stable market it did not rise to the level that warrants a specific cluster analysis.

The committee did however discuss several of the issues relative to expanding mining in the region and believed that these were worth mentioning in this report. As a result of mining's potential impacts on local and regional economies, the committee agreed that local communities should carefully compare potential benefits and costs to determine whether mining projects are desirable.

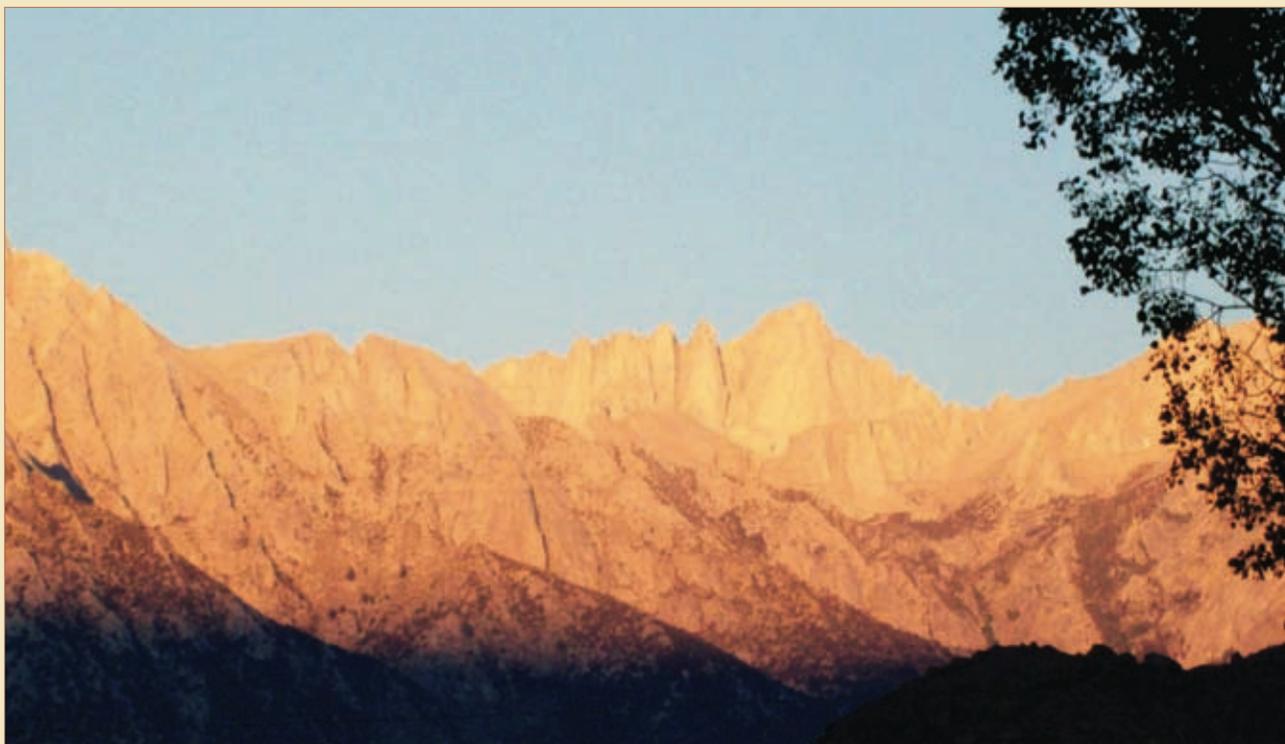
A broader assessment of the costs, benefits and impacts is needed to help local officials and residents understand the implications of mining in their communities. These issues should be critically examined as the decisions made could alter a region's future economic prosperity and sustainability, particularly around many of the activities envisioned in this report, such as a focus on agriculture, recreation, tourism, and hospitality as growing industry clusters.

The regional economy in the eastern Sierra depends to a large part on a quality of life that is primarily due to environmental amenities flowing from protected public lands. This quality of life attracts visitors and new residents alike, thereby developing local economic vitality.

In the last 50 years, the economic value of the non-extractive uses of the public lands has come to dwarf that of extractive

## PROSPERITY CLUSTERS AND MINING

*Committee Commentary*



*photo by Vickie Taton*

industries, as tourism activities, including skiing, hiking, fishing, camping, off-highway vehicle use and second-home construction driven by repeat visitors, have become important economic drivers. As such, protected public lands are significant economic assets for local and regional economic development.

Proposed mining activities on federal lands in the region do offer important short-term economic benefits in the form of employment, business purchases, and taxes paid to local governments. These proposed activities may also generate significant long-term costs in the form of decreased revenues from

outdoor recreation and tourism, decreased property values, habitat disturbance and associated regulatory compliance costs, surface and groundwater impacts, and potentially permanent environmental degradation that could impact the sustainability of the local economy after mines have closed and their positive economic impacts have dissipated.

Mining is appealing to communities because it is perceived as good for economic development, generally because of the high wages paid by the mining industry (assuming a significant portion of those jobs are filled by existing residents rather than in-migrants) and

# PROSPERITY CLUSTERS AND MINING

## *Committee Commentary*

other contributions to the local economy; however, several factors associated with mining cause it to be detrimental to the economic development of communities in the longer term.

Mining profits are a function of production costs and metals prices. Metals are traded in the international market and are subject to global economic forces. As a result, metals prices are volatile; decreasing when there is overcapacity or large stockpiles and increasing when production or stocks are low relative to demand. Mines tend to shut down when prices are low and re-open when prices increase again. These boom-and-bust cycles cause mining income, employment and payrolls to be unstable. In addition, mining operations tend to have relatively short lives, generally less than 20 years. People with specialized skills tend to leave when mines close to seek mining employment elsewhere.

Local communities should also be cognizant of potential fiscal impacts deriving from mining projects in the area. Area communities and governments need to be prepared to deal with associated fiscal impacts. These could include:

- Increased demand for social services;
- Increased costs to local school districts; higher public safety costs; and,
- Higher road maintenance and other infrastructure requirements

Income volatility arising from mines opening and closing creates uncertainty for community economies, leading to increased investment risk. This, in turn, can lead to lack of investment in the local economy by outside investors. Local business owners and entrepreneurs may not want to put money into business ventures if there is a risk of layoffs or mine closure. Community government expenditure decisions may also be affected if the local tax base is mining dependent.

All of these factors impact negatively on local and regional economies and thereby impede the development of stable, sustainable economies. Elko, Nevada provides an example of how uncertainty associated with boom/bust economies prevents public and private investment in the community. As reported in a recent article in the Los Angeles Times, because of memories of the bust in the late 1990s due to low gold prices, even with very high gold prices and in the middle of a mining boom, the town is reluctant to build a new recreation center.

The police department is overwhelmed because they are afraid to hire new officers due to uncertainty. Some employees are living in recreational vehicles and intend to leave town when the bust comes instead of putting down roots in the community.

After considering all of these issues, the committee decided that it would not focus on mining as a specific industry cluster.

*Summary Economic  
Profile of Inyo and  
Mono Counties*

# SUMMARY ECONOMIC PROFILE OF INYO AND MONO COUNTIES

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*Economic Context: The Changing Economy of the West*



*photo courtesy Design Workshop*

## SUMMARY ECONOMIC PROFILE OF INYO AND MONO COUNTIES, CALIFORNIA

### ECONOMIC CONTEXT

The economy of the eastern Sierra region is partly a function of the changing economy of the West — defined here as the 11 contiguous mainland states of Washington, Idaho, Montana, Oregon, Wyoming, California, Nevada, Utah, Colorado, Arizona, and New Mexico. Abundant research indicates that people are moving to the rural West to live, work, and conduct business primarily due to quality-of-life considerations or amenities

such as clean air and water, outdoor recreational opportunities, low crime rates, and a pleasant climate, among others (Beyers, Lindahl et al. 1995; Johnson and Rasker 1995; McGranahan 1999; Shumway and Otterstrom 2001). This is a switch from the past when people often migrated to an area primarily based upon employment availability. In this new structure of local economic development, business and jobs follow the people instead of the reverse (Whitelaw 1992). People move to an area because of its amenities, often visiting first as tourists. Known as “amenity migration,” this in-migration then stimulates the local economy through demand for new home construction and a full range of goods and services. Once a more robust local economy

## SUMMARY ECONOMIC PROFILE OF INYO AND MONO COUNTIES

*Economic Context: The Changing Economy of the West*

exists with additional amenities such as health care facilities, arts and entertainment, or regular airline service, a new round of migrants is attracted and the cycle repeats.

Protected public lands such as USFS and BLM lands, national parks, designated wilderness and national conservation areas provide key environmental amenities that are important contributors to quality of life. As such, protected public lands are significant economic assets for local and regional economic development. An extensive study of the role of protected public lands in economic prosperity in the West, conducted by the Sonoran Institute, concluded that counties with protected public lands or close to protected lands have the fastest economic growth. The same study also found evidence of other conditions important for economic prosperity, including access to metropolitan areas via reliable roads and airports, an educated workforce, and a diverse local economy.

The economy of the West has changed greatly over the last 30 to 40 years. Three of the most significant trends are: 1) rapid growth in the role of services in the economy; 2) the rise of non-labor sources of income; and 3) diminished levels of jobs

and income from extractive industries.

The Bureau of Economic Analysis of the U.S. Department of Commerce (BEA) defines services as “products that cannot be stored and are consumed at the place and time of their purchase.” This “Services and Professional” category includes an extremely wide range of sectors, including arts and entertainment, lodging and food services, health and social services, finance, insurance and real estate, engineering and scientific services, and public administration, among others. This wide variety of activities includes high-wage, high-skill occupations like doctors and financial consultants, as well as low-wage, low-skill



*photo by Vickie Taton*

# SUMMARY ECONOMIC PROFILE OF INYO AND MONO COUNTIES

*Economic Context: The Changing Economy of the West*

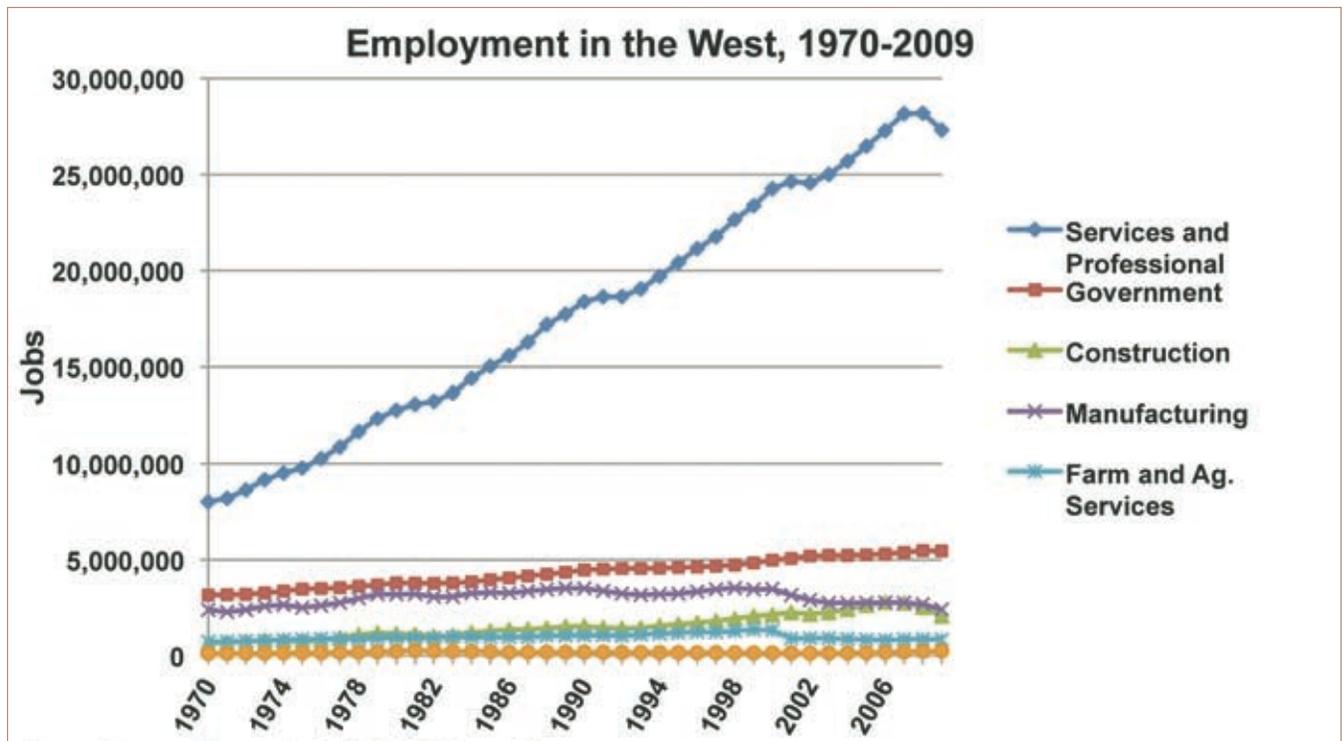


FIGURE 1: EMPLOYMENT, WESTERN U.S., 1970-2009

Source: Bureau of Economic Analysis, U.S. Dept. of Commerce

positions such as landscape laborer and hotel maid.

By dividing the “Services and Professional” category into producer, consumer, and government services, it is possible to obtain a clear picture of the local economy. Producer services is a relatively high-wage category and includes occupations such as real estate, insurance, finance, engineering, business services, and research. This category is a large component of the knowledge economy. Consumer services is mostly a low-wage category that includes food service, accommodation, retail, and personal services. By tracking the various service categories, it is possible to

obtain a clear picture of a local economy.

Figure 1 shows that nearly all of the new jobs created in the West since 1970 have been in the services and professional category. Government employment has risen steadily across the period. Manufacturing employment generally rose from 1970 until 1990, was up and down in the 1990s, and has dropped over the last decade to levels of the early 1970s. Employment in mining and agricultural sectors has changed little over the last 35 years.

Construction jobs generally increased in

# SUMMARY ECONOMIC PROFILE OF INYO AND MONO COUNTIES

*Economic Context: The Changing Economy of the West*

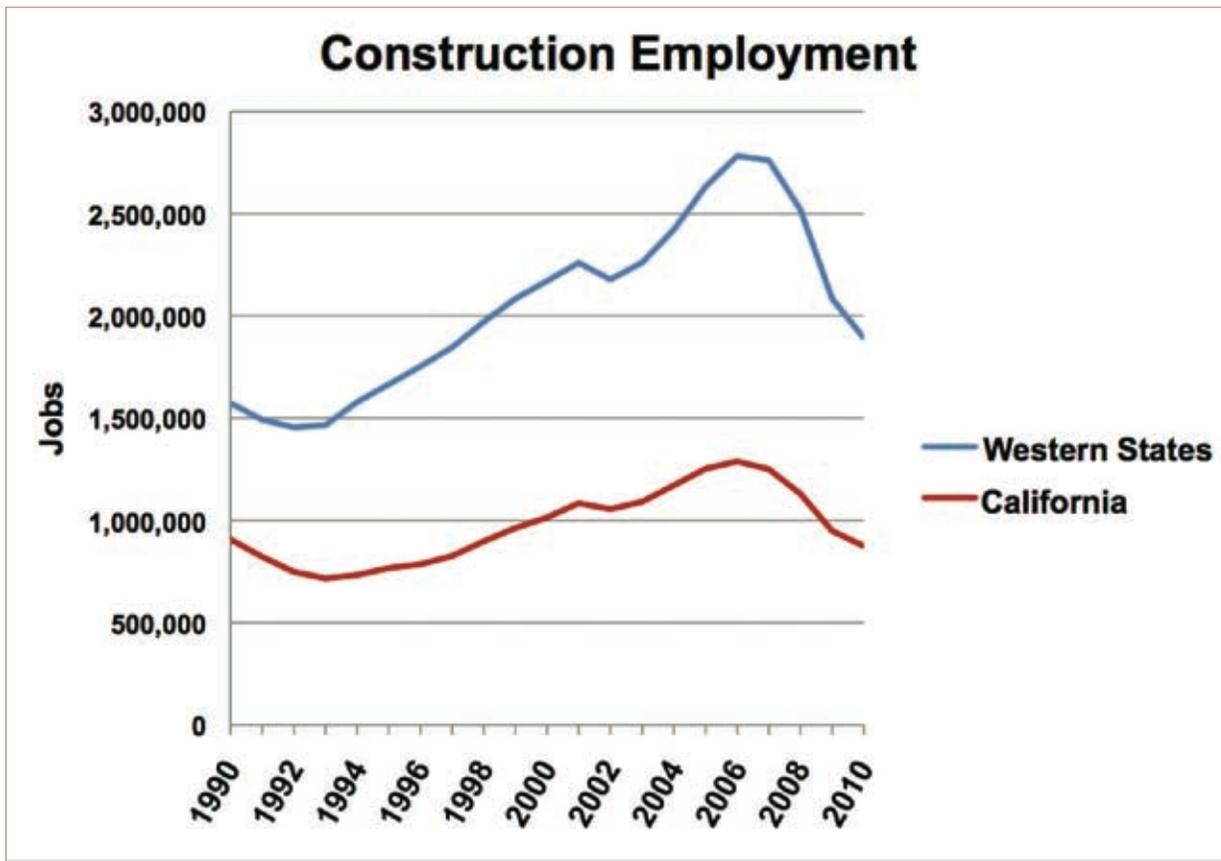


FIGURE 2 - CONSTRUCTION EMPLOYMENT, WESTERN U.S. AND CALIFORNIA, 1990-2010

Source: Bureau of Economic Analysis, U.S. Dept. of Commerce

number from 1970 through 2006 with occasional slight downturns. Figure 2 provides a detailed view of construction employment in the West and in California from 1990 through 2010. In the period from 2002 through 2006, construction employment saw strong growth as the national real estate and construction boom impacted the West. With the bust in real estate values, construction employment has plunged dramatically. From the peak year in construction employment in 2006, this sector in the West has shed nearly 900,000 jobs, declining by over 30 percent. Over

400,000 of those lost construction jobs in the West were in California, where construction employment declined by a little over 32 percent from 2006 to 2010. Data sources indicate this trend continues as of the writing of this economic summary (November, 2011).

Table 1 shows personal income data for the West reclassified into various sectors, defined as:

- **Transformative** - Industries where raw material is extracted and/or transformed into

# SUMMARY ECONOMIC PROFILE OF INYO AND MONO COUNTIES

TABLE 1: PERSONAL INCOME, WESTERN U.S., 1990 AND 2000

Source: Bureau of Economic Analysis, U.S. Dept. of Commerce

<b>Personal Income</b>					
All figures in millions of 2005 dollars	1990	2000	New Income	% Change	% of New Income
Total Personal Income	1,545,637	2,139,482	593,845	38%	
<b>Labor Income</b>					
<b>Transformative</b>					
Agriculture	12,089	15,912	3,823		
Mining	11,765	12,105	341		
Construction	76,670	107,490	30,820		
Manufacturing	195,533	250,970	55,437		
<b>Total</b>	<b>296,056</b>	<b>386,478</b>	<b>90,421</b>	<b>31%</b>	<b>15%</b>
<b>Distributive</b>					
Transportation & public utilities	74,136	108,459	34,323		
Wholesale Trade	34,708	34,718	10		
<b>Total</b>	<b>108,844</b>	<b>143,177</b>	<b>34,333</b>	<b>32%</b>	<b>6%</b>
<b>Retail Trade</b>	<b>115,294</b>	<b>149,791</b>	<b>34,498</b>	<b>30%</b>	<b>6%</b>
<b>Consumer Services</b>					
Hotels & Other Lodging	14,183	22,279	8,096		
Personal Services	11,070	12,150	1,080		
Household Services	3,622	0	-3,622		
Repair Services	17,763	24,353	6,590		
Motion Pictures	13,862	23,523	9,661		
Amusements and Recreation	12,465	18,082	5,617		
<b>Total</b>	<b>72,965</b>	<b>100,387</b>	<b>27,422</b>	<b>38%</b>	<b>5%</b>
<b>Producer Services</b>					
Finance, Insurance & Real Estate	70,315	143,837	73,521		
Legal Services	27,310	32,088	4,778		
Business Services	62,630	163,741	101,111		
Engineering & Management Svcs	47,063	72,890	25,827		
Membership Organizations	9,762	13,789	4,026		
<b>Total</b>	<b>217,081</b>	<b>426,345</b>	<b>209,264</b>	<b>96%</b>	<b>35%</b>
<b>Social Services</b>					
Health Services	86,025	104,704	18,679		
Social Services	7,694	14,781	7,087		
Educational Services	8,095	13,746	5,651		
<b>Total</b>	<b>101,814</b>	<b>133,231</b>	<b>31,417</b>	<b>31%</b>	<b>5%</b>
<b>Government Services</b>					
Federal, Civilian	43,788	45,115	1,327		
Military	28,220	20,790	-7,430		
State and Local	146,423	189,197	42,775		
<b>Total</b>	<b>218,430</b>	<b>255,102</b>	<b>36,671</b>	<b>17%</b>	<b>6%</b>

# SUMMARY ECONOMIC PROFILE OF INYO AND MONO COUNTIES

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## *Economic Context: The Changing Economy of the West*

a finished product. This includes manufacturing, construction, agriculture, and mining.

- **Distributive** - Involved in the distribution of goods and information, this includes transportation and public utilities, as well as telecommunications.
- **Retail Trade** - Retail sales, includes sales associates, managers and owners of retail stores.
- **Producer services** - Closely associated with goods production, these include engineering and management services, finance and real estate, and are generally higher wage industries.
- **Consumer Services** - Includes many of the relatively low-wage sectors, often related to tourism, such as hotels and lodging, amusement, and recreation. Also includes repair services, which can be higher wage.
- **Social Services** - A mix of high-wage and low -wages services including health services as well as in-person and social services.
- **Government** - State, local, federal and military.

As can be seen in Table 1, the fastest-growing service sector in the West between 1990 and 2000 was producer services, which grew by 96 percent and accounted for 35 percent of all new personal income.

