

LAKE COUNTY ECONOMIC DEVELOPMENT STRATEGY

2. TARGETED INDUSTRIES

The following industries are recommended as targets of economic development efforts due to each providing these benefits using these ideas as primary filters:

- Export focus, leading to large multiplier or ripple effects in the local economy;
- Increasing economic mobility for workers;
- Utilizing assets Lake County has now as a foundation; and
- Lake County is made differentiable regionally.

The large the revenue multiplier, the more the local business utilizes local supply chain links and also looks at markets outside Lake County for revenues.

Targeted Industries

- Agricultural Supply Chain
 - o Manufacturing, distribution beyond the field or vineyard
 - May include cannabis: think beyond the pipe
 - Play to strengths and consider niche: regional processing for regional farmers
- Tourism: Ag to Health Care
 - Expanding why people come to Lake County
 - Coordination of events, includes transportation
- University-based science: drawing in science using Lake County's assets
 - Build partnerships with three or four major universities
 - Tied to tourism, but more like business development
- Home-based professional businesses with outside markets
 - o Need reliable broadband, residents that have businesses will demand this
 - Ties to workforce development here also

Targeted Industries: The Foci of Economic Development Efforts

After many discussions and considerations of what industries would both best fit Lake County and also have some resilience in Lake County's economy, the following choices continued to come up:

- Tourism, with an emphasis on Konocti re-opening strongly;
- Agriculture, with some links to tourism;
- Manufacturing (in many forms, but most likely food and beverage); and
- Health care.

The idea of targeting industries in economic development is not new. In the early 2000s, a nascent movement became manifest generally toward "triple-bottom line" development brought green building, environmental sustainability, and other practices with a focus on the planet/natural environment into vogue. We found that many companies were heading that way and the word "sustainability" became a household word in strategic planning. For Lake County, these concepts may have more specific meaning: can Lake County become a place where businesses that use the county's natural assets, beauty and environment

The metrics to make decisions and evolve these choices are also debated and shift from time to time. The idea of a "location quotient" (LQ), where relative employment in the local area to a broader marketplace may point toward opportunity gave way to "shift share" concepts. Shift share uses the LQ and expands to include macroeconomic trends and regional data more completely. Shift share is a standard regional analysis method that attempts to determine how much of regional job growth can be attributed to national trends and how much is due to unique regional factors. Shift share helps answer why employment is growing or declining in a regional industry, cluster, or occupation.

Economic Modeling (EMSI) is a service used by the Workforce alliance of the North Bay that estimates "shift share" by splitting regional job growth into three components: (1) industrial mix effect, (2) national growth effect, and (3) regional competitive effect. In addition, a time frame (start year and end year) is required to perform shift share analysis, since shift share deals with job growth over time. The list below shows Lake County's top-ten industries for shift share:

- Services for the Elderly and Persons with Disabilities;
- Local Government, Excluding Education and Hospitals;
- General Medical and Surgical Hospitals;
- Farm Labor Contractors and Crew Leaders;
- All Other Outpatient Care Centers;
- Elementary and Secondary Schools (Local Government);
- Soil Preparation, Planting, and Cultivating;
- Geothermal Electric Power Generation;
- Full-Service Restaurants; and
- Supermarkets and Other Grocery (except Convenience) Stores.

The ten industries with the smallest shift share, according to EMSI, are:

- Site Preparation Contractors;
- Commercial Banking;
- Newspaper Publishers;
- Offices of Physicians;
- Child Day Care Services;
- Offices of Real Estate Agents and Brokers;
- Religious Organizations;
- Hotels and Motels;
- Private Household Employment (full-time personal assistants);
- Crop Production.

For the top-ten industries, the predicted jobs growth between 2018 and 2023 for Lake County is 1,913 more jobs, where the bottom ten is 441 fewer jobs in those industries. Shift share is computed in the following ways, the sum of the effect "scores":

- Industry mix effect = the number of jobs affected by how the specific industry is performing at the national level (i.e., what the percentage growth or decline in hospitals is predicted to be nationally like a location quotient);
- National mix effect = the number of jobs affected by how the national economy is predicted to perform, i.e. is the industry growing with or against the economic cycle and by what "multiplier"; and
- Regional Competitiveness effect = the number of jobs that are based on how well an
 industry performs regionally, as different from the national trends, much like a dynamic
 location quotient.

In each case, you take the current employment level, multiply it by the estimated percentage growth or decline in the industry, national economy, and then regional economy, and add up the numbers as a way to calculate the "share" of the local economy's "shift" to higher or lower employment.

So What on Shift Share

Like any other statistic, this should be measured and discussed in a relative way. Relatively large shift share data is going to be driven by national trends under the assumption that the local economy ultimately follows the national and state economies, with some portion of regional effects helping guide the data. Qualitatively, economic development strategies and support ultimately dictate how the local economy is able to harness national trends that affect either current businesses or potential new businesses that fins a local market.