Non-labor income derives from two sources: investments and transfer payments.

Investments — including income from retirement plans and investment accounts — provide dividends, interest, and rent. Transfer payments are government payments to individuals, such as Social Security and Medicare.

Figure 3 shows that non-labor sources are the second largest source of personal income and the second fastest-growing source in the West, accounting for 30 percent of all personal income in 2005 and 32 percent of new income growth between 1970 and 2005. In some areas of the West, non-labor income is the single largest source of income and has become a very important source of economic growth as people build second homes and retire in areas they once visited as tourists.

As the economy of the West has grown and diversified over the last 30 to 40 years, the traditional extractive industries of mining, logging, oil and gas, and agriculture have become a much smaller component of the economy in a relative sense. In 2000, personal income from these sectors in non-metropolitan counties represented less than 8 percent of total personal income, down from 20 percent in 1970 (Rasker et al. 2004). Nearly all of the growth in employment and personal income has been in other sectors of the economy (Fig 3). Productivity increases driven by technological advances in the extractive industries have led to decreasing labor requirements. Higher-quality resource discoveries elsewhere in the world, in conjunction with freer international trade and low-cost labor, also contribute to the long-term decline of the resource industries in the West.

Rasker et al. (2004) found that states and counties in the West that were more dependent on the transformative industries such as mining, logging, agriculture, and manufacturing had the slowest economic growth,

# SUMMARY ECONOMIC PROFILE OF INYO AND MONO COUNTIES

*Economic Context: The Changing Economy of the West*

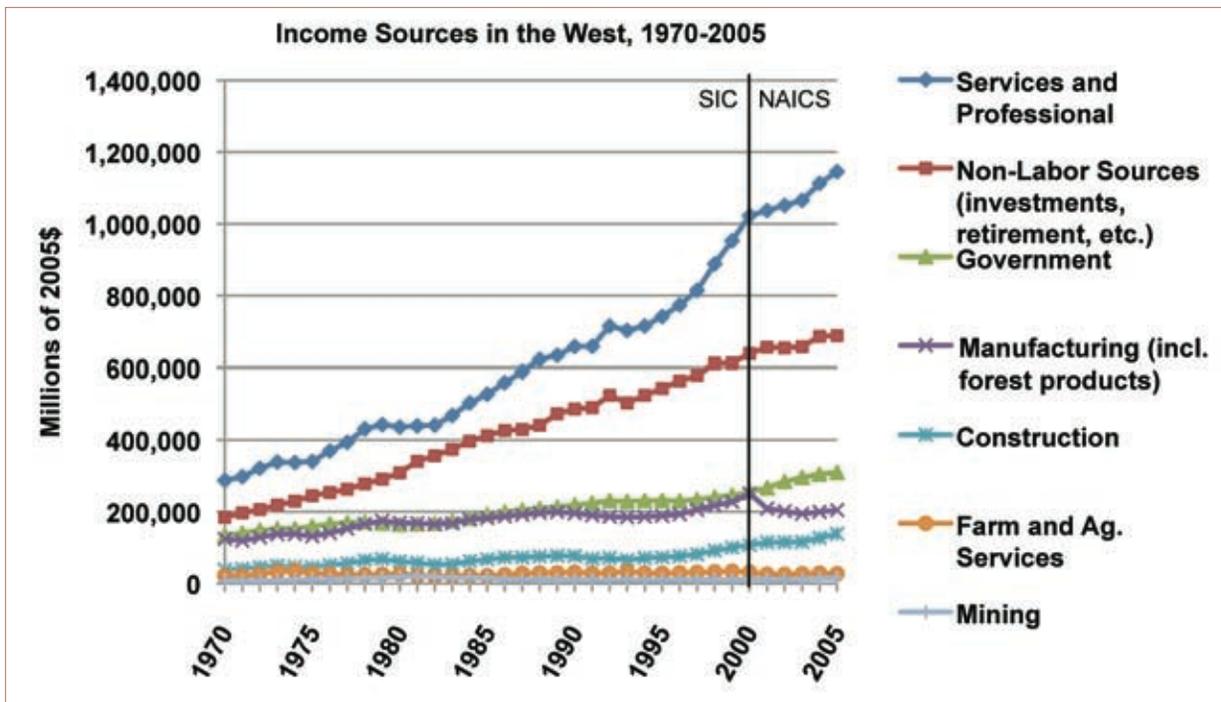


FIGURE 3: INCOME SOURCES, WESTERN U.S., 1970 - 2005

Source: Bureau of Economic Analysis, U.S. Dept. of Commerce

whereas those with a diversified economy more dependent on producer services grew the fastest.

To summarize the changing economy of the West:

- Protected public lands such as designated wilderness, national parks, and national conservation areas provide key environmental amenities that are important contributors to quality of life. As such, protected public lands are significant economic assets for local and regional economic development. Counties with protected public lands or close to protected public lands have the fastest economic growth. Additional conditions important for

economic prosperity include good transportation access to metropolitan areas via road and airline connections, an educated workforce, and a diverse local economy.

- The economy over the last three to four decades has become much more diversified, with a mix of service-sector businesses joining the traditional extractive resource industries. (The service sector encompasses both high and low wage employment, including engineering, management, finance, real estate, and health care professionals.) The amenity economy and knowledge economy are also very important components of the economic picture in the West.
- The service industries have grown greatly

# SUMMARY ECONOMIC PROFILE OF INYO AND MONO COUNTIES

*Economic Context: The Changing Economy of the West*

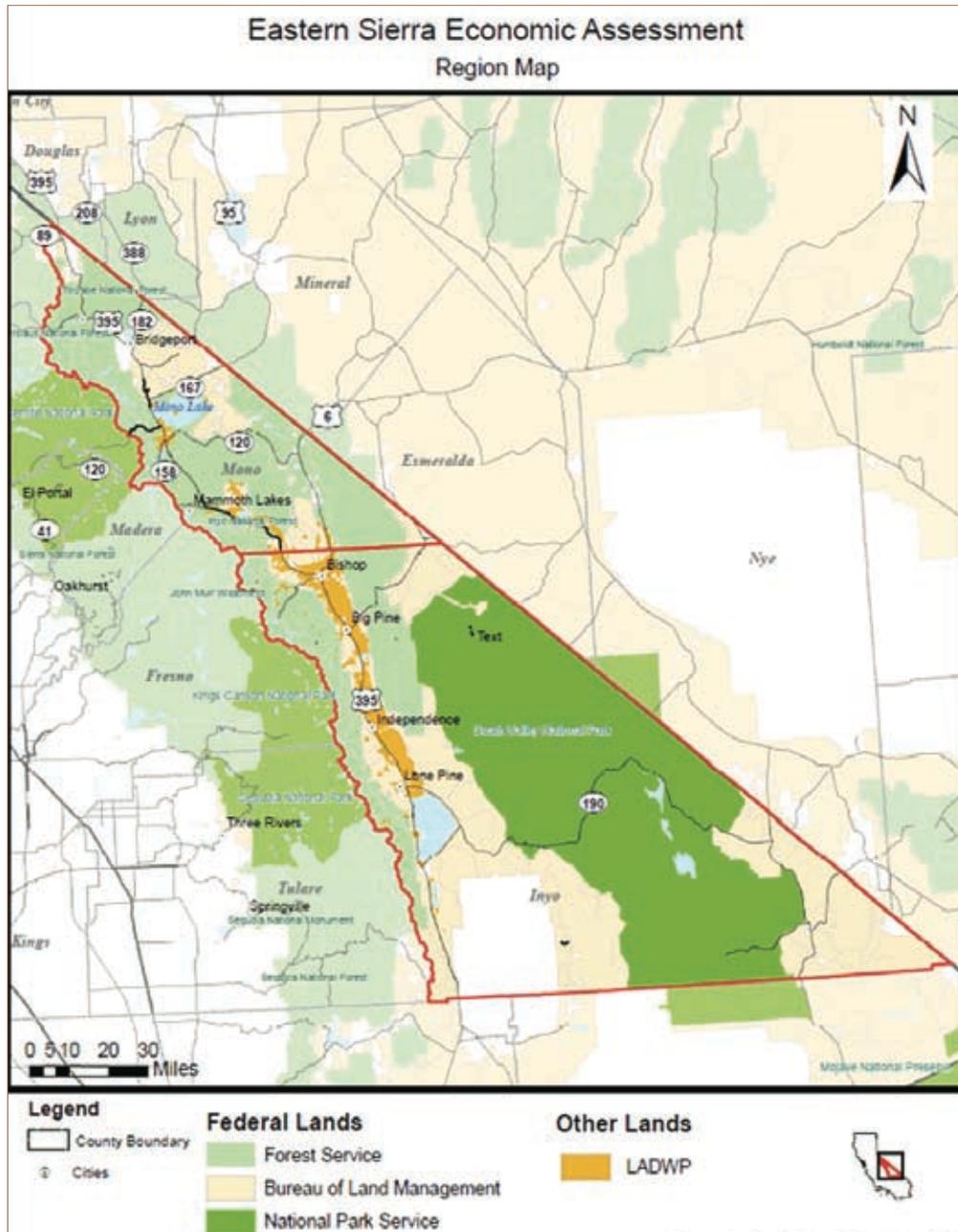


FIGURE 4: MAP OF EASTERN SIERRA  
Prepared by Sierra Business Council, June 2010

# SUMMARY ECONOMIC PROFILE OF INYO AND MONO COUNTIES

*Economic Context: The Changing Economy of the West*

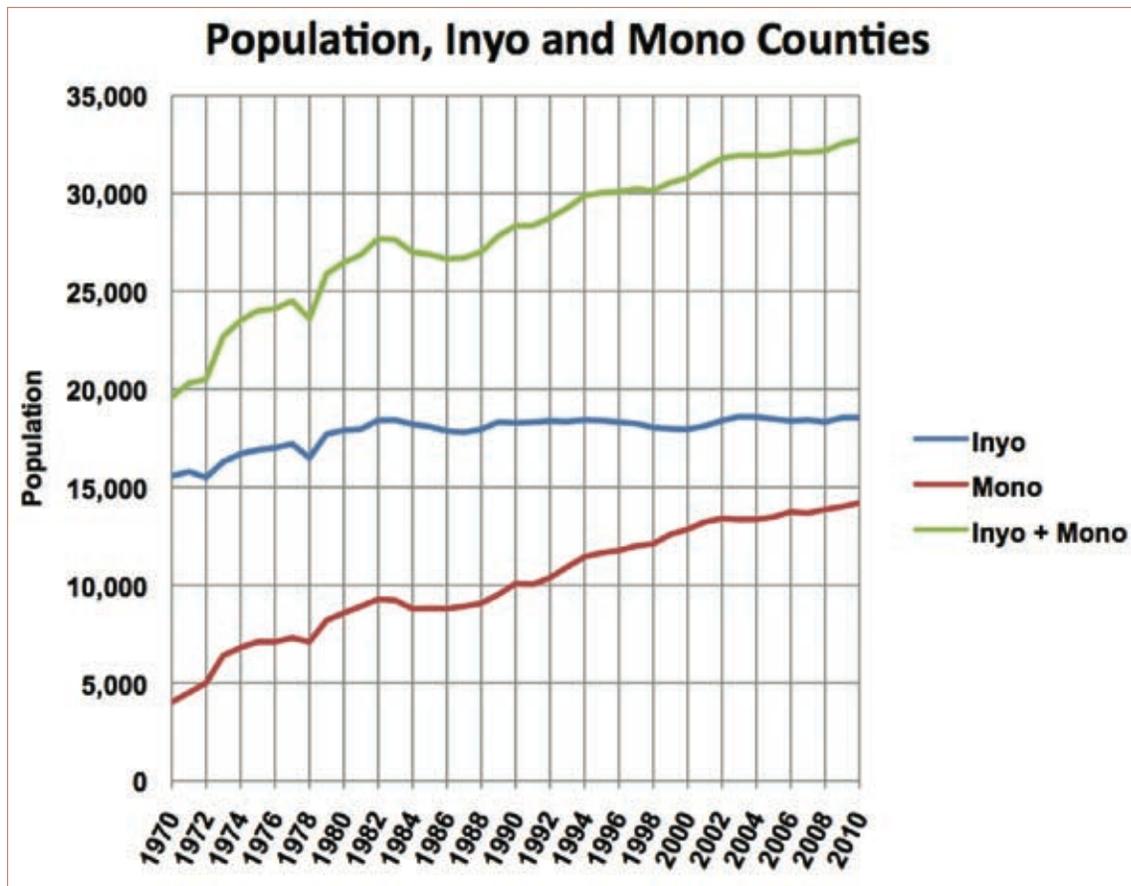


FIGURE 5 – POPULATION, INYO AND MONO COUNTIES, 1970-2009

Source: U.S. Census Bureau

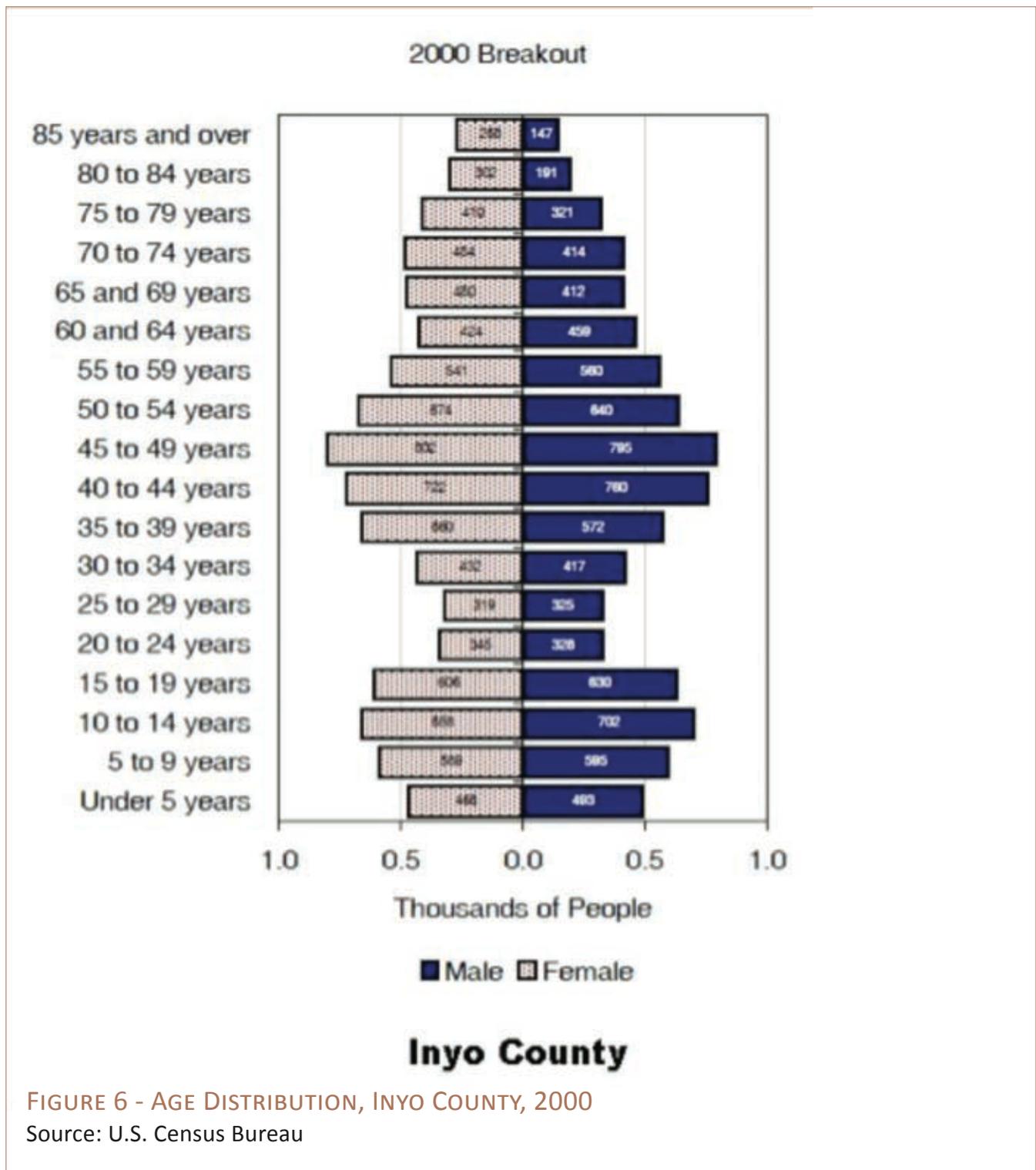
during the last 30 to 40 years. There is a wide diversity in wage levels among the service sectors. Locales with a knowledge economy, having a greater proportion of producer services such as finance, engineering, and business services, have faster growth than areas dependent on low-wage consumer services such as accommodations and food service.

- Retirement and investment income has become a very significant economic driver in many rural areas of the West.
- Though extractive industries continue to

be a factor in the economy of the West, their relative contribution has declined markedly as growth in other sectors outpaces both mining employment and mining income. Given that trend, which has continued since 1970, it is unlikely that extractive industries will provide significant sources of new employment and income in the future. In fact, data shows that counties and states with resource-based economies had the slowest economic growth over the period 1970-2000 (Rasker et al. 2004).