Industry Multipliers and "Bang for Buck"

The multiplier effect is how the expansion of one industry can expand others. In some cases, this does not involve employment initially; a commercial space may be built that houses a cannery using a machine and very few workers. However, those workers live locally and spend their wages. The business uses local vendors and service providers when needed, and purchases supplies locally, which employs more people and provides more local profits. In turn, these additional economic flows also provide more government revenue across all municipalities.

However, there are leakages from the system. Supply chain links can be broken locally and lead to resources flowing away from the local area. In rural settings, agriculture may have strong supply chains locally; wineries are self-contained with local vineyards and bottling operations, vineyard management, fencing, trellis systems businesses, plumbing, and other maintenance is all local. Trucking may come from outside the county, as might glass, barrels, labeling, marketing expertise, social media consulting, distribution, and broader retail. Some of these leakages are the fate of rural California; leakages exist in major metropolitan, urban areas also. Part of economic development is to reduce those leakages, as the multiplier effects and amount of dollars circulating and jobs supported rise as a result.

For Lake County, below is a sample of top "revenue" multiplier businesses in the private sector (thus excluding local and state government because those revenues originate from the local economy or in Sacramento or both), where in Table 1 an additional dollar in revenue provides more than \$1 to Lake County. This includes new taxes, wages and profits.

- Distilleries
- Wireless Telecommunications Carriers (except Satellite);
- Breweries;
- Coffee and Tea Manufacturing;
- Logging;
- Timber Tract Operations;
- Meat Processed from Carcasses;
- Animal (except Poultry) Slaughtering;
- Casinos;
- Wired Telecommunications Carriers;
- Truck, Utility Trailer, and RV (Recreational Vehicle) Rental and Leasing;

Table 1 is sorted by the revenue multiplier, where the targeted industries can be seen throughout the lists toward the top.

Table 1: Revenue, Jobs and Wages Multipliers, 2017 Data, EMSI, Total Impacts of \$1 more

Industry	Revenues	Jobs	Wages
Real Estate	1.43	1.49	1.51
Performing Arts and Spectator Sports	1.42	1.25	1.46
Oil and Gas Extraction	1.38	1.23	1.33
Direct to Consumer Retailers	1.38	1.22	1.34
Crop Production	1.37	1.51	1.58
Electronic Markets and Agents/Brokers	1.37	1.38	1.32
Rail Transportation	1.37	1.94	1.34
Electronics and Appliance Stores	1.36	1.37	1.32
Health and Personal Care Stores	1.36	1.27	1.32
Gasoline Stations	1.36	1.31	1.32
Miscellaneous Store Retailers	1.36	1.22	1.32
Fishing, Hunting and Trapping	1.35	1.11	1.23
ISPs, Search Portals, & Data Processing	1.34	1.23	1.29
Forestry and Logging	1.33	0.97	1.16
Accommodation/Hotels	1.33	1.12	1.17
Motor Vehicle and Parts Dealers	1.32	1.15	1.11
Animal Production and Aquaculture	1.31	1.35	1.45
Postal Service	1.31	1.22	1.18
Sporting Goods/Hobby/Book/Music Stores	1.30	0.99	1.11
Couriers and Messengers	1.30	1.21	1.23
Merchant Wholesalers, Nondurable Goods	1.29	1.00	1.02
Telecommunications	1.29	2.11	1.26
Educational Services	1.29	0.96	1.06
Personal and Laundry Services	1.29	0.97	1.07
Specialty Trade Contractors	1.28	1.19	1.19
Clothing and Clothing Accessories Stores	1.28	0.90	1.02
Utilities	1.27	1.26	0.94
Construction of Buildings	1.27	1.16	1.18
Heavy and Civil Engineering Construction	1.27	1.13	1.18
Furniture and Home Furnishings Stores	1.27	0.98	0.99
Truck Transportation	1.27	1.39	1.25
Insurance Carriers & Related Activities	1.27	0.88	0.77
Professional and Technical Services	1.27	1.09	1.10
Administrative and Support Services	1.27	1.06	1.11
Nursing and Residential Care Facilities	1.27	1.00	0.99
Scenic and Sightseeing Transportation	1.26	0.79	0.89
Rental and Leasing Services	1.26	1.11	0.93
Ambulatory Health Care Services	1.26	1.20	1.07
Social Assistance	1.25	1.05	1.05
Building Material & Garden Supply Stores	1.24	0.90	0.88
Warehousing and Storage	1.24	0.89	0.89
Food Services and Drinking Places	1.24	0.97	1.04
Food and Beverage Stores	1.23	0.77	0.83
General Merchandise Stores	1.23	0.82	0.86
Publishing Industries	1.23	0.84	0.91
Repair and Maintenance	1.23	1.11	1.11
Credit Intermediation & Related Activity	1.22	0.91	0.82

Table 1: Revenue, Jobs and Wages Multipliers, 2017 Data, EMSI, Total Impacts of \$1 more (cont.)