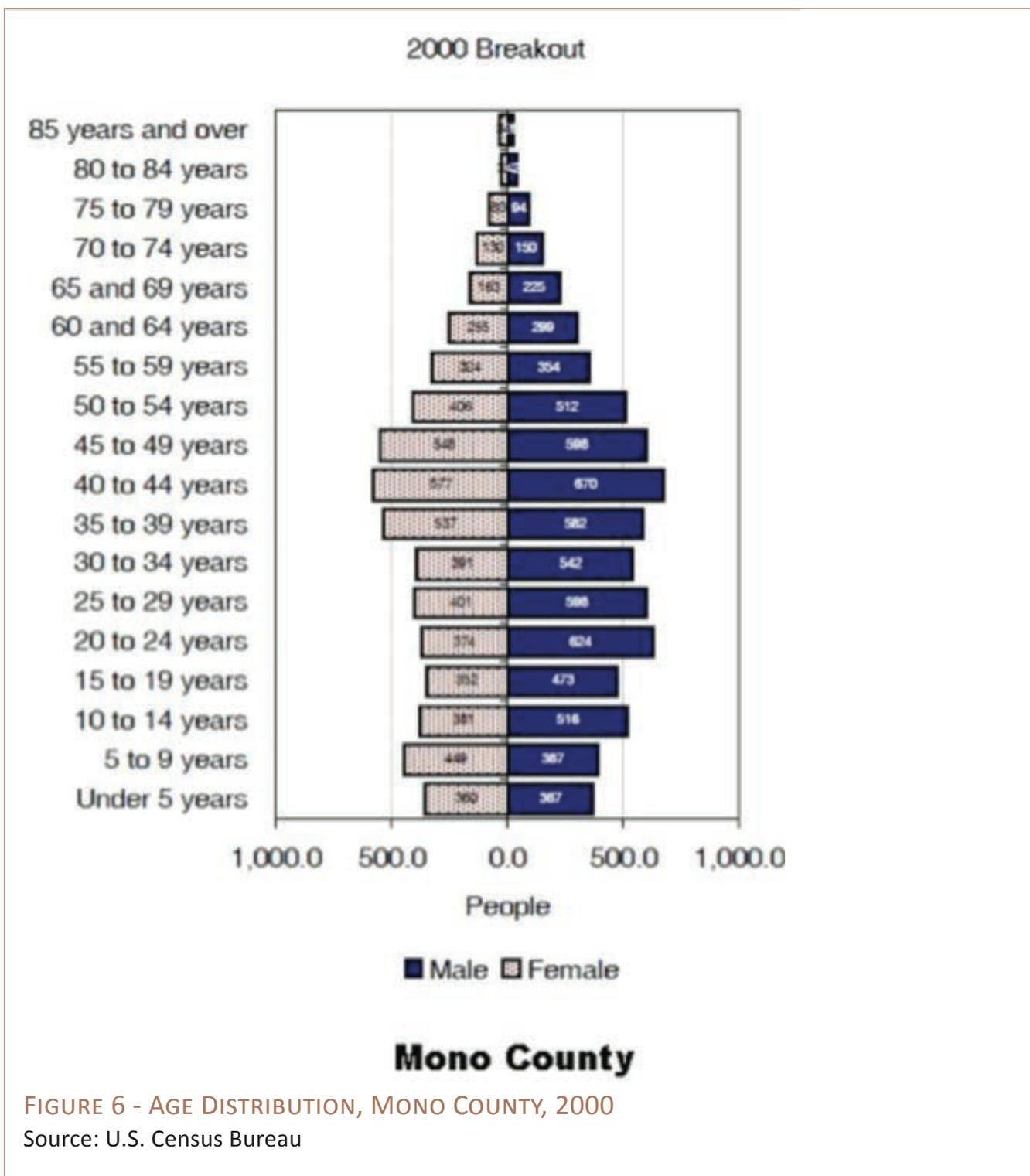
# SUMMARY ECONOMIC PROFILE OF INYO AND MONO COUNTIES

*Economic Context: The Changing Economy of the West*



# SUMMARY ECONOMIC PROFILE OF INYO AND MONO COUNTIES

*Economic Context: The Changing Economy of the West*



# SUMMARY ECONOMIC PROFILE OF INYO AND MONO COUNTIES

*Economic Summary of Inyo and Mono Counties*

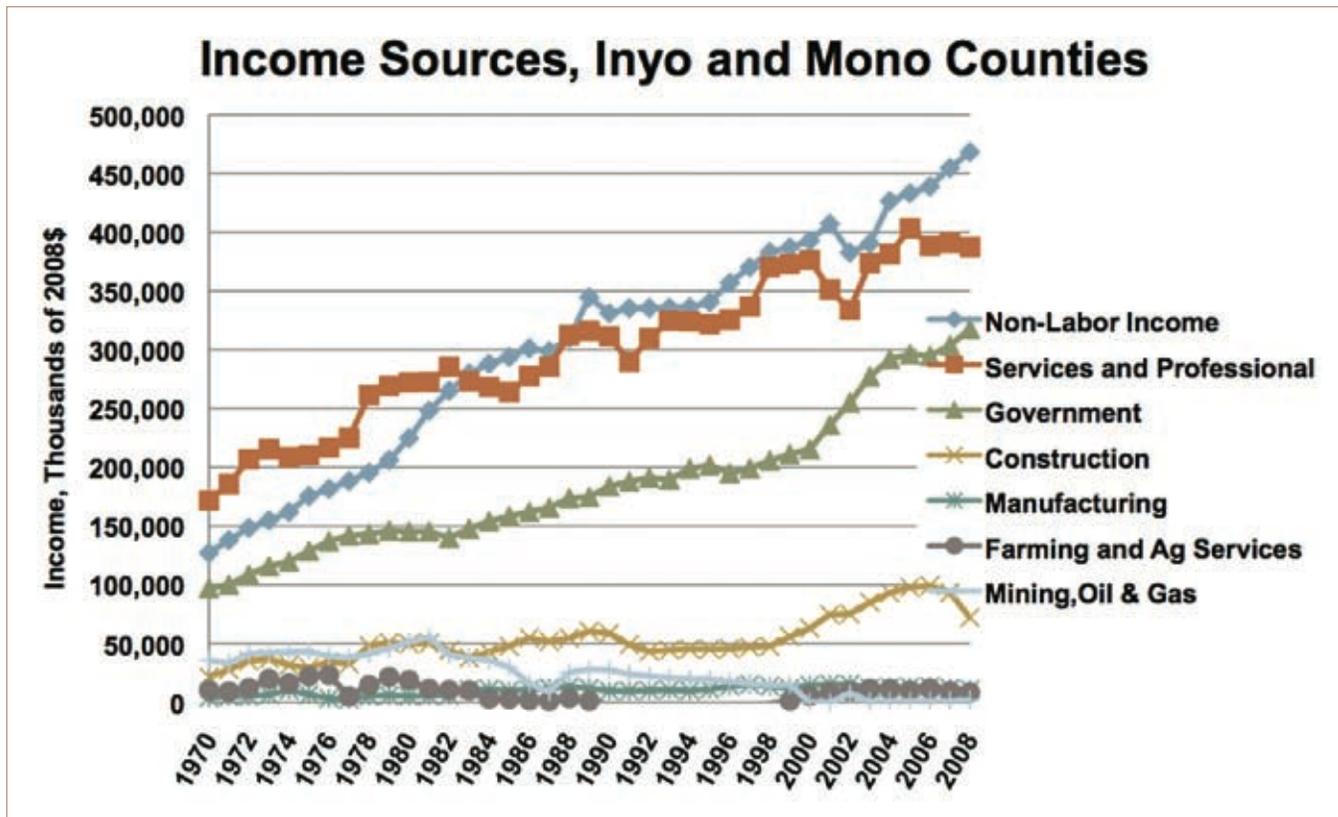


FIGURE 7 - INCOME SOURCES, COMBINED INYO AND MONO COUNTIES, 1970-2008

Source: Bureau of Economic Analysis, U.S. Dept. of Commerce

## ECONOMIC SUMMARY OF INYO AND MONO COUNTIES

### POPULATION

The population of the two-county area grew by an estimated 13,161 from 1970 to 2010, an increase of 67 percent. For comparison, California's overall population increased 87 percent (17,282,885) over the same period.

Figure 5 shows that significant differences exist between the two counties regarding

population. Mono County's population increase of 254 percent is far greater than the 19 percent increase of Inyo County, whose population has been essentially flat at slightly above 18,000 since about 1983. Population in Mono County decreased slightly between 2002 and 2004, but has increased slightly since then.

### AGE DISTRIBUTION

Differences in the age distributions of the counties are primarily in the younger and

# SUMMARY ECONOMIC PROFILE OF INYO AND MONO COUNTIES

## Inyo County Income Sources

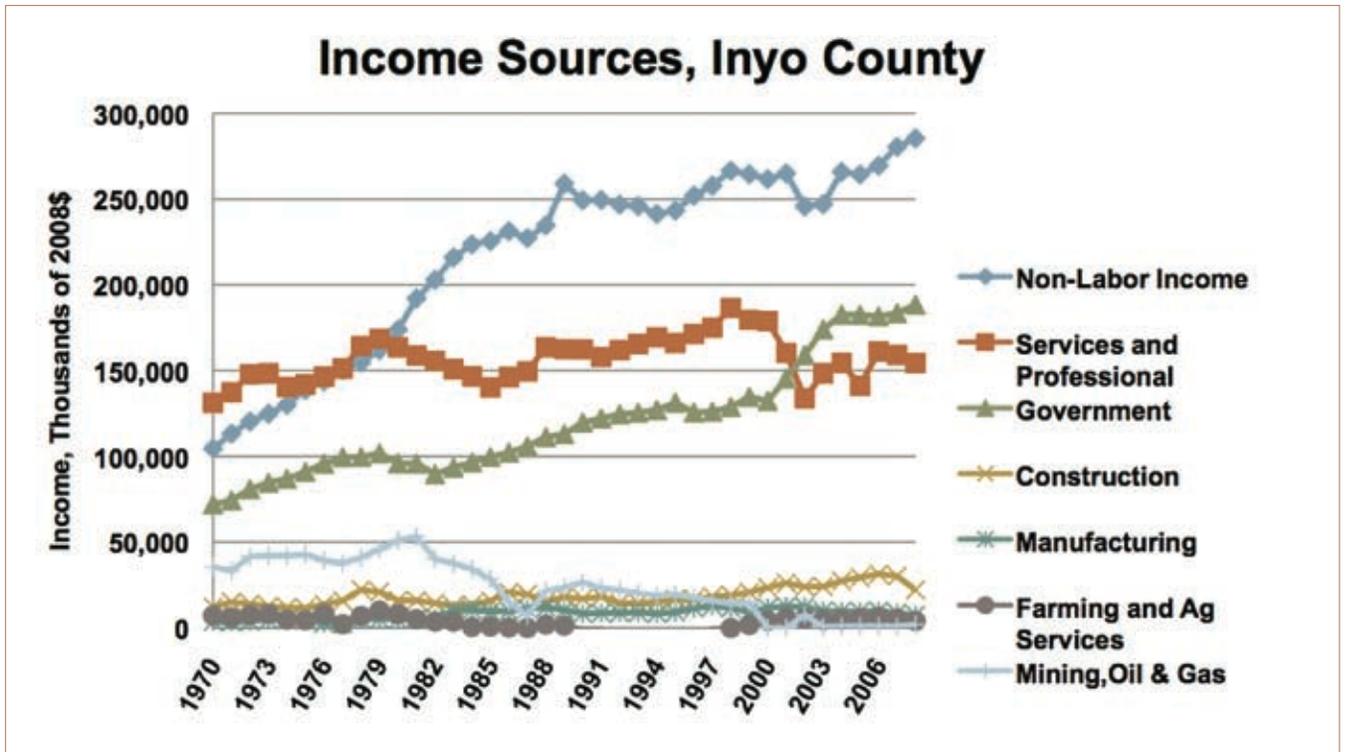


FIGURE 8 - INYO COUNTY INCOME SOURCES, 1970-2008

Source: Bureau of Economic Analysis, U.S. Dept. of Commerce

older portions of the range (See Figure 6). In 2000, Inyo County had a much smaller proportion of people in their twenties and a significantly higher proportion of people over 60 years old than did Mono County.

### INCOME SOURCES

Over the period of 1970-2008, 44 percent of the personal income growth was from non-labor income (retirement and investment). The services and professional sector accounted for 27 percent of the new personal income over the same period. These two sectors were the fastest growing and largest sources

of personal income, as shown in Figure 7. Personal income from government and construction employment also increased significantly, especially since about 2000, although construction income has declined steeply in the last few years. Personal income derived from the mining and petroleum sectors experienced some sharp swings in the 1980s, but has generally been flat or declining since then. Manufacturing and agricultural sources of personal income from 1970 to 2008 were fairly flat across the period, except for some significant fluctuations in the agriculture sector in the 1970s. The mining and petroleum, manufacturing and agricultural sectors are a small component of personal income in

# SUMMARY ECONOMIC PROFILE OF INYO AND MONO COUNTIES

## *Mono County Income Sources*

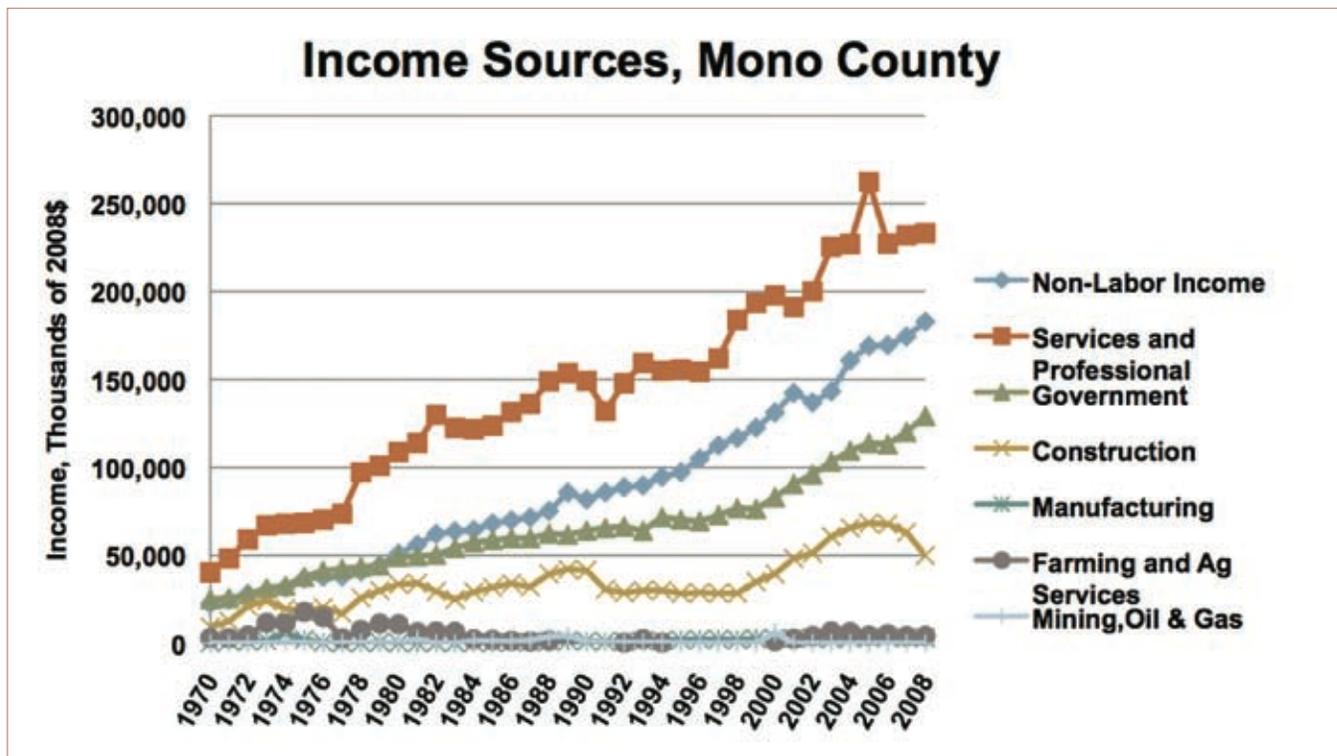


FIGURE 9 - MONO COUNTY INCOME SOURCES, 1970-2008

Source: Bureau of Economic Analysis, U.S. Dept. of Commerce

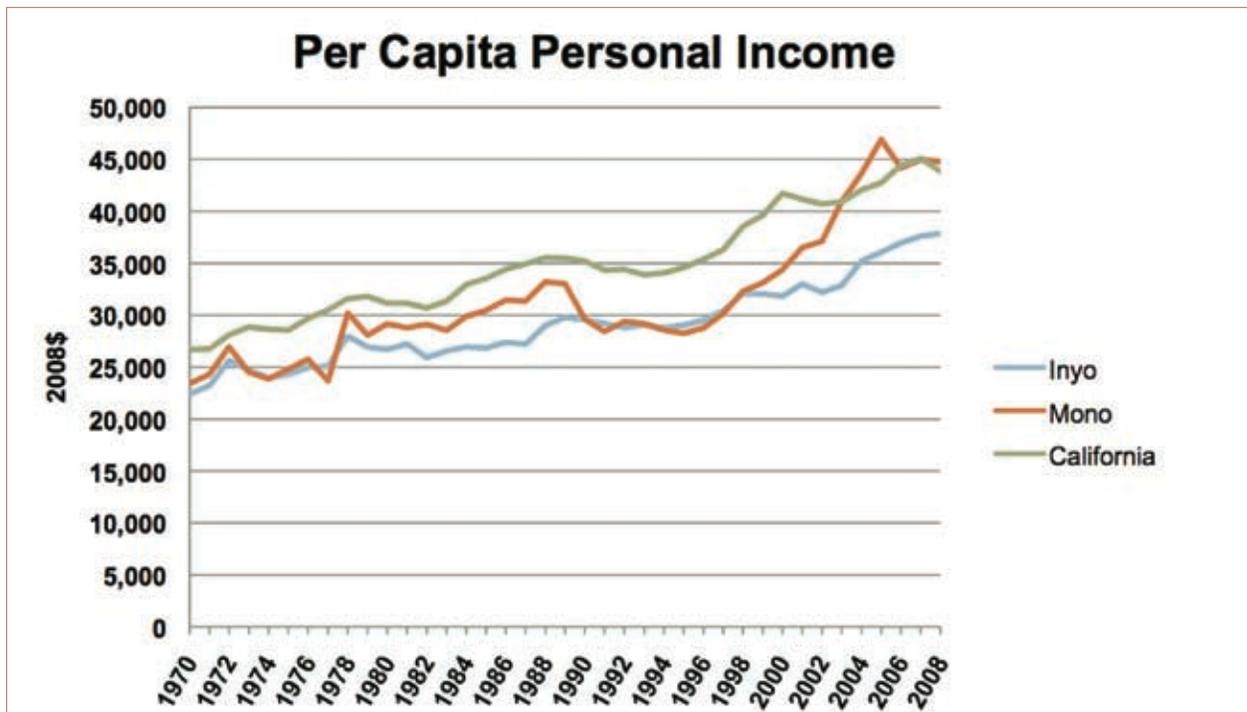
the counties, as can be seen in Figure 6.

Organizing personal income data by county reveals some significant differences between the counties, as can be seen by comparing Figures 8 and 9. Perhaps the most striking differences are those regarding the sectors of non-labor income, services and professional, and government. In Mono County, the services and professional sector has been the largest single source of personal income for the entire period 1970 – 2008, while in Inyo County, non-labor income is the largest income source and has been since 1980.

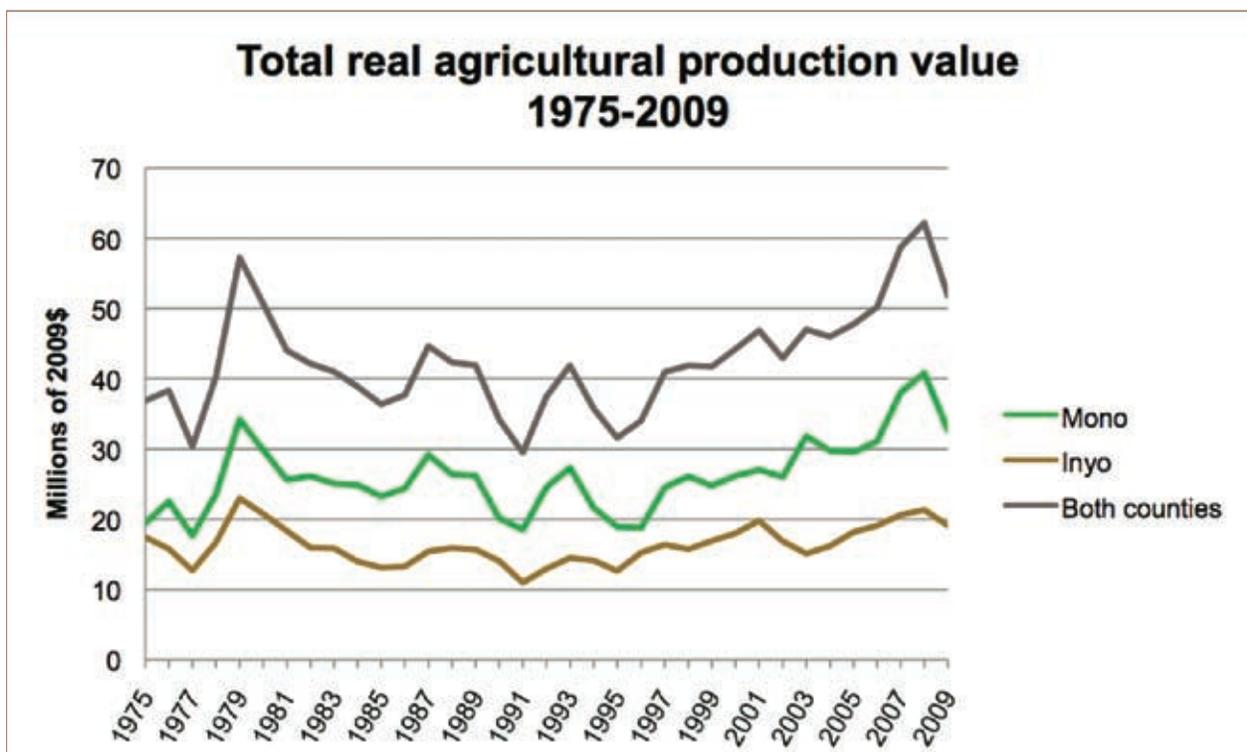
Even so, non-labor income in Inyo County was fairly flat for most of the 1980s and 1990s. Personal income from services and professional jobs in Inyo County has not increased significantly since the mid-1970s, in sharp contrast with Mono County, the West and indeed most of the rest of the country. Income from government employment also differs significantly between the two counties. In 2008 government was the largest source of income from employment in Inyo County at 29 percent of total personal income, while in Mono County it was the second most important employment sector in 2008, providing 22 percent of total personal income.

# SUMMARY ECONOMIC PROFILE OF INYO AND MONO COUNTIES

## Per Capita Personal Income



## Total real agricultural production value 1975-2009



# SUMMARY ECONOMIC PROFILE OF INYO AND MONO COUNTIES

## Per Capita Personal Income

The construction sector contributes a significantly greater proportion of personal income in Mono County, although income from this sector has decreased considerably since 2006.

similar trends until 1999 when Mono County began to experience a greater increase than Inyo County. Mono County now has a significantly higher level of per capita personal income, despite the sharp decrease that occurred due to the recent global recession.

The trend of per capita personal income for Inyo and Mono Counties shown in Figure 10 indicates that the two counties maintained

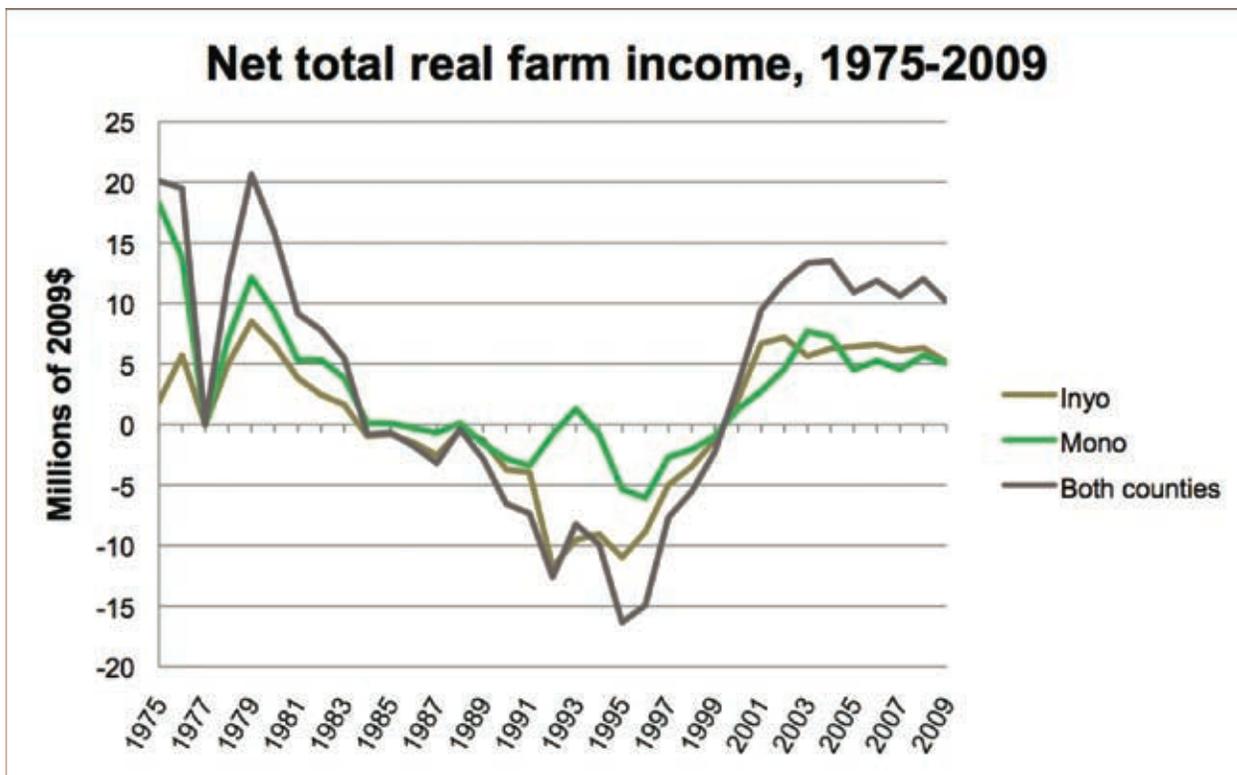


FIGURE 12 – NET TOTAL FARM INCOME, 1975 - 2009

Source: Bureau of Economic Analysis, U.S. Dept. of Commerce

Previous page:

TOP: FIGURE 10 - PER CAPITA PERSONAL INCOME, 1970 - 2008

Source: Bureau of Economic Analysis, U.S. Dept. of Commerce

BOTTOM: FIGURE 11 – TOTAL AGRICULTURAL PRODUCTION VALUE, 1975 - 2009

Source: Inyo and Mono Counties Agricultural Department

# SUMMARY ECONOMIC PROFILE OF INYO AND MONO COUNTIES

## Household Income Distribution, Inyo County

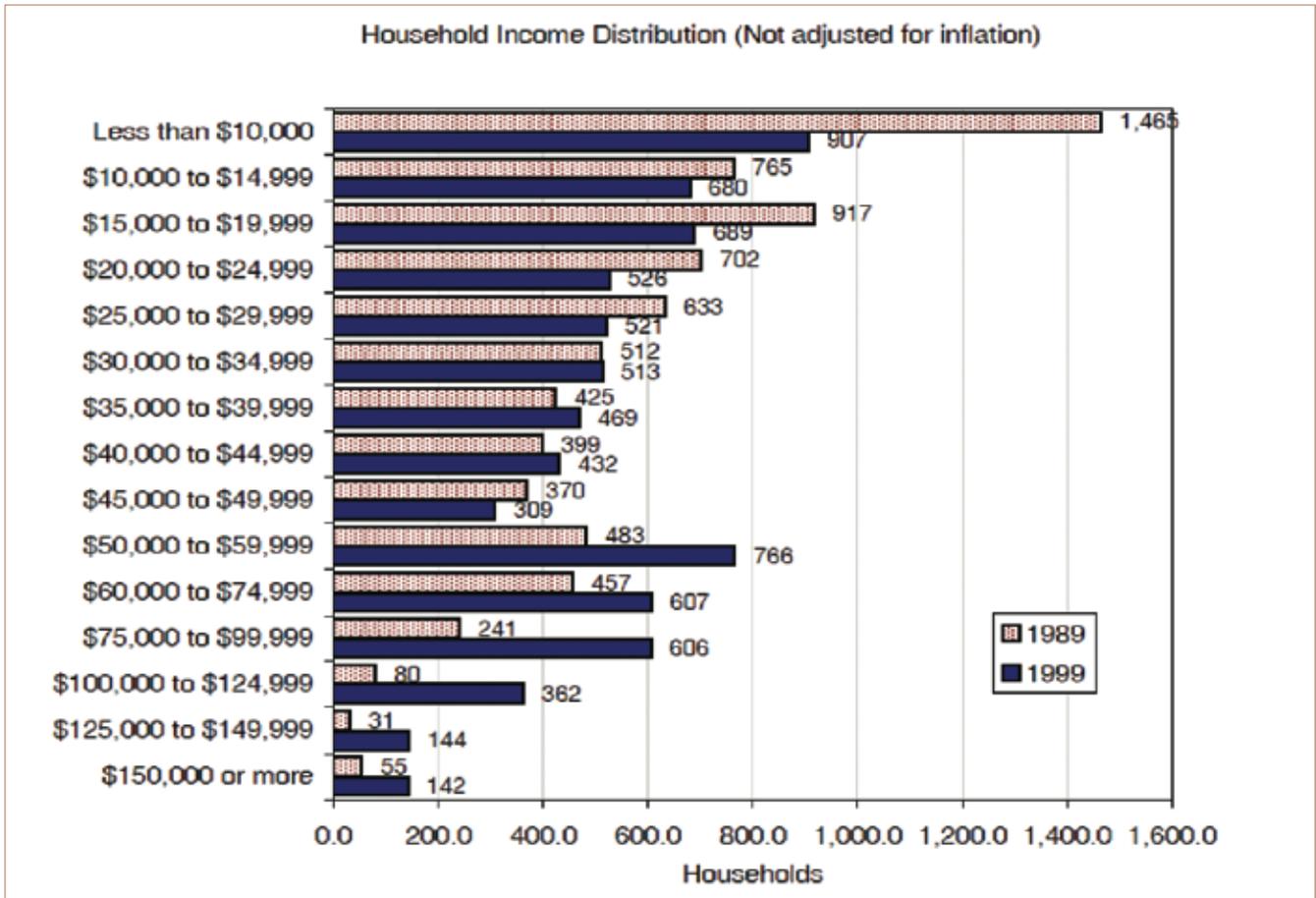


FIGURE 13 - HOUSEHOLD INCOME DISTRIBUTION, INYO COUNTY, 2000

Source: U.S. Census Bureau

### AGRICULTURE, ADDITIONAL ECONOMIC DETAILS

As noted prior, real personal income in the agricultural sector has fluctuated relatively little in the last four decades. A similar trend exists in farm employment which has been flat or slowly declining since the mid-1980s.

If we examine total real agricultural production value, as shown in Figure 11, we can see that it has increased significantly in the

years since about 1995, although it decreased sharply in 2009 (the last year for which data are available). Taking a look at Figure 12, net total real farm income (which incorporates changes in farm expenses), it is interesting to note that for 15 years (1985-2000) net farm income was negative. Since the low in the mid-90s net farm income has rebounded into positive terrain, but has remained essentially flat over the last decade and still remains near or lower than it was in the late 1970s.

# SUMMARY ECONOMIC PROFILE OF INYO AND MONO COUNTIES

## Household Income Distribution, Mono County

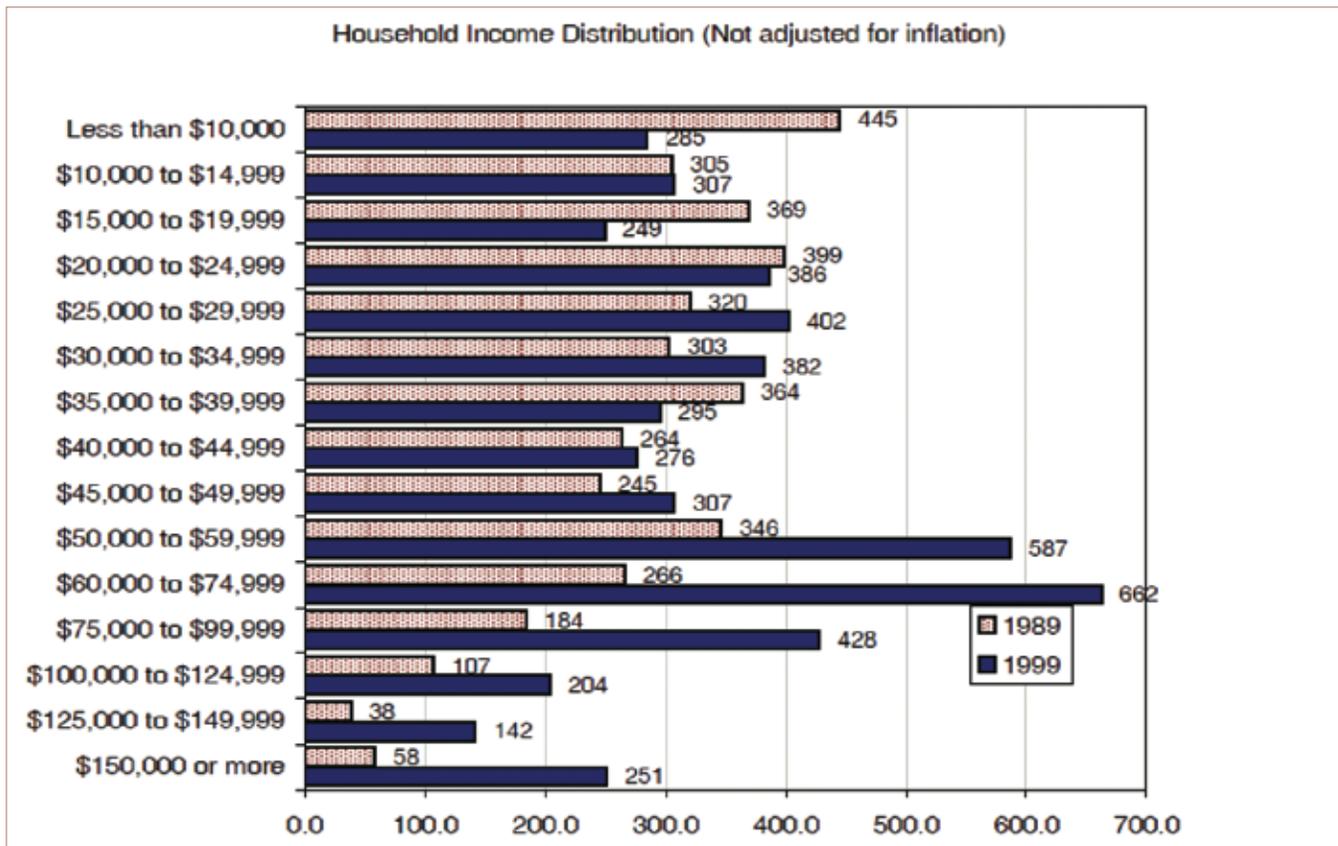


FIGURE 14 - HOUSEHOLD INCOME DISTRIBUTION, MONO COUNTY, 2000

Source: U.S. Census Bureau

### Income Distribution

An examination of household income distribution based on 2000 data (see Figures 13 and 14) indicates that Mono County has a greater proportion of affluent households than Inyo County. An estimated 32 percent of Mono County households have incomes above \$60,000; for Inyo County, the figure is 24 percent. Also, Inyo County has a larger proportion of low-income households with 37 percent having incomes below \$25,000 as compared to 24 percent of Mono County households in the same category.

### Employment and Earnings

Job creation in the two counties over the period 1970 – 2008 has differed substantially as indicated in Figure 15. Mono County has seen a nearly 400 percent increase, adding nearly 8,500 jobs, while Inyo County has seen only a 166 percent increase adding approximately 4,200 new jobs. Average earnings per job in the two counties has been similar over the past few decades and declined during the 1980s, was flat in the 1990s and has increased slightly since 2000. An exception to this trend is in Mono County where there has been a sharp drop since the peak in 2005.

# SUMMARY ECONOMIC PROFILE OF INYO AND MONO COUNTIES

## Job Growth

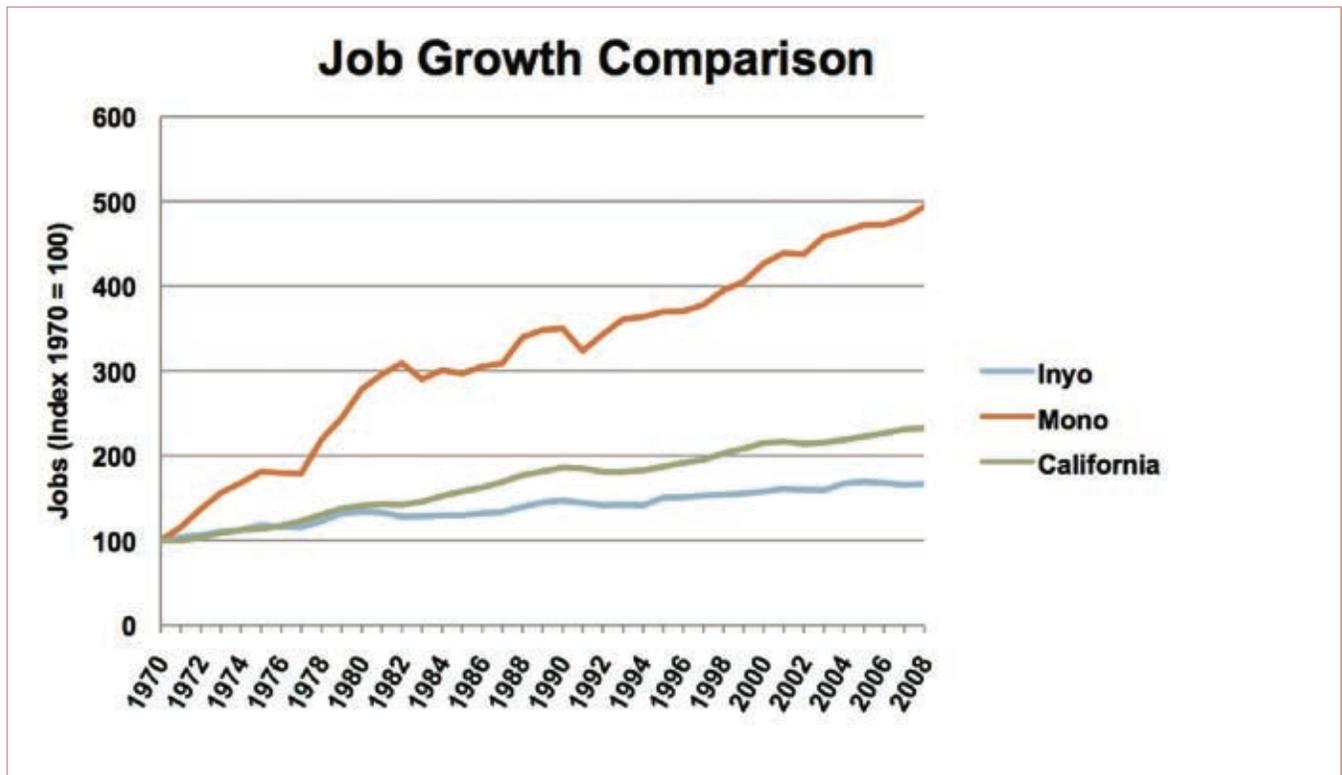


FIGURE 15 - JOB GROWTH INDEX, 1970-2008

Source: Bureau of Economic Analysis, U.S. Dept. of Commerce

### Wages

Figures 17 and 18 show total employment and average annual wages for the year 2006, in Inyo and Mono Counties, respectively. Both counties have the same top three employment sectors, although the top two are reversed between the counties. Note that one of these top sectors — with a high proportion of employees — is also the industry with one of the lowest local average annual wages. With relatively small numbers of employees, the information, financial, and manufacturing sectors have some of the highest average annual wages.

### Location Quotient

Economic diversification is a key factor for a resilient local economy, since diversified local economies are less volatile in the event that a primary industry contracts or shuts down. The economy in Inyo and Mono Counties is highly concentrated in two sectors, leisure/hospitality and government. This can be seen by examining location quotients for local economic sectors.

Location quotient (LQ) is a statistic that measures an area's industrial specialization as compared to a larger geographic area, usually the country as a whole. An LQ is computed as

# SUMMARY ECONOMIC PROFILE OF INYO AND MONO COUNTIES

*Average Earnings per Job*

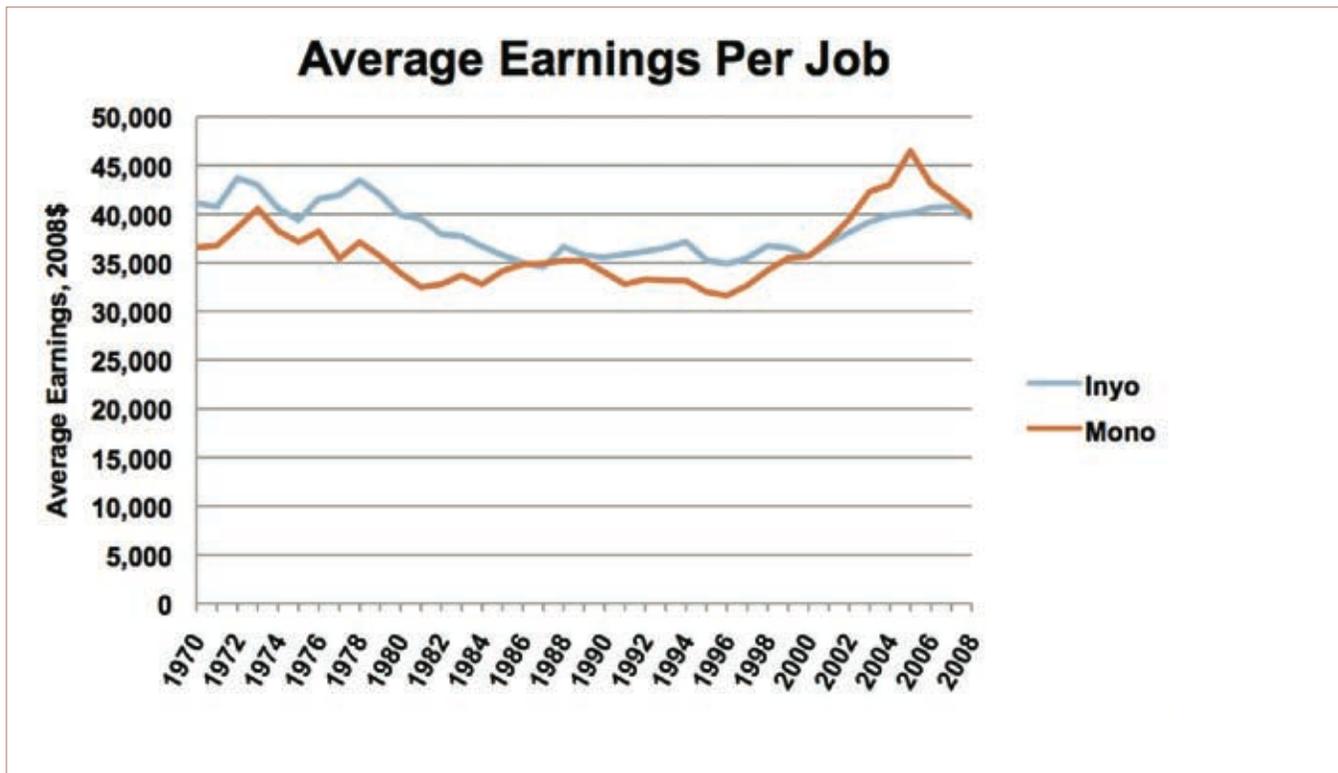


FIGURE 16 - AVERAGE EARNINGS PER JOB, INYO AND MONO COUNTIES

Source: Bureau of Economic Analysis, U.S. Dept. of Commerce

the ratio of an industry's share of a regional total for some economic measure (such as earnings, employment or local GDP) to the industry's share of the national total for the same measure. As an example, an LQ of 1.0 in manufacturing means that the region and the nation are equally specialized in manufacturing. An LQ above 1.0 means that the region has a higher concentration of manufacturing than the nation; conversely, an LQ below 1.0 implies a lower concentration.

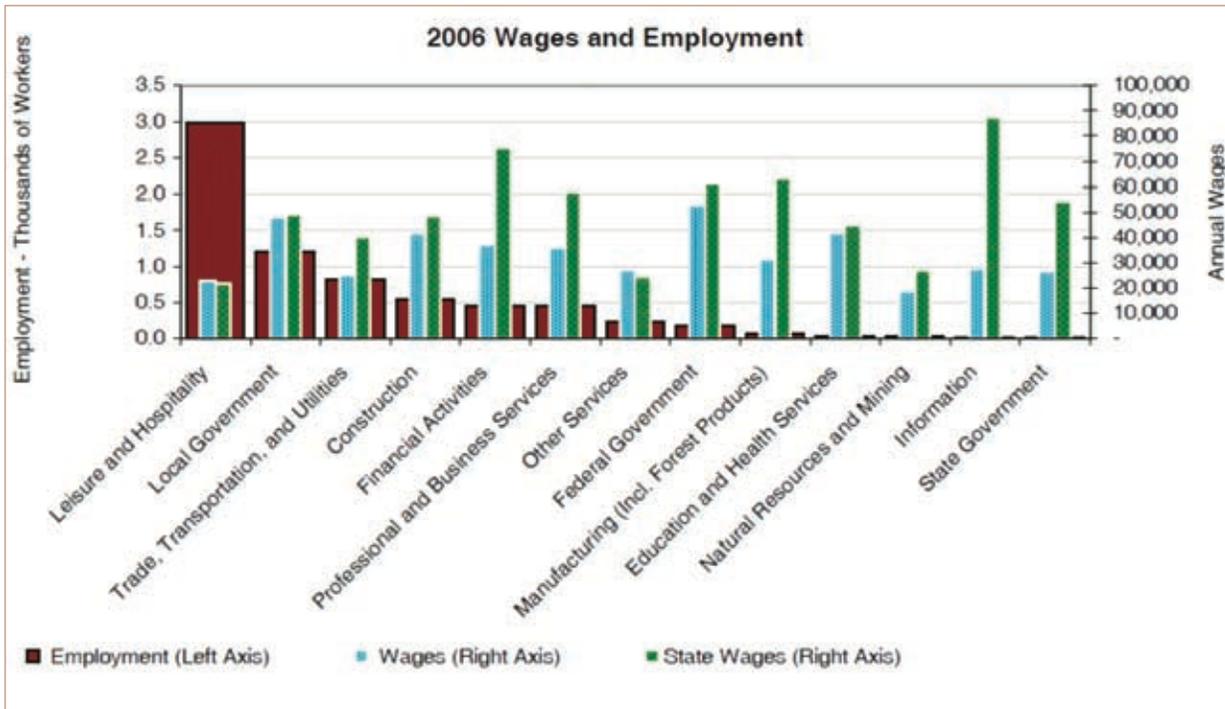
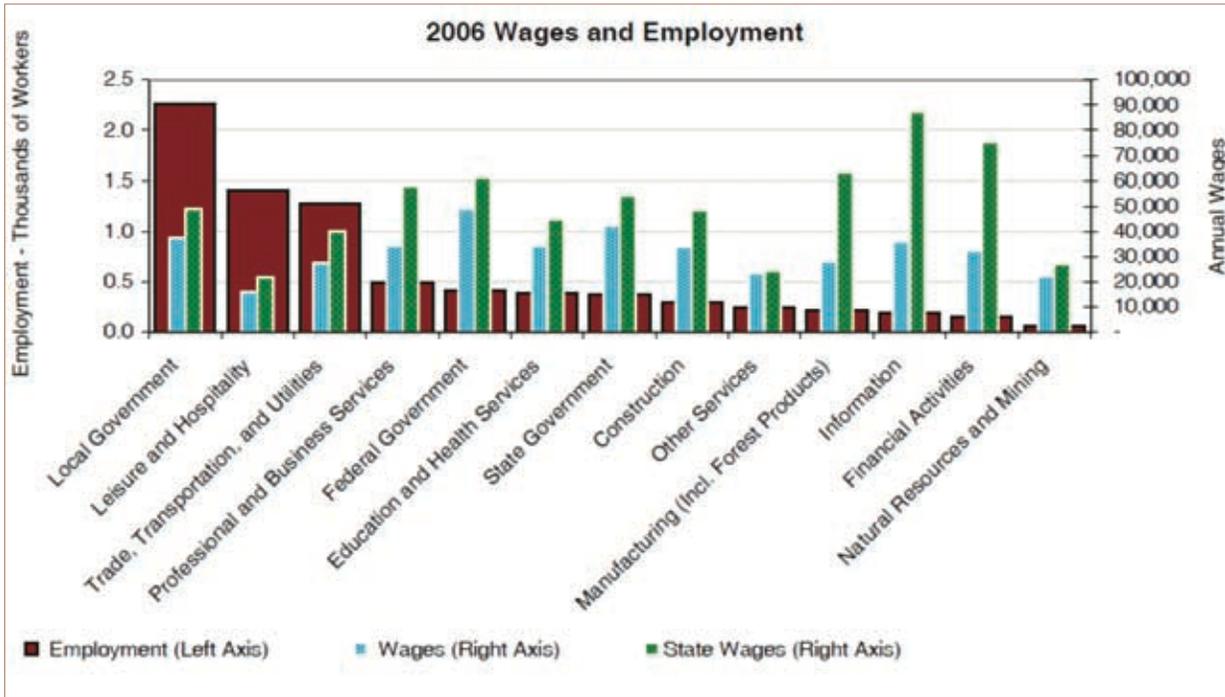
Location quotient provides different information than job numbers or job growth. Industries having a high LQ are usually (but

not always) export-oriented industries. These industries are important because they bring money into the region, rather than simply recirculating money already present in the region (as is the case with most retail stores and restaurants). Industries that have both high LQ and relatively high total job numbers typically form a region's economic base.

Figure 19 shows location quotients calculated using 2009 employment figures for Inyo and Mono Counties, and, for comparison, the state of California. In both counties, the highest two LQs are for the leisure/hospitality and government sectors.

# SUMMARY ECONOMIC PROFILE OF INYO AND MONO COUNTIES

## Wages and Employment



# SUMMARY ECONOMIC PROFILE OF INYO AND MONO COUNTIES

## Location Quotient

Inyo County is most highly concentrated in the government sector, with additional significant concentrations in the sectors of leisure and hospitality; trade, transportation and utilities; and other services. Breaking down the LQ for trade, transportation and utilities indicates that retail trade is the primary factor in the sector and in other services, both repair and maintenance, as well as membership associations/organizations are the subsectors that drive the sector's high LQ.

The Mono County economy is most highly concentrated in leisure and hospitality. This is no surprise as skiing associated with resorts in the Mammoth Lakes area and tourism in general are the backbone of the county economy.

### Proprietorship component of the local economies

Employment and income growth arising from proprietors provides an indication of the level of entrepreneurial activity in an economy.

Figure 18 shows that in Inyo and Mono Counties, wage and salary jobs have grown more rapidly than proprietorships over the period 1970-2008. Both counties have added proprietors at about the

Sector	Location Quotient, Inyo County	Location Quotient, Mono County	Location Quotient, California
<b>Base Industry: Total, all industries</b>	1	1	1
<b>Natural Resources and Mining</b>	0.77	0.4	1.96
<b>Construction</b>	0.67	1.12	0.91
<b>Manufacturing</b>	0.62	0.07	0.95
<b>Trade, Transportation, and Utilities</b>	1.28	0.59	0.93
<b>Information</b>	0.74	0.18	1.37
<b>Financial Activities</b>	0.45	0.89	0.92
<b>Professional and Business Services</b>	0.35	0.4	1.09
<b>Education and Health Services</b>	0.54	0.05	0.82
<b>Leisure and Hospitality</b>	2.71	4.99	1.01
<b>Other Services</b>	1.45	1.04	1.49
<b>Government</b>	3.10	1.53	0.99
<b>Unclassified</b>	0.93	0.11	3.13

FIGURE 19: 2009 LOCATION QUOTIENTS, INYO, MONO, CALIFORNIA

Source: Bureau of Labor Statistics

Previous page:

TOP: FIGURE 17 - 2006 WAGES AND EMPLOYMENT, INYO COUNTY

BOTTOM: FIGURE 18 - 2006 WAGES AND EMPLOYMENT, MONO COUNTY

Source: Bureau of Economic Analysis, U.S. Dept. of Commerce

# SUMMARY ECONOMIC PROFILE OF INYO AND MONO COUNTIES

## Types of Employment

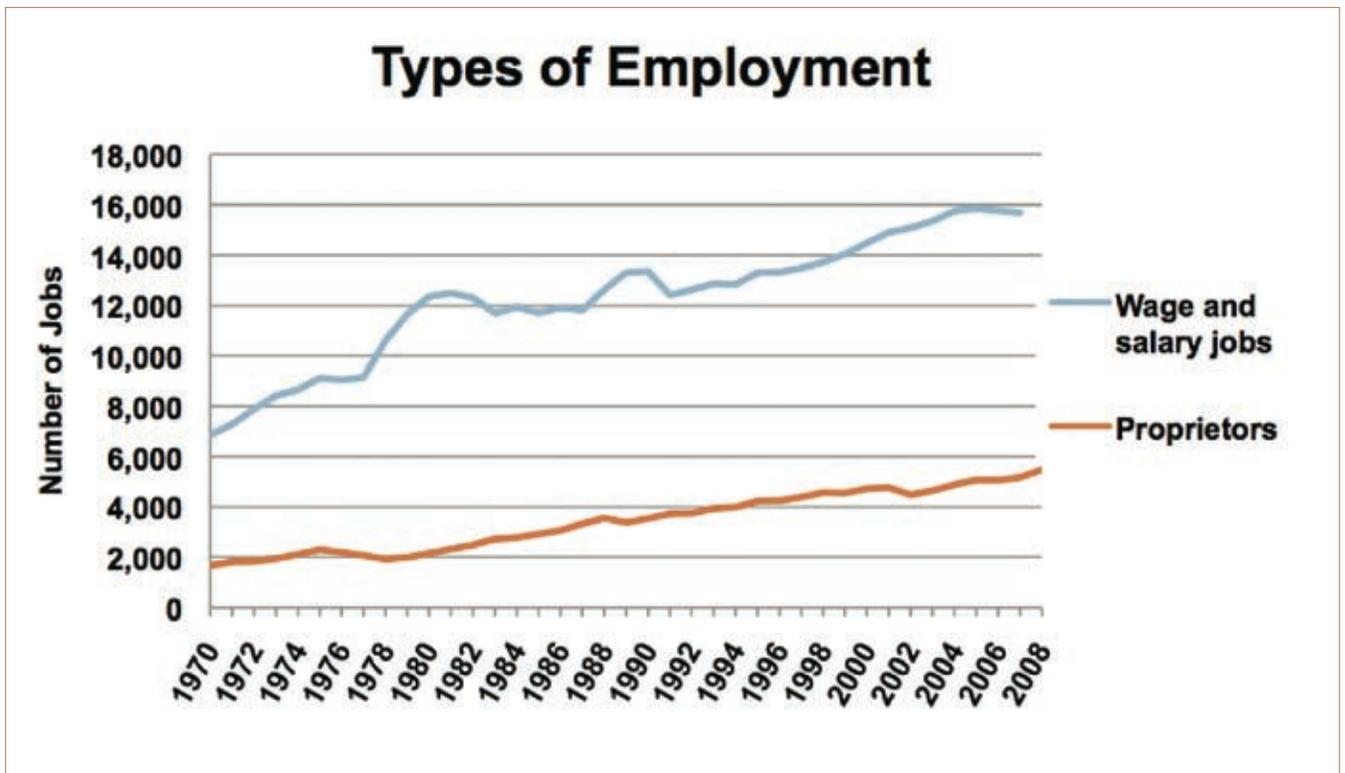


FIGURE 20 - TYPES OF EMPLOYMENT, INYO AND MONO COUNTIES COMBINED

Source: Bureau of Economic Analysis, U.S. Dept. of Commerce

same rate and number (Figure 20), although the proportion is higher for Mono County, as it has a smaller workforce.

Examining income and average income levels between proprietors and wage/salary workers (Figures 22 and 23) indicates that total income from wages/salaries has risen as new jobs are created, while average real wages and salaries have been fairly flat for decades, increasing slightly since 2000. This is likely due to the fact that many of the jobs created have been low-wage.

Proprietors have fared even worse with average real incomes decreasing significantly from 1980 until the late 1990s, remaining fairly flat since 2000 and declining sharply during the recent recession.

### Unemployment

The unemployment rate in the two counties (Figure 24) has tracked very closely over the last 10 years and has increased sharply since 2007.

Although the unemployment rate trend across the two counties has been very close,

# SUMMARY ECONOMIC PROFILE OF INYO AND MONO COUNTIES

*Proprietors and the Inyo-Mono Economy*

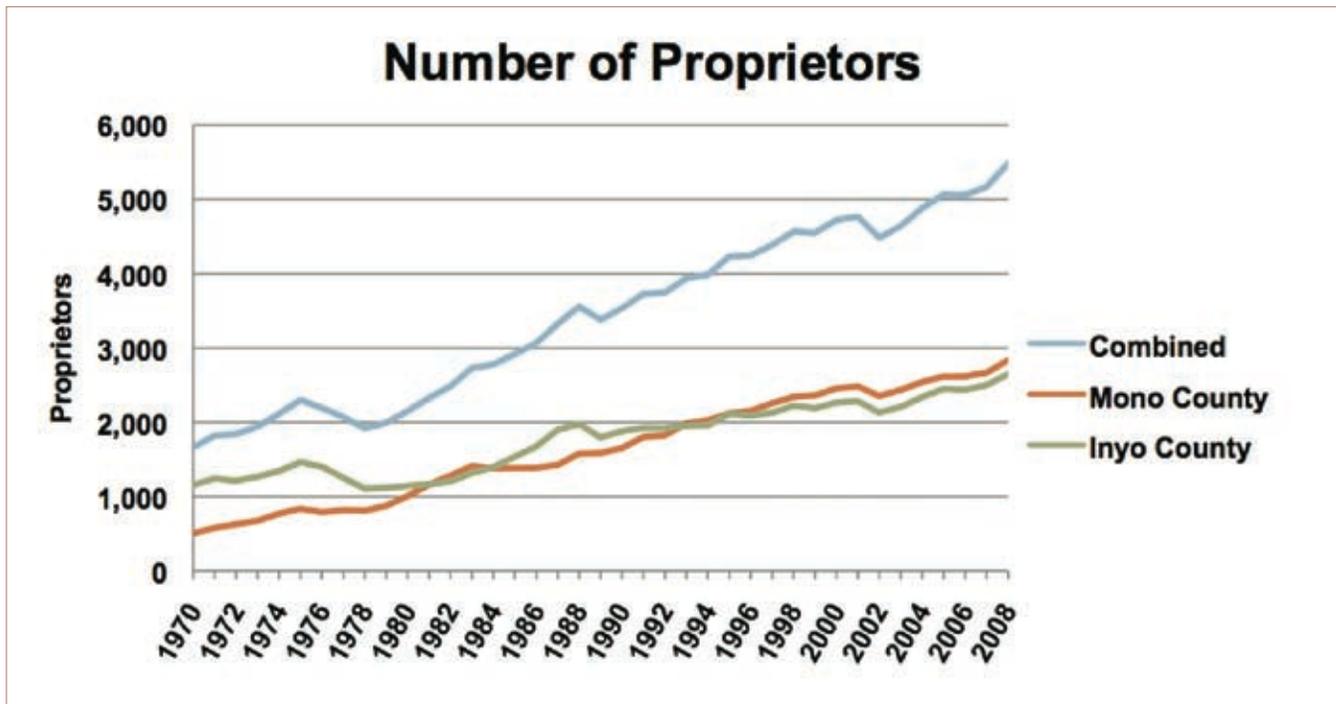


FIGURE 21 – GROWTH IN PROPRIETORSHIPS, INYO AND MONO COUNTIES

Source: Bureau of Economic Analysis, U.S. Dept. of Commerce

the seasonality of unemployment varies significantly, primarily due to differences in tourism activity in the counties (Figures 25 and 26).

In Inyo County, unemployment is higher in the winter months, while the opposite is true for Mono County. Also, in Mono County, highest unemployment is experienced in May/June and October/November.

## Tourism

Tourism is very important to the economies of both counties, providing direct and indirect employment as well as being a very important source of tax income. The tourism sector is

especially important in Mono County, where a recent study conducted by Lauren Schlau Consulting for the Mono County Department of Economic Development and Special Projects estimates that 62 percent of the county workforce is supported by tourism.

A study by Dean Runyan Associates for the California Travel and Tourism Commission analyzed tourism in the state during the period 1992 to 2008. Dean Runyan Associates used its proprietary Regional Travel Impact Model to estimate direct impacts resulting from spending by visitors to the state. The report, released in April 2010, provides estimated direct visitor spending and

# SUMMARY ECONOMIC PROFILE OF INYO AND MONO COUNTIES

## Wages/Salaries vs... Proprietor's Income

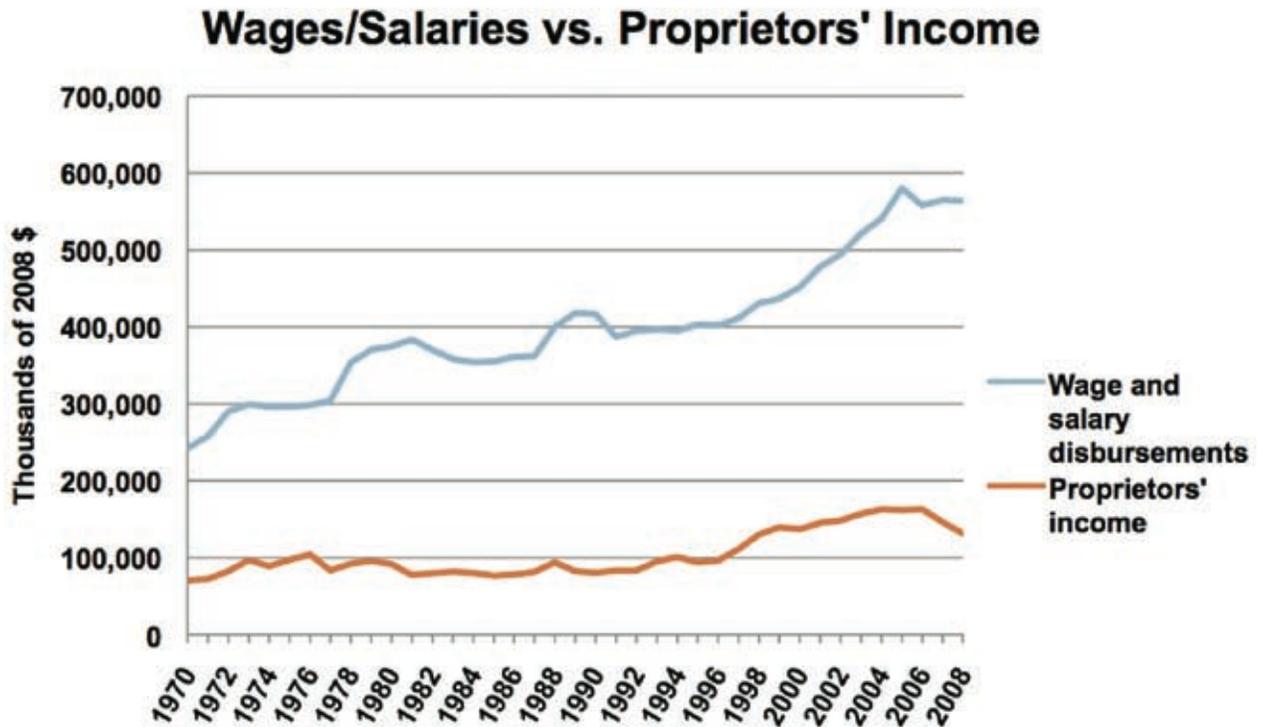


FIGURE 22 - INCOME BREAKDOWN, PROPRIETORS AND WAGE/SALARY WORKERS

Source: Bureau of Economic Analysis, U.S. Dept. of Commerce

employment and government tax revenue generated by travelers to California. Estimates were developed for the entire state and sub-state regions and are also broken down by county.

Total direct travel spending in Mono County in 2008 was estimated at \$367.0 million; Inyo County realized an estimated \$203.6 million. Figure 27 is a graph of estimated total direct travel spending and earnings in the county generated by those expenditures for the period 1992 – 2008.

Most of the spending by tourists is in six categories: restaurant food, retail, accommodation, transportation/fuel, and in food stores. Figure 28 shows the spending breakdown for Inyo and Mono Counties for 2008. Visitor spending in the two counties is similar, with the main differences occurring in the categories of accommodations, local transportation/gas, and food stores.

Mono County visitors spend more on accommodations, while Inyo County visitors spent more on local transportation/gas and food from stores. Significant numbers of jobs result from the tourism/travel industry in

# SUMMARY ECONOMIC PROFILE OF INYO AND MONO COUNTIES

## Average Wage/Salary and Proprietor's Income

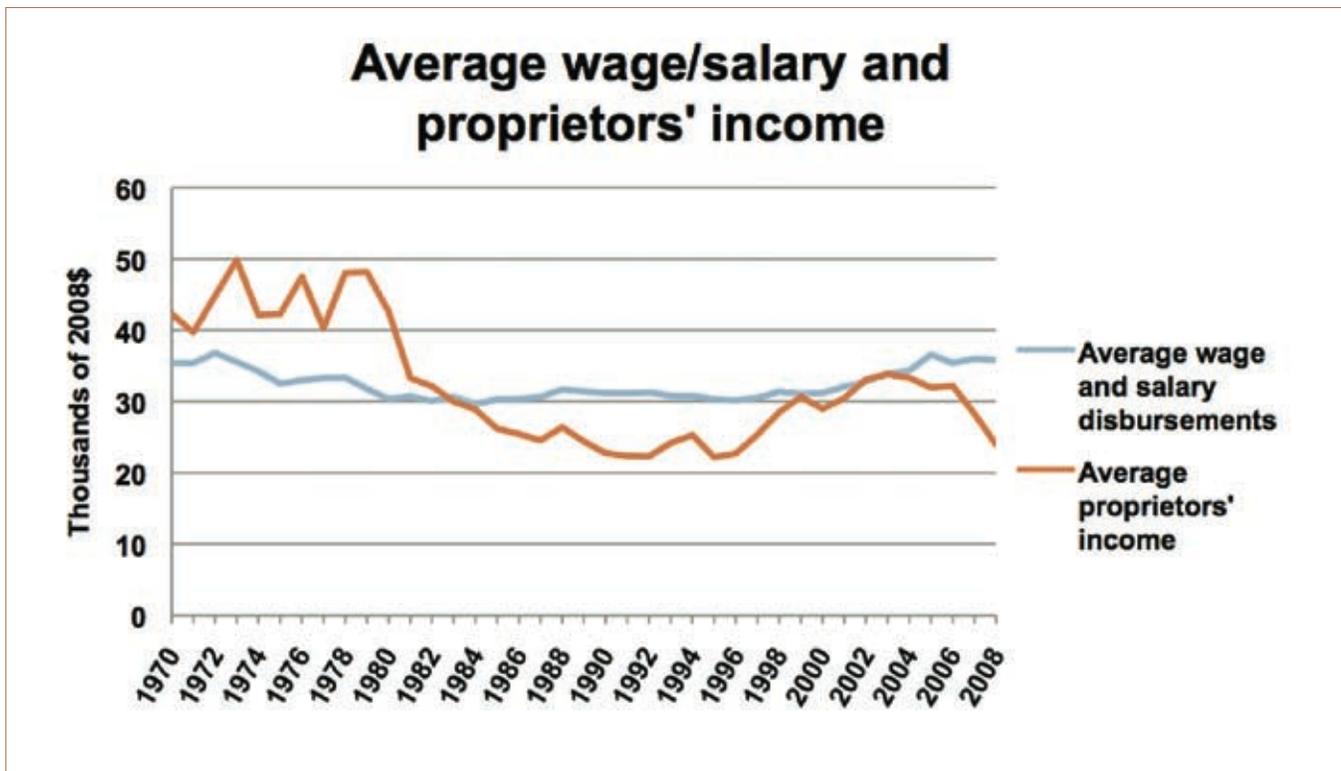


FIGURE 23 – AVERAGE INCOMES FOR PROPRIETORS AND WAGE/SALARY WORKERS

Source: Bureau of Economic Analysis, U.S. Dept. of Commerce

both counties, with Mono County leading Inyo County as shown in Figure 29.

The travel industry generates a significant proportion of state and local government revenues through the collection of state and local sales tax, lodging tax, and motor fuel tax on visitor spending, as well as income taxes on individuals and corporations.

An important aspect of tax receipts generated by travel spending is that most of the taxes are paid by visitors instead of residents. Estimated total local tax receipts generated

by tourism for 2008 was \$13.8 million in Mono County and \$5.5 million in Inyo County. Figure 30 shows local tax revenue generated by travel spending from 1992 - 2008.

The following two pages summarize estimated travel impacts in detail for the period 1992-2008 for Inyo and Mono Counties. These summaries were prepared by Dean Runyan Associates as part of the study conducted for the California Travel and Tourism Commission.

# SUMMARY ECONOMIC PROFILE OF INYO AND MONO COUNTIES

## *Economic Benefits of Public Lands in Inyo and Mono Counties*

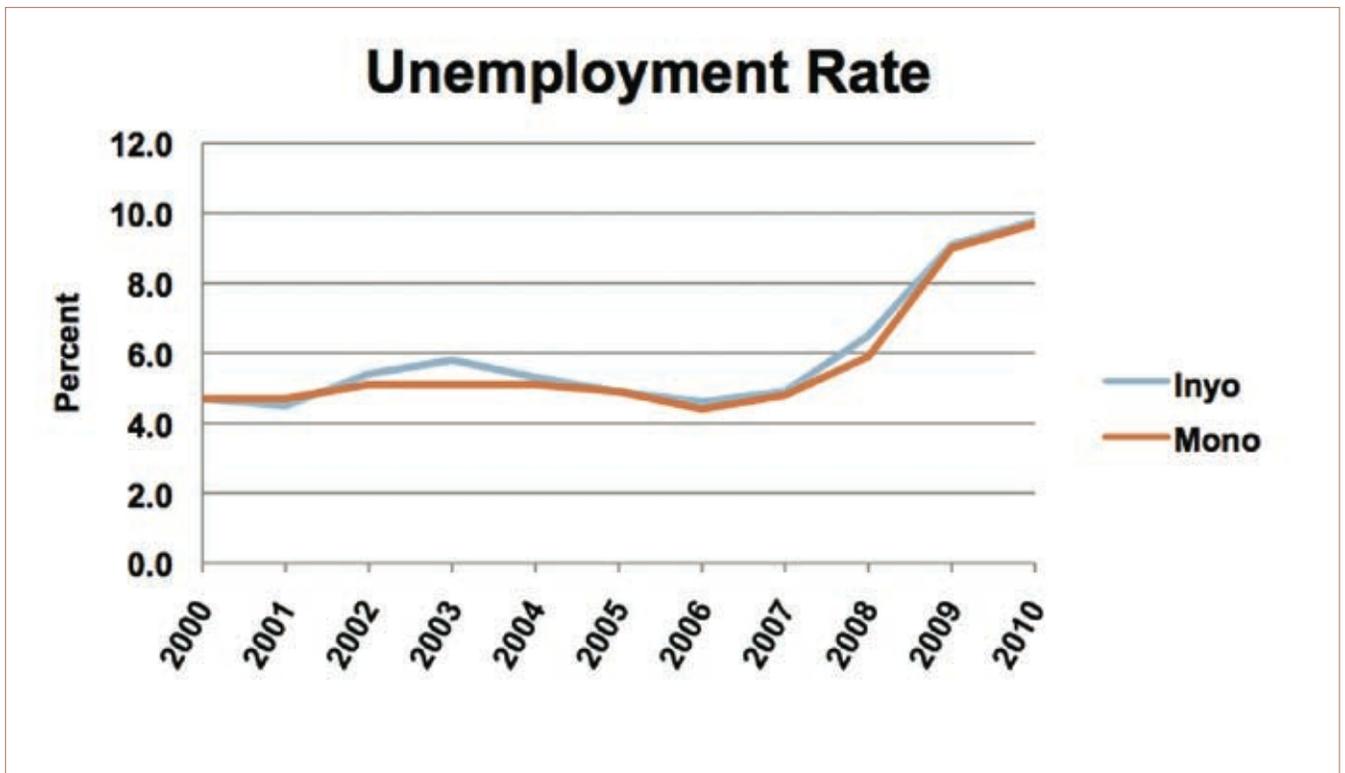


FIGURE 24 – UNEMPLOYMENT RATE, INYO AND MONO COUNTIES

Source: Bureau of Labor Statistics

### ECONOMIC BENEFITS OF PUBLIC LANDS IN INYO & MONO COUNTIES

- Past research has found that “wildlands” (including wilderness, inventoried roadless areas, research natural areas, wilderness study areas, and the ancient bristlecone pine forest) in Inyo and Mono Counties had “an estimated economic value between \$66.2 million and \$784.2 million per year” (Richardson 2002).

- \* Of the total, \$124.9-170.9/year were associated with “direct use (recreation)” (Richardson 2002).

- \* Annual visitation to the wildlands in this

study were estimated at 2,886,747 recreation visitor days (Richardson 2002).

- \* These lands also contributed “more than \$98.1 million in annual income to the counties,” and supported more than 2,800 jobs (Richardson 2002).

A later study, focusing on only National Park Service and Bureau of Land Management Wilderness and Wilderness Study Areas in Inyo County, found these lands provided estimated economic benefits of \$371.2 million per year (Richardson 2005). Of the total, \$1.3 million/year was associated with “direct use.”

# SUMMARY ECONOMIC PROFILE OF INYO AND MONO COUNTIES

*Unemployment*

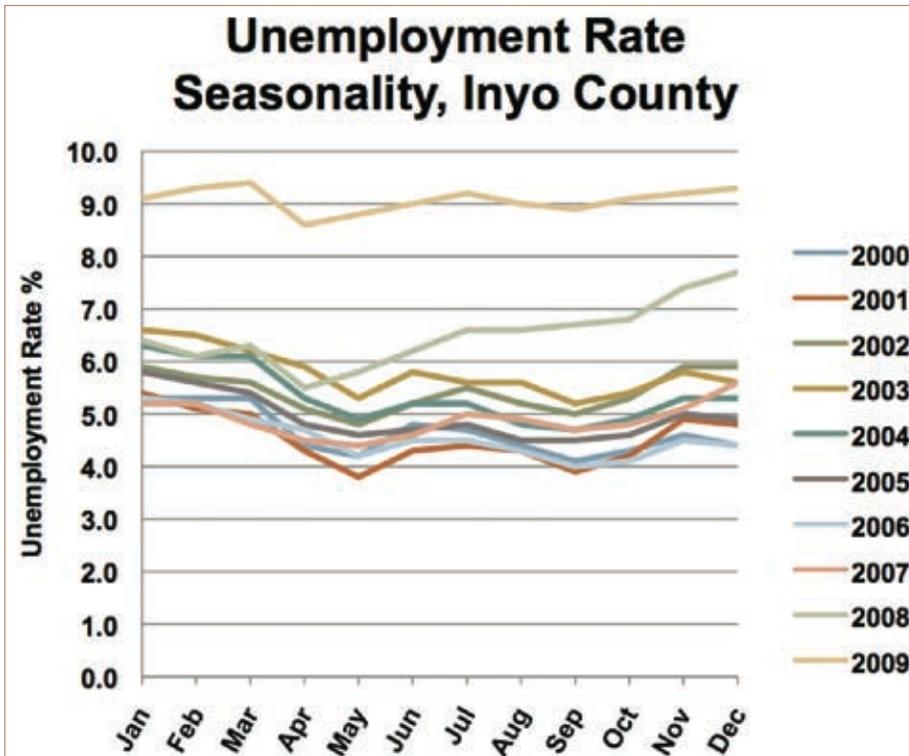


FIGURE 25 –  
UNEMPLOYMENT  
SEASONALITY, INYO COUNTY  
Source: Bureau of Labor  
Statistics

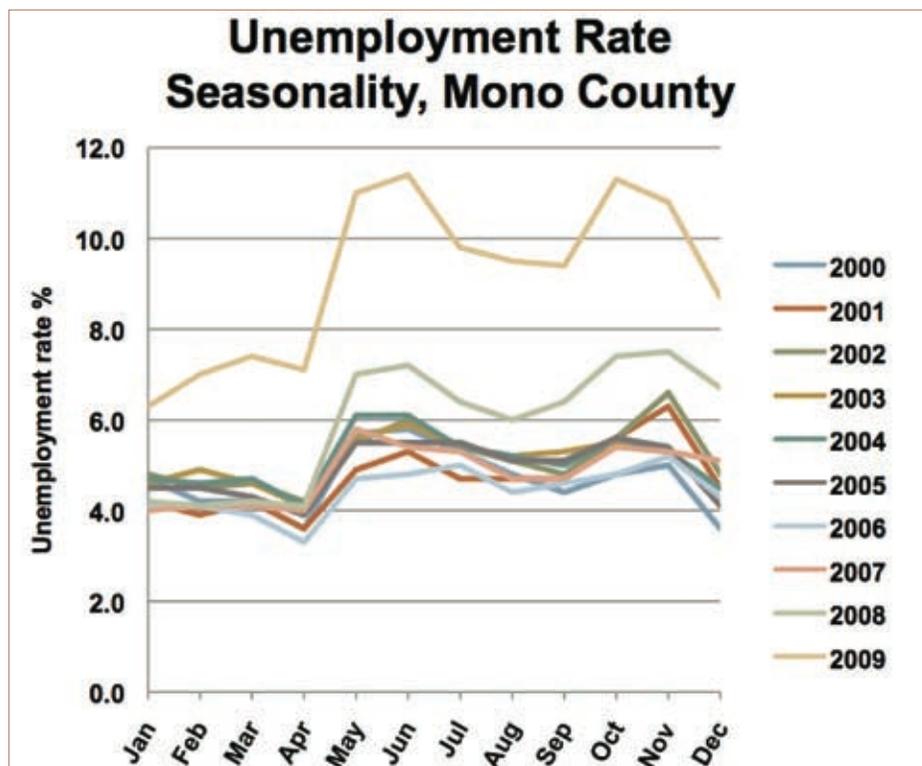


FIGURE 26-  
UNEMPLOYMENT  
SEASONALITY, MONO  
COUNTY  
Source: Bureau of Labor  
Statistics

# SUMMARY ECONOMIC PROFILE OF INYO AND MONO COUNTIES

## Economic Benefits of Public Lands

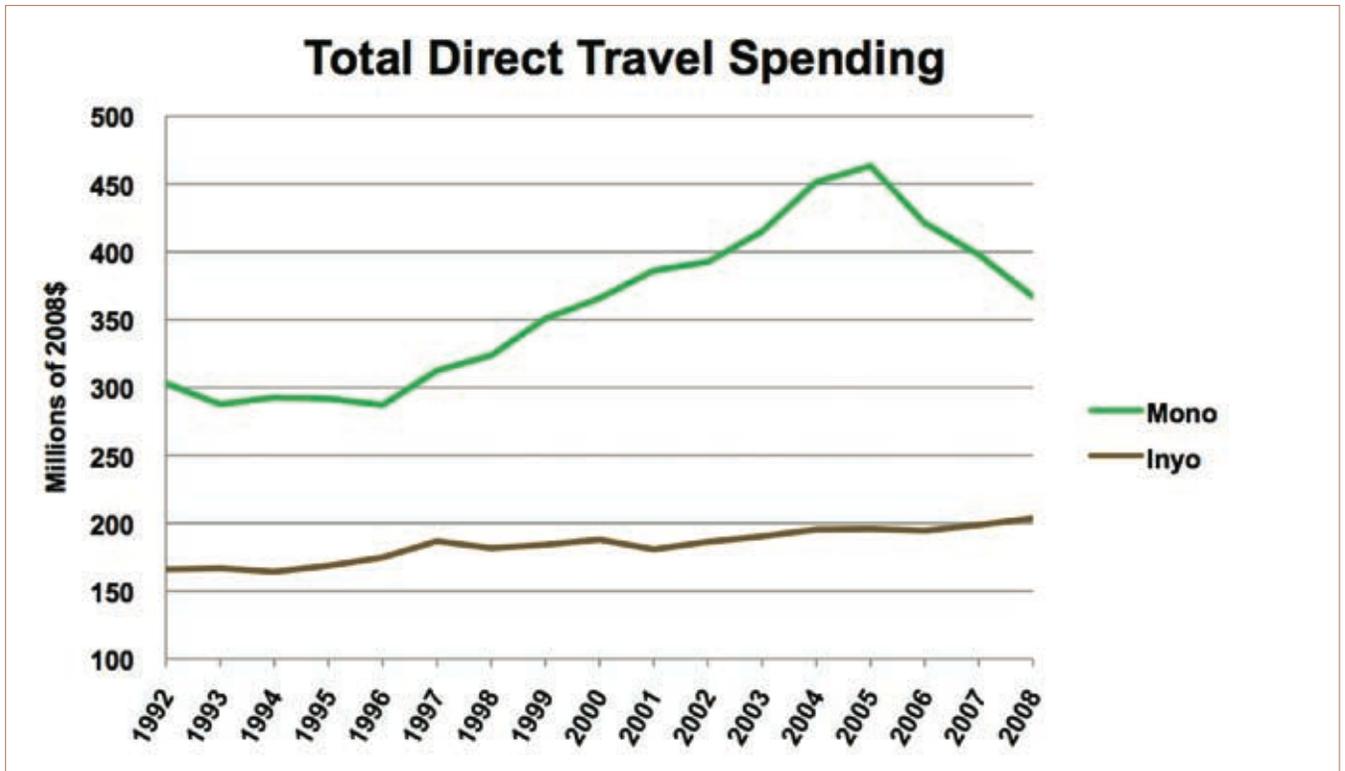


FIGURE 27 - TOTAL DIRECT TRAVEL SPENDING

Source: Dean Runyan Associates

### Recent figures show:

- Amount of “Wildlands” (including wilderness, inventoried roadless areas, research natural areas, wilderness study areas, and the ancient bristlecone pine forest) in Inyo and Mono Counties: 5,803,153 acres (personal communication with Cameron Ellis, GIS Specialist, Sonoran Institute 2010, and Richardson 2002).

### VISITATION TO PUBLIC LANDS IN INYO AND MONO COUNTIES:

- \* Death Valley National Park 828,574 recreational visitors/year in 2009 (NPS Statistics 2010)

Next page:

TOP: FIGURE 28 - VISITOR SPENDING BREAKDOWN

BOTTOM: FIGURE 29 - TOTAL DIRECT TOURISM EMPLOYMENT

Source: Dean Runyan Associates

\* Devil’s Postpile National Park 110,212 recreational visitors/year in 2009 (NPS Statistics 2010)

\* Inyo National Forest 3,921,700 visits/year in 2006 (USDA Forest Service 2009)

\* Bridgeport Ranger District, Humboldt-Toiyabe National Forest (NO DATA)

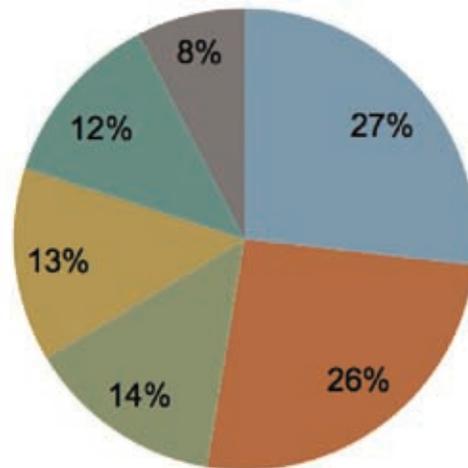
\* Bureau of Land Management 1,594,274 visits/year in FY 2009/2010 (BLM RMIS 2010)

# SUMMARY ECONOMIC PROFILE OF INYO AND MONO COUNTIES

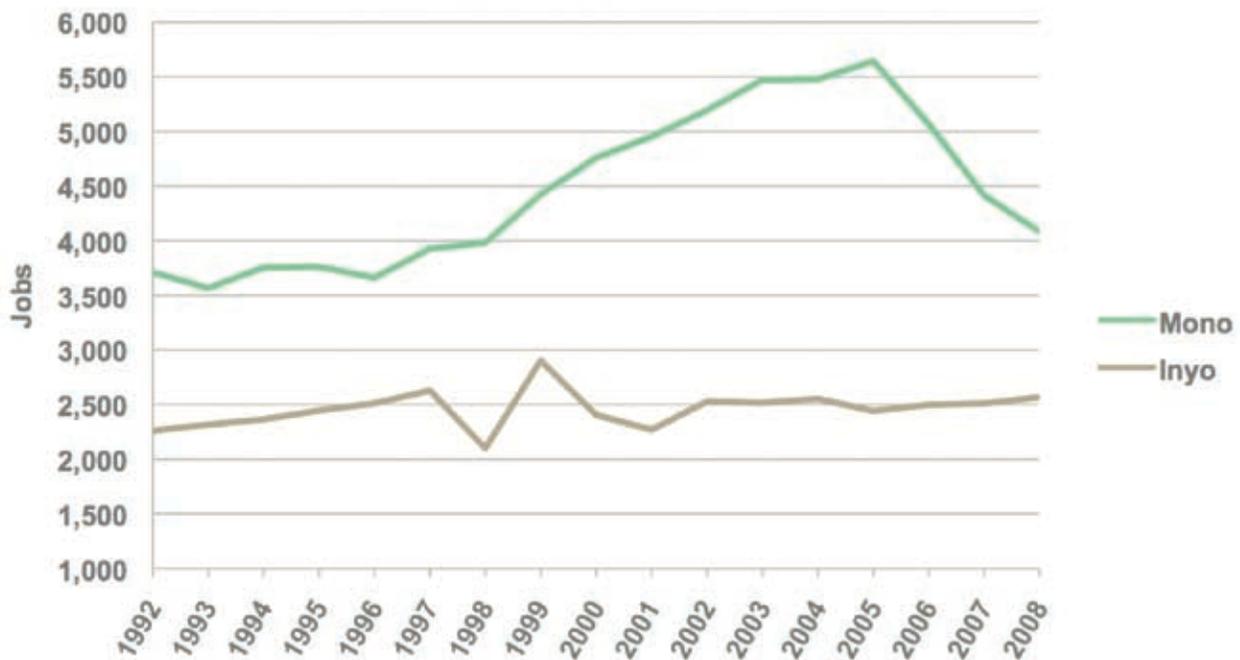
*Economic Benefits of Public Lands*

## Visitor Spending, Inyo, 2008

- Food Service
- Accommodations
- Arts, Ent. & Rec.
- Retail Sales
- Local Tran. & Gas
- Food Stores



## Total Direct Employment from Tourism



# SUMMARY ECONOMIC PROFILE OF INYO AND MONO COUNTIES

## Tourism and Tax Receipts

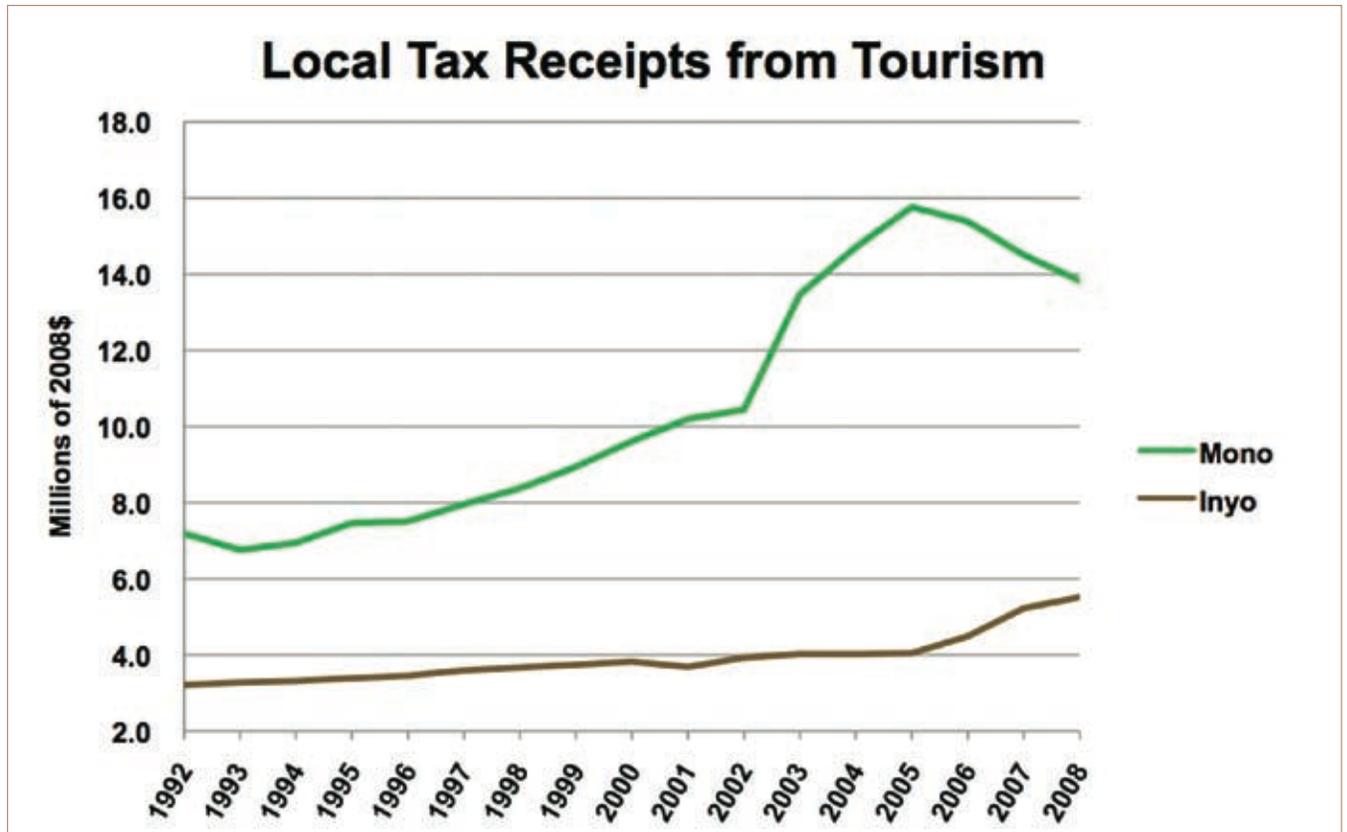


FIGURE 30 - LOCAL TOURISM TAX RECEIPTS

Source: Dean Runyan Associates

\* State Parks 342,448 visits/year in FY 2007/2008 (California State Park System 2008/2009)

### TRENDS IN VISITATION:

(Data available for National Parks. Source: NPS Statistics)

#### Recent figures show:

- Average value of outdoor recreation on national forests and other public lands: \$47.64/day (2004\$ Loomis 2005, page 3). This amounts to: (Data are adjusted for inflation to the year in which the visitation numbers were

counted)

- \* \$46,151,572/year at Death Valley National Park (2009\$)
- \* \$6,138,808/year at Devil's Postpile National Park (2009\$)
- \* \$198,359,586/year on Inyo National Forest (2006\$)
- \* Bridgeport RD
- \* \$88,801,062/year on BLM lands (2009\$)
- \* \$17,875,786/year at state parks (2007\$)
- This amounts to a value for recreational use of public lands in Inyo and Mono Counties of \$295,939,365/year (adjusted to 2009\$).

# SUMMARY ECONOMIC PROFILE OF INYO AND MONO COUNTIES

*Travel Impacts:*

## Inyo County Travel Impacts, 1992-2008

	1992	2003	2004	2005	2006	2007	2008
<b>Total Direct Travel Spending (\$Million)</b>							
Visitor Spending at Destination	107.9	162.2	170.8	177.1	181.4	190.7	202.9
Other Travel*	0.3	0.5	0.5	0.5	0.6	0.6	0.6
Total Direct Spending	108.2	162.7	171.3	177.6	182.0	191.3	203.6
<b>Visitor Spending by Type of Traveler Accommodation (\$Million)</b>							
Hotel, Motel	54.0	89.0	94.5	98.9	102.1	110.9	117.6
Private Campground	17.4	25.5	26.7	27.3	27.6	27.6	29.9
Public Campground	14.2	18.7	19.5	20.1	20.4	20.3	22.2
Private Home	6.0	7.3	7.5	7.8	7.9	8.1	8.2
Vacation Home	2.5	3.2	3.3	3.4	3.5	3.6	3.6
Day Travel	13.7	18.6	19.3	19.7	19.8	20.2	21.4
Spending at Destination	107.9	162.2	170.8	177.1	181.4	190.7	202.9
<b>Visitor Spending by Commodity Purchased (\$Million)</b>							
Accommodations	24.5	39.5	41.6	43.4	45.6	49.5	52.4
Food & Beverage Services	29.6	43.9	46.3	47.6	48.0	50.7	54.4
Food Stores	9.2	13.5	14.0	13.9	13.7	14.0	15.5
Ground Tran. & Motor Fuel	8.1	13.0	15.6	19.0	21.4	22.9	25.2
Arts, Entertainment & Recreation	17.0	25.5	26.3	26.3	26.1	26.9	27.9
Retail Sales	19.5	26.9	27.0	26.9	26.6	26.7	27.5
Air Transportation (visitor only)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Spending at Destination	107.9	162.2	170.8	177.1	181.4	190.7	202.9
<b>Industry Earnings Generated by Travel Spending (\$Million)</b>							
Accommodations & Food Service	16.4	27.2	28.6	29.2	29.9	32.2	34.5
Arts, Entertainment & Recreation	4.9	7.4	7.6	7.7	7.9	8.4	8.9
Retail**	4.2	6.2	6.3	6.3	6.3	6.5	6.7
Auto Rental & Ground Tran.	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Air Transportation (visitor only)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Other Travel*	0.1	0.2	0.2	0.2	0.3	0.3	0.3
Total Direct Earnings	25.6	41.0	42.8	43.4	44.3	47.3	50.5
<b>Industry Employment Generated by Travel Spending (Jobs)</b>							
Accommodations & Food Service	1,290	1,620	1,700	1,600	1,630	1,620	1,630
Arts, Entertainment & Recreation	700	630	590	580	610	630	670
Retail**	270	260	260	260	250	260	250
Auto Rental & Ground Tran.	0	0	0	0	0	0	0
Air Transportation (visitor only)	0	0	0	0	0	0	0
Other Travel*	10	10	10	10	10	10	10
Total Direct Employment	2,260	2,520	2,550	2,440	2,500	2,510	2,570
<b>Tax Receipts Generated by Travel Spending (\$Million)</b>							
Local Tax Receipts	2.1	3.4	3.5	3.7	4.2	5.0	5.5
State Tax Receipts	3.3	4.9	5.2	5.4	5.5	5.8	6.1
Total Direct Tax Receipts	5.4	8.3	8.7	9.1	9.7	10.8	11.6

Details may not add to totals due to rounding.

\*Other Travel includes resident air travel and travel agencies. \*\*Retail includes gasoline.

## SUMMARY ECONOMIC PROFILE OF INYO AND MONO COUNTIES

### Visitation to Public Lands

VISITATION TO PUBLIC LANDS		
Site	Annual Recreational Visitors (2009)	Source
Death Valley National Park	828,574 (2009)	NPS Statistics 2010
Devil's Postpile National Park	110,212 (2009)	NPS Statistics 2010
Inyo National Forest	3,921,700 (2006)	USDA Forest Service 2009
Bridgeport Ranger District	no data	
BLM lands	1,594,274 (FY 2009-2010)	BLM RMIS 2010
State Parks	342,448 (FY 2007-2008)	California State Park System 2008/2009

TRENDS IN VISITATION		
Site	Annual Value (2009 \$)	Source
Death Valley National Park	\$46,151,572	Dean Runyan Associates 2010
Devil's Postpile National Park	\$6,138,808	Dean Runyan Associates 2010
Inyo National Forest	\$198,359,586	Dean Runyan Associates 2010
Bridgeport RD	N/A	Dean Runyan Associates 2010
BLM lands	\$88,801,062	Dean Runyan Associates 2010
State Parks	\$17,875,786	Dean Runyan Associates 2010

# SUMMARY ECONOMIC PROFILE OF INYO AND MONO COUNTIES

*Travel Impacts:*

## Mono County Travel Impacts, 1992-2008

	1992	2003	2004	2005	2006	2007	2008
<b>Total Direct Travel Spending (\$Million)</b>							
Visitor Spending at Destination	197.2	354.3	395.4	419.6	393.5	382.2	366.1
Other Travel*	0.3	0.6	0.6	0.6	0.8	0.9	0.9
Total Direct Spending	197.6	354.9	396.0	420.2	394.3	383.1	367.0
<b>Visitor Spending by Type of Traveler Accommodation (\$Million)</b>							
Hotel, Motel	132.9	264.3	298.9	320.2	296.1	285.4	270.2
Private Campground	9.5	11.4	12.8	12.8	12.8	12.8	12.7
Public Campground	6.0	7.7	7.9	7.9	7.9	7.9	7.9
Private Home	3.3	5.2	5.4	5.6	5.7	5.8	5.9
Vacation Home	26.0	34.0	35.7	37.2	38.3	38.9	39.5
Day Travel	19.5	31.6	34.8	35.9	32.7	31.5	29.9
Spending at Destination	197.2	354.3	395.4	419.6	393.5	382.2	366.1
<b>Visitor Spending by Commodity Purchased (\$Million)</b>							
Accommodations	58.7	111.1	126.0	139.9	139.6	136.6	132.7
Food & Beverage Services	57.2	103.1	116.2	122.3	110.8	108.4	103.7
Food Stores	7.5	12.2	13.5	13.6	12.7	12.7	12.7
Ground Tran. & Motor Fuel	3.3	5.3	6.3	7.7	8.7	9.3	10.2
Arts, Entertainment & Recreation	35.9	65.0	71.6	73.0	65.2	62.1	57.7
Retail Sales	34.5	57.6	61.9	63.1	56.5	53.2	49.1
Air Transportation (visitor only)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Spending at Destination	197.2	354.3	395.4	419.6	393.5	382.2	366.1
<b>Industry Earnings Generated by Travel Spending (\$Million)</b>							
Accommodations & Food Service	36.2	71.7	81.1	85.7	80.9	80.2	77.8
Arts, Entertainment & Recreation	14.4	26.1	28.8	29.6	27.3	26.7	25.6
Retail**	6.1	10.4	11.2	11.4	10.5	10.2	9.4
Auto Rental & Ground Tran.	a	0.0	0.0	0.0	0.0	0.0	0.0
Air Transportation (visitor only)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Other Travel*	0.2	0.3	0.3	0.3	0.4	0.4	0.4
Total Direct Earnings	56.9	108.5	121.4	127.1	119.1	117.6	113.3
<b>Industry Employment Generated by Travel Spending (Jobs)</b>							
Accommodations & Food Service	2,180	3,250	3,080	3,380	3,200	2,890	2,630
Arts, Entertainment & Recreation	1,190	1,810	1,970	1,840	1,480	1,150	1,130
Retail**	330	400	420	410	380	360	310
Auto Rental & Ground Tran.	b	0	0	0	0	0	0
Air Transportation (visitor only)	0	0	0	0	0	0	0
Other Travel*	10	10	10	10	10	10	10
Total Direct Employment	3,710	5,470	5,480	5,640	5,070	4,410	4,080
<b>Tax Receipts Generated by Travel Spending (\$Million)</b>							
Local Tax Receipts	4.7	11.5	12.9	14.3	14.4	14.0	13.8
State Tax Receipts	4.9	8.8	10.0	10.6	9.7	9.5	9.0
Total Direct Tax Receipts	9.6	20.4	22.9	24.8	24.1	23.4	22.9

Details may not add to totals due to rounding.

\*Other Travel includes resident air travel and travel agencies. \*\*Retail includes gasoline.

# SUMMARY ECONOMIC PROFILE OF INYO AND MONO COUNTIES

## Real Estate

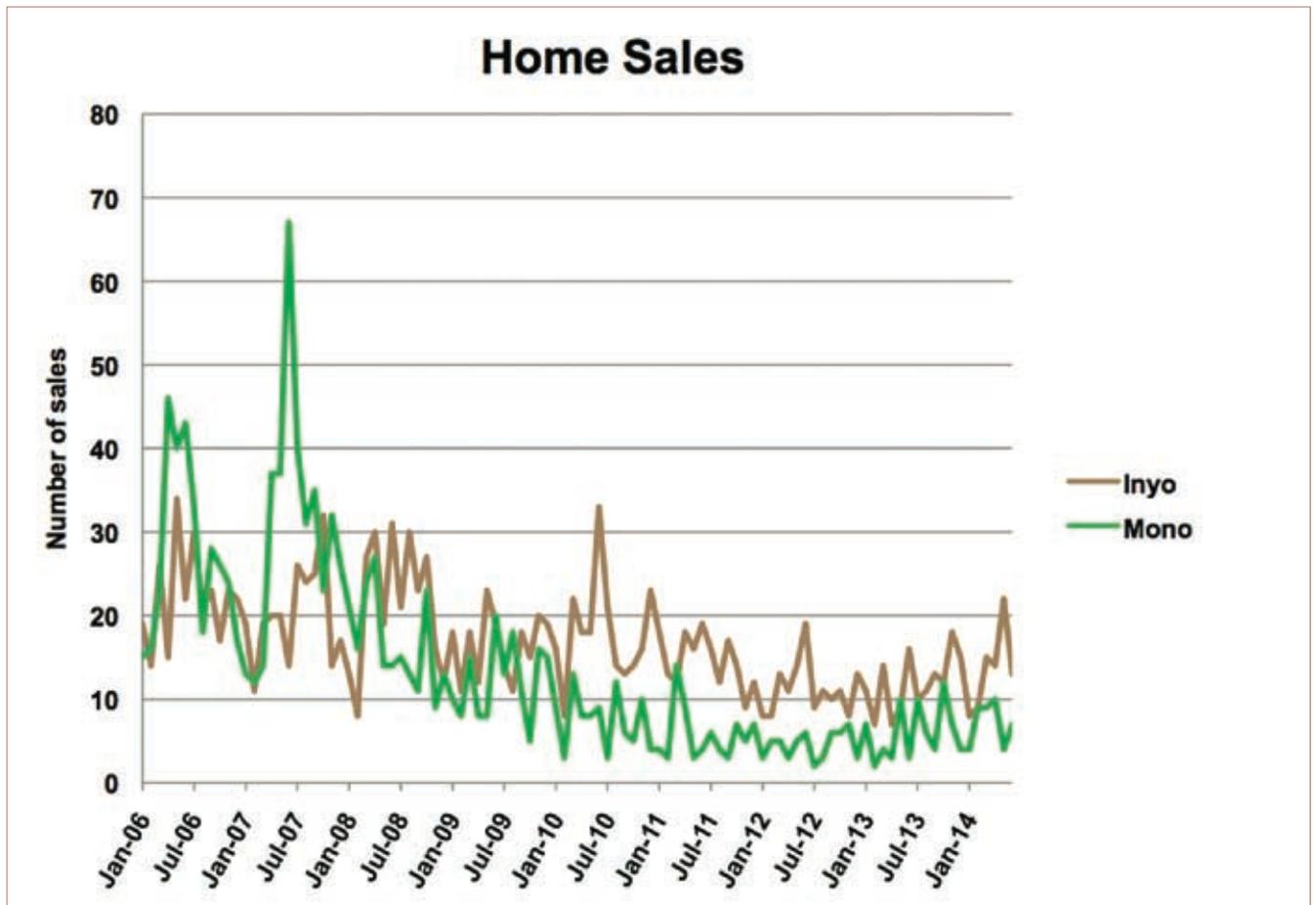


FIGURE 31 - MONTHLY HOME SALES

Source: Rand Corporation California Statistics

- Other data shows spending at public campgrounds in 2008: \$22.2 million/year in Inyo County, and \$7.9 million/year in Mono County (Dean Runyan Associates 2010).

### Real Estate

In many areas of the country, real estate sales and home prices decreased precipitously in the recent recession and ongoing economic malaise. These effects have also been felt

in the eastern Sierra. Monthly numbers of home sales in the two counties are shown in Figure 31. Sales volumes in Mono County were slightly higher than in Inyo County in the early years of the real estate boom and dropped off to a lower level than Inyo County during the bust.

Average home sales prices have been consistently higher in Mono County. Both counties experienced the significant price run-up and

# SUMMARY ECONOMIC PROFILE OF INYO AND MONO COUNTIES

*Social Indicators: Housing Booms and Vacancy*



**FIGURE 32 - AVERAGE HOME SALES PRICE**  
Source: Rand Corporation California Statistics

decline in housing prices through the real estate boom/bust cycle (Figure 32).

## SOCIAL INDICATORS

### HOUSING BOOMS AND VACANCY

- The largest number of houses in this area was built during the period from 1970 to 1979. This is true for the entire region and for each county individually.
- In Inyo County, 85.2 percent of the housing units were occupied in 2000.

- In Mono County, 43.7 percent of the housing units were occupied in 2000. Of the vacant units in Mono County, the most (49.1 percent) were for seasonal, recreational, or occasional use.

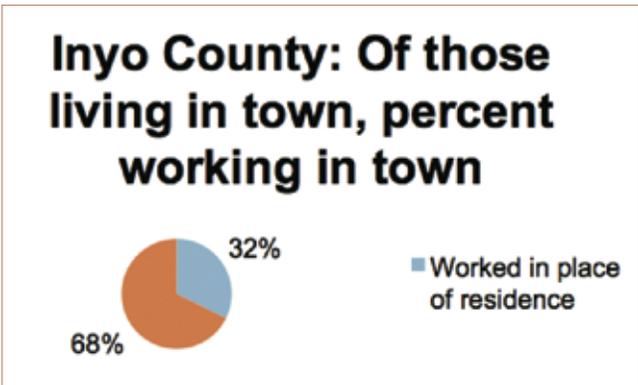
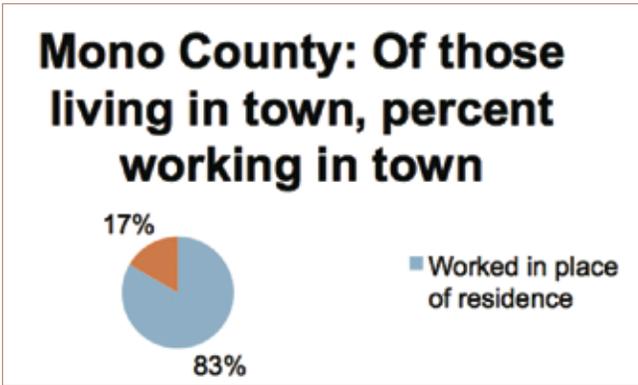
- In Inyo County, 34.1 percent of occupied units are rental units. In Mono County 40.0 percent of occupied units are rental units.

### HOUSING AFFORDABILITY

- Rentals:
  - \* In Inyo County, 23 percent of the median household income was paid in gross rent.

# SUMMARY ECONOMIC PROFILE OF INYO AND MONO COUNTIES

## Social Indicators: Commuting



In Mono County, 26 percent of the median household income was paid in rent.

- Owner-Occupied

\* In 2000, the median home price was \$161,300 in Inyo County and \$236,300 in Mono County.

\* In 2000, per capita income was \$19,636 in Inyo County and \$23,422 in Mono County.

### COMMUTING

- In this region, most commuters (75 percent in Inyo County, 65 percent in Mono County) commute for less than 20 minutes.
- Most people in this region (91 percent) work in their county of residence.
- Inyo County: Of those living in a town, 32 percent work in the same town where they live.

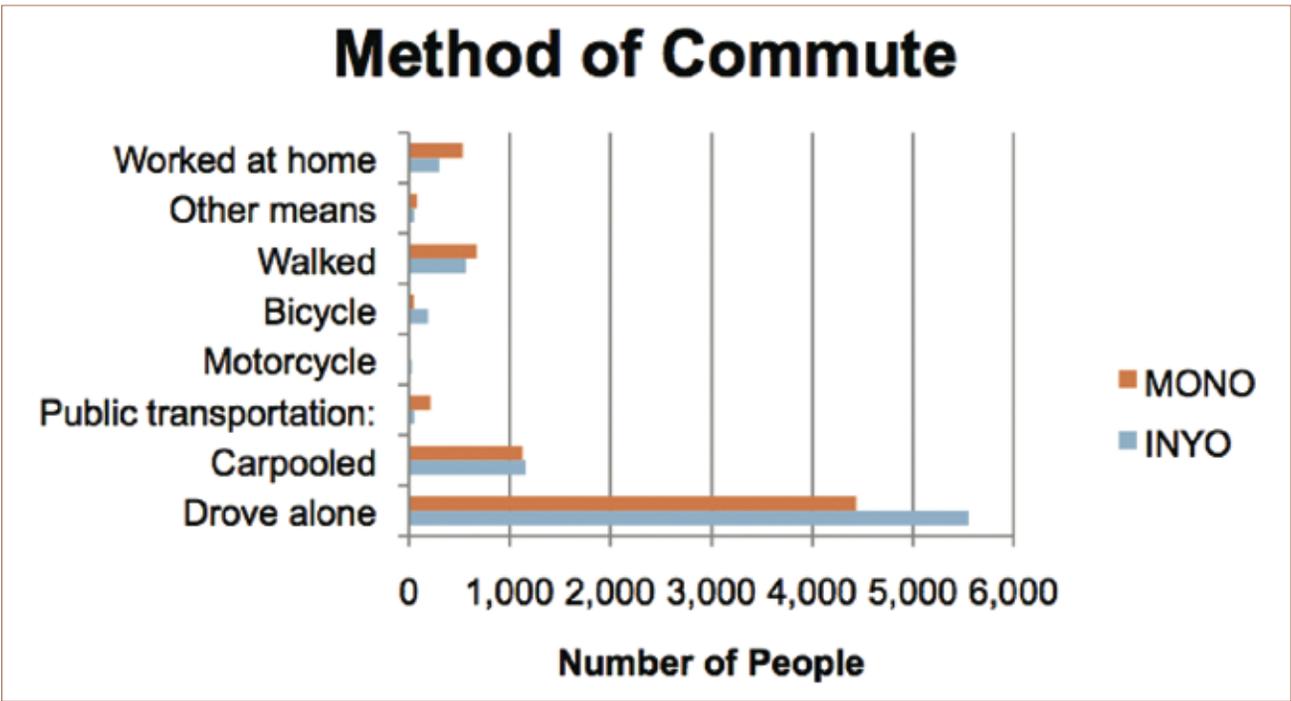


Image Source: U.S. Census Bureau

# SUMMARY ECONOMIC PROFILE OF INYO AND MONO COUNTIES

## Social Indicators: Education

- Mono County: Of those living in a town, 83 percent work in the same town where they live.

### IN MIGRATION

- In 2000, in Inyo County, 54 percent of residents lived in the same house in which they had lived in 1995.
- In 2000, in Mono County, 62 percent of residents lived in the same house in which they had lived in 1995.
- In Inyo County, 24 percent of residents moved within the county between 1995 and 2000.
- In Mono County, 28 percent of residents moved within the county between 1995 and 2000.
- Most new residents (15 percent of residents in Inyo County and 23 percent of residents in Mono County) came from elsewhere in California.

### EDUCATION

- In Inyo County, 17 percent of residents hold Bachelor's degrees. This includes 7 percent of Inyo County residents holding Master's, Professional or Doctorate degrees.
- In Mono County, 29 percent of residents hold Bachelor's degrees. This includes 10 percent of Mono County residents holding Master's, Professional, or Doctorate degrees.
- In Inyo County, 18 percent of residents age 25 and older did not

graduate high school (or pass equivalency tests).

- In Mono County, 15 percent of residents age 25 and older did not graduate high school (or pass equivalency tests).

### WORKFORCE (WEEKS PER YEAR)

- In Inyo County, 23 percent of workers

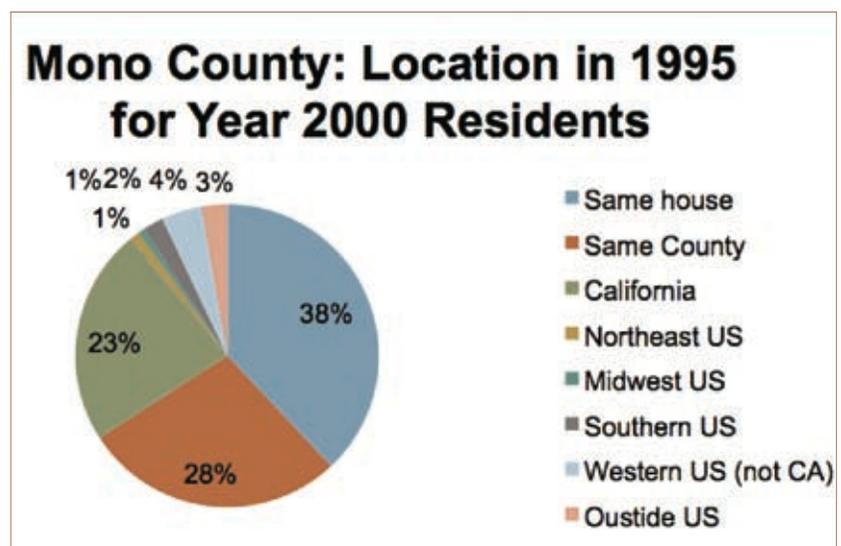
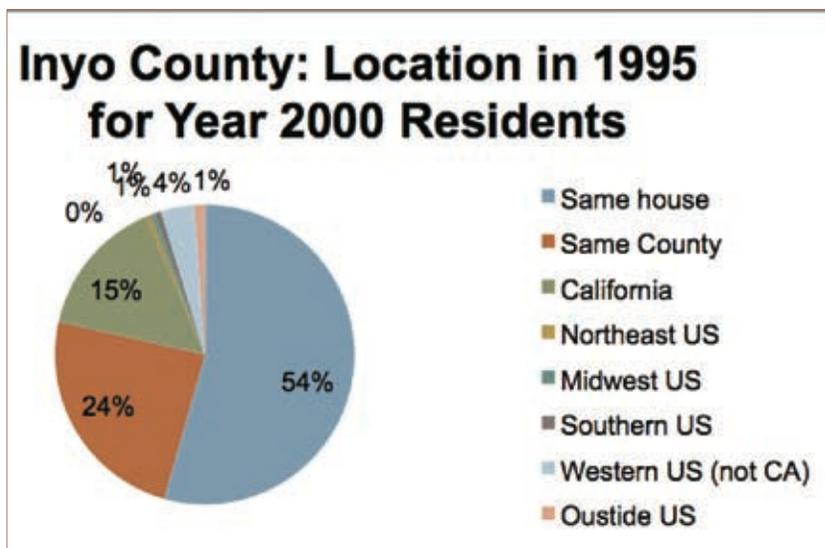


Image Source: U.S. Census Bureau

# SUMMARY ECONOMIC PROFILE OF INYO AND MONO COUNTIES

## Social Indicators: Workforce and Poverty

worked less than 40 weeks per year.

- In Mono County, 25 percent of workers worked less than 40 weeks per year.
- Most people in both counties (65 percent in Inyo and 58 percent in Mono) worked 50 to 52 weeks per year.

### WORKFORCE (HOURS PER WEEK)

- In Inyo County, 64 percent of people age 16 and older worked in 1999.
- In Mono County, 81 percent of people age 16 and older worked in 1999.
- In this region, 75 percent of workers worked full time (35 or more hours per week).

### POVERTY

- 12 percent of residents over age 5 have income below the poverty level. (12 percent in Inyo County and 11 percent in Mono County.)
- Most people (65 percent) living below the poverty level are white.

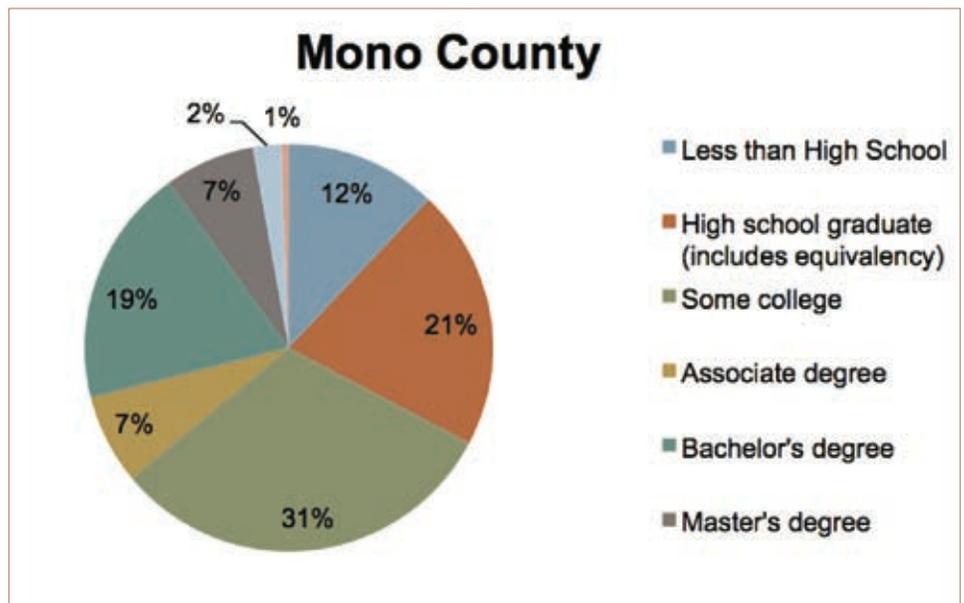
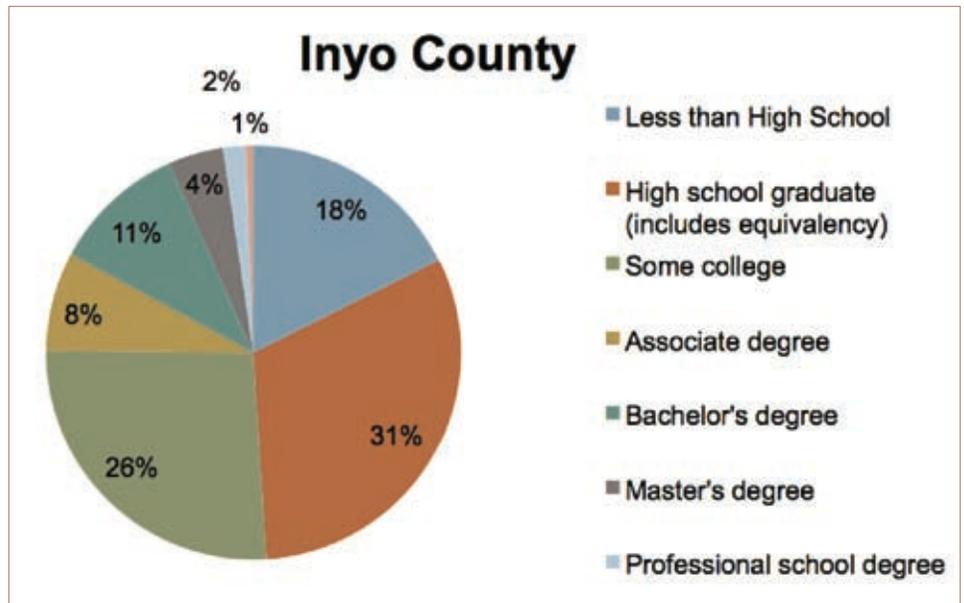


Image Source: U.S. Census Bureau

*Monitoring Progress  
and Evaluating  
Results*

## MONITORING PROGRESS AND EVALUATING RESULTS

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As economic development proceeds in the Eastern Sierra, it will be important to monitor progress and evaluate results with respect to both the overall economy and specific targeted prosperity clusters. Using a set of indicators will greatly facilitate the monitoring and evaluation process. Creating a set of indicators to monitor and evaluate progress involves establishing indicator baselines to describe current conditions and then re-examining the indicators on a periodic basis as economic development moves forward.

Tracking indicators of the overall economy in a region involves a significant time and resource commitment to gather data, calculate indicator metrics and interpret the numbers. Fortunately for the Eastern Sierra region, an excellent indicator set to track environmental, economic and social well-being in the Sierra Nevada has been established by the Sierra Nevada Conservancy (SNC), who will also be updating these indicators on a regular basis in the future. These indicators are described in detail in the Sierra Nevada Conservancy 2012-2013 Action Plan and in the Demographic and Economy System Indicator Report, available on the Sierra Nevada Conservancy website at [www.sier-ranevada.ca.gov](http://www.sier-ranevada.ca.gov). Using the SNC Demographic and Economy System Indicator Report augmented with local data the eastern Sierra region will be able to evaluate overall economic progress and allow comparisons with other sections of the Sierra Nevada and the state of California as a whole.

Evaluating progress in developing the five Prosperity Clusters will also require a set of

more specific indicators. Some useful metrics regarding the Prosperity Clusters already exist in the SNC indicator dataset and other, more targeted metrics will need to be developed and tracked as the Prosperity Clusters expand and evolve. The following sections will examine indicators for each of the five Prosperity Clusters.

### PROSPERITY CLUSTER: LEVERAGING INFORMATION TECHNOLOGY AND BROADBAND ACCESS

For this cluster, indicators providing information on access to broadband infrastructure are required, along with specific metrics regarding specific opportunities identified: online sales, use of broadband in providing professional services, and industry development (e.g. telemedicine).

The California Emerging Technology Fund (CETF) has initiated development of a set of metrics that will track on an annual basis the supply and demand aspects of broadband technology. These indicators will be very useful to track progress in the Eastern Sierra.

### PROSPERITY CLUSTER: MEETING CALIFORNIA'S RENEWABLE ENERGY STANDARD

General renewable energy indicators are part of the Sierra Nevada Conservancy's System Indicator reports. Tracking county-level renewable energy and large hydro capacity will provide general information on the

## MONITORING PROGRESS AND EVALUATING RESULTS

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magnitude and types of renewable energy produced by Inyo and Mono Counties. To request SNC's System Indicator reports for Inyo or Mono County, visit <http://www.sierranevada.ca.gov/>.

In this cluster, the specific opportunities identified are workforce training and support services.

Metrics used to evaluate workforce training should include the number of high schools and community college campuses offering renewable energy training, number of courses, number of students enrolled in the curriculum and completing it, and the number of students receiving certification in renewable energy technology.

Measuring progress in developing a renewable energy support services industry in the region can be accomplished by counting the number of support services businesses established, total number of jobs in this sector, and personal and business income attributed to the sector.

### PROSPERITY CLUSTER: FINDING THE NICHEs IN TOURISM, HOSPITALITY AND THE ARTS

General tourism indicators are tracked in the Sierra Nevada Conservancy System Indicator reports. Amount of total direct travel spending by county is a useful metric for the Eastern Sierra counties. To request SNC's System Indicator reports for Inyo or

Mono County, visit <http://www.sierranevada.ca.gov/>.

Additional indicators that should be tracked include county-level metrics on the breakdown of spending by category. Tourism employment, earnings and tax receipts will provide more detailed information on this sector.

These are produced annually by Dean Runyan Associates under contract to the state of California and made available via the following website: <http://industry.visitcalifornia.com/Research/California-Statistics-and-Trends/>.

The identified opportunities in this cluster are: increased geotourism and agricultural tourism; improved customer service in the hospitality sector; and improved marketing of museums, cultural events and festivals.

Tracking increased geotourism, agricultural tourism and improved destination marketing should be done through surveys of the Eastern Sierra businesses/parks/destinations shown on the Sierra Nevada Geotourism mapguide and the project supporters located within Inyo and Mono Counties (<http://www.sierranevadageotourism.org/index.php>).

Data on numbers of visitors, spending and activities will be useful to track progress for this identified cluster opportunity.

## MONITORING PROGRESS AND EVALUATING RESULTS

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To gather information on customer service improvement in hospitality, comprehensive annual surveys should be conducted of visitors' impressions of quality and consistency of customer service.

### PROSPERITY CLUSTER: DIVERSIFYING RECREATION

This cluster is strongly related to Tourism, Hospitality and the Arts. As a result, the general tourism indicators previously described will allow evaluation of overall cluster progress.

Opportunities identified in this cluster are development of niche activities and improved access to information about recreation activities in the region.

Evaluating the development of additional niche activities can be accomplished using indicators on the number of activities available to visitors, number of visitors participating in those activities, visitor spending on these activities, and number of local businesses/proprietors providing services in the various niche activities.

Measuring improved access to information about recreation activities should include data generated from surveys of visitors regarding how they planned their visits to the area and data from websites maintained by area destinations and businesses serving recreation visitors.

### PROSPERITY CLUSTER: ENCOURAGING WELLNESS THROUGH VALUE-ADDED AGRICULTURE

An extensive set of indicators on agriculture in the Eastern Sierra is generated for the Annual Crop Reports by the Inyo and Mono Counties' Agricultural Commissioner's Office: <http://www.inyomonoagriculture.com/reports.html>.

For this Prosperity Cluster, three opportunities have been identified: locally branded foods; value-added agriculture and agricultural tourism.

Specific indicators for the locally branded foods opportunity should include number of farms and businesses producing locally branded foods, number of restaurants and stores selling these foods, magnitude of sales, types of products, numbers of out-of-region distributors, and level of statewide or national recognition of these foods.

Value-added agriculture indicators can include total amount of added value, number of businesses involved in this sector and proportion of local agricultural production going into value-added products. Agricultural tourism indicators were discussed in the section on tourism. Additional indicators useful for measuring agricultural tourism include numbers of operations, number of agricultural visitors, types of agricultural tourism activities available to visitors, and number of annual farm tours.

# *Funding Opportunities*

# FUNDING OPPORTUNITIES

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## *State and Federal Funding Opportunities*

### FUNDING OPPORTUNITIES FROM STATE AND FEDERAL AGENCIES

#### U.S. ECONOMIC DEVELOPMENT ADMINISTRATION (EDA)

The EDA was established under the Public Works and Economic Development Act of 1965 (42 U.S.C. § 3121), as amended, to generate jobs, help retain existing jobs, and stimulate industrial and commercial growth in economically distressed areas of the United States.

EDA assistance is available to rural and urban areas of the nation experiencing high unemployment, low income, or other severe economic distress. In fulfilling its mission, EDA is guided by the basic principle that distressed communities must be empowered to develop and implement their own economic development and revitalization strategies.

Based on these locally and regionally developed priorities, EDA works in partnership with state and local governments, regional economic development districts, public and private nonprofit organizations, and Indian tribes. EDA helps distressed communities address problems associated with long-term economic distress, as well as sudden and severe economic dislocations including recovering from the economic impacts of natural disasters, the closure of military installations and other federal facilities, changing trade patterns, and the depletion of natural resources.

#### PROGRAMS

- **Public Works and Economic Development**

Supports construction, expansion, or upgrade of essential public infrastructure and facilities.

- **Economic Adjustment Assistance (EAA)**

Provides a wide range of technical, planning, and public works and infrastructure assistance in regions experiencing adverse economic changes that may occur suddenly or over time (e.g., strategy development, infrastructure construction, revolving loan fund capitalization).

- **Planning**

Assists local and regional organizations (District organizations, Tribal agencies, and other eligible entities) with short- and long-term planning efforts.

- **Technical Assistance**

Focused assistance provided to public and nonprofit leaders to help in economic development decision making (e.g., project planning, impact analyses, feasibility studies); also includes the University Center Economic Development Program, which makes the resources of universities available to the economic development community.

#### CONTACTS

- **California (Northern and Coastal)**

David Martin  
Seattle Regional Office  
915 Second Avenue, Room 1890  
Seattle, WA 98174  
T: (206) 220-7699  
E: dfarnworth-martin@eda.doc.gov

## FUNDING OPPORTUNITIES

### *State and Federal Funding Opportunities*

#### **California (Southern and Central)**

Wilfred Marshall  
5777 West Century Boulevard, Suite 1675  
Los Angeles, CA 90045  
T: (310) 348-5386  
E: wmarsh7298@aol.com

#### **Agency Website**

<http://www.eda.gov>

#### **U.S. DEPARTMENT OF AGRICULTURE, RURAL DEVELOPMENT (USDA RD)**

USDA Rural Development financial programs support essential public facilities and services: water and sewer systems, housing, health clinics, emergency service facilities, electric and telephone service. It supports loans to businesses through banks, credit unions, and community-managed lending pools and offers technical assistance and information to help agricultural producers and cooperatives launch and improve the effectiveness of operations, and provides technical assistance for community empowerment programs. USDA RD has a \$155 billion portfolio of loans and will administer \$20 billion in loans, loan guarantees, and grants through programs in the current fiscal year. It achieves its mission by helping rural individuals, communities and businesses obtain the financial and technical assistance needed to address diverse and unique needs.

#### **PROGRAMS**

- **Business Loans and Grants**

The Business Program (BP) works in

partnership with the private sector and community-based organizations to provide financial assistance and business planning. BP helps fund projects that create or preserve quality jobs and/or promote a clean rural environment. Financial resources of BP are often leveraged with those of other public and private lenders to meet business and credit needs in underserved areas. Recipients of these programs may include individuals, corporations, partnerships, cooperatives, public bodies, nonprofit corporations, Indian tribes, and private companies.

- **Telecommunications Loans and Grants**

USDA Rural Development continues to provide many programs for financing rural America's telecommunications infrastructure. The Traditional Telephone Loan program consists of hardship, cost of money, and guaranteed loans that finance voice telephone service. The Broadband Access Loan program provides loans for funding the costs of construction, improvement, and acquisition of facilities to provide broadband service to eligible rural communities. The Distance Learning and Telemedicine program continues its charge of bringing electronic educational resources to rural schools and improving health care delivery in rural America. Lastly, the Community Connect Grant program provides financial assistance to eligible applicants that will provide currently unserved areas with broadband service that fosters economic growth and public safety services.

- **Community and Economic Development Programs**

The CEDP administers programs and

# FUNDING OPPORTUNITIES

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## *State and Federal Funding Opportunities*

initiatives that promote self-sustaining, long-term economic and regional development in rural areas. The programs demonstrate how rural communities can achieve self-sufficiency through innovative and comprehensive strategic plans developed and implemented at a grassroots level. The programs stress continued local involvement and decision making supported by partnerships among private, public and nonprofit entities.

### CONTACTS

#### **Area 2 (includes Mono County)**

Sue Ladner, Acting Area Director  
(916) 799-5143

#### **Auburn Office**

251 Auburn Ravine Rd, Ste. 107  
Auburn, CA  
Phone: (530) 885-7081 x4  
Fax: (530) 823-5504

#### **Elk Grove Office**

9701 Dino Drive, Ste. 170  
Elk Grove, CA  
Phone: (916) 714-1104 x4  
Fax: (916) 714-1118

#### **Area 3 (includes Inyo County)**

Richard Brassfield, Area Director  
(559) 276-7494 x 137

#### **Fresno Office**

4625 W Jennifer St, Ste. 126  
Fresno, CA  
Phone: (559) 276-7494 x4  
Fax: (559) 276-1791

#### **Merced Office**

2135 Wardrobe Ave., Ste. A  
Merced, CA  
Phone: (209) 722-4119 x4  
Fax: (209) 725-2964

#### **Modesto Office**

3800 Cornucopia Way, Ste. E  
Modesto, CA  
Phone: (209) 491-9320 x4  
Fax: (209) 491-9331

## CALIFORNIA DEPARTMENT OF HOUSING AND COMMUNITY DEVELOPMENT

Provides leadership, policies and programs to preserve and expand safe and affordable housing opportunities and promote strong communities for all Californians.

### PROGRAMS

#### **Community Development Block Grant Program**

The purpose of the program is to create or retain jobs for low-income workers in rural communities. Grants are available of up to \$2.5 million for eligible cities and counties to lend to identified businesses, or use for infrastructure improvements necessary to accommodate the creation, expansion, or retention of identified businesses. Assistance may include loans or loan guarantees to businesses for construction, on-site improvements, equipment purchase, working capital, and site acquisition. It may also include loans for business start-ups, grants for publicly owned

## FUNDING OPPORTUNITIES

### *State Funding Opportunities*

infrastructure, and loan or grants for small business incubators.

Eligible applicants include counties with fewer than 200,000 residents in unincorporated areas and cities with fewer than 50,000 residents that are not participants in the U.S. Department of Housing and Urban Development (HUD) Community Development Block Grant (CDBG) entitlement program. Applications are invited by an annual Notice of Funding Availability (NOFA). Applications are continuously received and reviewed throughout the year. Awards are made on an ongoing basis, normally within 60 days of HCD receipt of a completed application.

#### CONTACTS

##### **Mono and Inyo Counties**

John Almanza, Program Rep  
(916) 323-1450  
jalmanza@hcd.ca.gov

#### FUNDING OPPORTUNITIES FROM STATE AGENCIES

##### GOVERNOR'S OFFICE OF ECONOMIC DEVELOPMENT

#### PROGRAMS

##### **Economic Adjustment Assistance (EAA)**

Provides a wide range of technical, planning, and public works and infrastructure assistance in regions experiencing adverse economic changes that may occur suddenly or over time (e.g., strategy development,

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##### • **Planning**

Assists local and regional organizations (District organizations, Tribal agencies, and other eligible entities) with their short-and long-term planning efforts.

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E: wmarsh7298@aol.com

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# FUNDING OPPORTUNITIES

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## *State Funding Opportunities*

### BUSINESS LOANS AND GRANTS

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Lastly, the Community Connect Grant program provides financial assistance to eligible applicants that will provide currently unserved areas with broadband service that fosters economic growth and public safety services.

### COMMUNITY AND ECONOMIC DEVELOPMENT PROGRAMS

The CEDP administers programs and initiative that promote self-sustaining, long-term economic and regional development in rural areas.

The programs demonstrate how every rural community can achieve self-sufficiency through innovative and comprehensive strategic plans developed and implemented at a grassroots level.

The programs stress continued local involvement and decision making which is supported by partnerships among private, public and nonprofit entities.

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Sue Ladner, Acting Area Director  
(916) 799-5143

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#### **Auburn Office**

251 Auburn Ravine Rd, Ste. 107  
Auburn, CA  
Phone: (530) 885-7081 x4  
Fax: (530) 823-5504

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3800 Cornucopia Way, Ste. E  
Modesto, CA  
Phone: (209) 491-9320 x4  
Fax: (209) 491-9331



*photo courtesy Oregon House Farms/High Sierra Beef*

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### SUPPORTING DOCUMENTATION

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### PROSPERITY CLUSTERS

#### ENCOURAGING WELLNESS THROUGH VALUE ADDED AGRICULTURE

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### COMMITTEE COMMENTARY

#### PROSPERITY CLUSTERS AND MINING

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