Agriculture & Forestry Support Activity 1.20 0.96 0 Museums, Parks and Historical Sites 1.20 0.62 0 Amusement, Gambling & Recreation Ind 1.20 0.65 0 Membership Organizations & Associations 1.19 0.71 0 Private Households 1.19 1.04 1 Federal Govt 1.19 1.48 1 Local Govt 1.19 0.89 0 Printing and Related Support Activities 1.18 0.89 0 Merchant Wholesalers, Durable Goods 1.17 0.58 0 Beverage & Tobacco Product Manufacturing (Mfg) 1.16 1.27 0 Waste Management and Remediation Service 1.16 0.73 0 Transit and Ground Passenger Transport 1.13 0.40 0 Financial Investment & Related Activity 1.13 0.66 0 Textile Product Mills 1.12 0.71 0 Pipeline Transportation 1.11 0.71 0 State Govt 1.11 0.8	71
Museums, Parks and Historical Sites 1.20 0.62 0 Amusement, Gambling & Recreation Ind 1.20 0.65 0 Membership Organizations & Associations 1.19 0.71 0 Private Households 1.19 1.04 1 Federal Govt 1.19 1.48 1 Local Govt 1.19 0.89 0 Printing and Related Support Activities 1.18 0.89 0 Merchant Wholesalers, Durable Goods 1.17 0.58 0 Beverage & Tobacco Product Manufacturing (Mfg) 1.16 1.27 0 Waste Management and Remediation Service 1.16 0.73 0 Transit and Ground Passenger Transport 1.13 0.40 0 Financial Investment & Related Activity 1.13 0.66 0 Textile Product Mills 1.12 0.71 0 Pipeline Transportation 1.11 0.71 0 State Govt 1.11 0.83 0 Management Consulting 1.09 0.47 <td< td=""><td></td></td<>	
Amusement, Gambling & Recreation Ind 1.20 0.65 0 Membership Organizations & Associations 1.19 0.71 0 Private Households 1.19 1.04 1 Federal Govt 1.19 1.48 1 Local Govt 1.19 0.89 0 Printing and Related Support Activities 1.18 0.89 0 Merchant Wholesalers, Durable Goods 1.17 0.58 0 Beverage & Tobacco Product Manufacturing (Mfg) 1.16 1.27 0 Waste Management and Remediation Service 1.16 0.73 0 Transit and Ground Passenger Transport 1.13 0.40 0 Financial Investment & Related Activity 1.13 0.66 0 Textile Product Mills 1.12 0.71 0 Pipeline Transportation 1.11 0.71 0 State Govt 1.11 0.83 0 Management Consulting 1.09 0.47 0 Hospitals 1.09 0.51 0	96
Membership Organizations & Associations 1.19 0.71 0 Private Households 1.19 1.04 1 Federal Govt 1.19 1.48 1 Local Govt 1.19 0.89 0 Printing and Related Support Activities 1.18 0.89 0 Merchant Wholesalers, Durable Goods 1.17 0.58 0 Beverage & Tobacco Product Manufacturing (Mfg) 1.16 1.27 0 Waste Management and Remediation Service 1.16 0.73 0 Transit and Ground Passenger Transport 1.13 0.40 0 Financial Investment & Related Activity 1.13 0.66 0 Textile Product Mills 1.12 0.71 0 Pipeline Transportation 1.11 0.71 0 State Govt 1.11 0.83 0 Management Consulting 1.09 0.47 0 Hospitals 1.09 0.51 0 Miscellaneous Manufacturing 1.08 0.31 0	65
Private Households 1.19 1.04 1 Federal Govt 1.19 1.48 1 Local Govt 1.19 0.89 0 Printing and Related Support Activities 1.18 0.89 0 Merchant Wholesalers, Durable Goods 1.17 0.58 0 Beverage & Tobacco Product Manufacturing (Mfg) 1.16 1.27 0 Waste Management and Remediation Service 1.16 0.73 0 Transit and Ground Passenger Transport 1.13 0.40 0 Financial Investment & Related Activity 1.13 0.66 0 Textile Product Mills 1.12 0.71 0 Pipeline Transportation 1.11 0.71 0 State Govt 1.11 0.83 0 Management Consulting 1.09 0.47 0 Hospitals 1.09 0.51 0 Miscellaneous Manufacturing 1.08 0.31 0 Support Activities for Transportation 1.08 0.31 0 <t< td=""><td>70</td></t<>	70
Federal Govt 1.19 1.48 1 Local Govt 1.19 0.89 0 Printing and Related Support Activities 1.18 0.89 0 Merchant Wholesalers, Durable Goods 1.17 0.58 0 Beverage & Tobacco Product Manufacturing (Mfg) 1.16 1.27 0 Waste Management and Remediation Service 1.16 0.73 0 Transit and Ground Passenger Transport 1.13 0.40 0 Financial Investment & Related Activity 1.13 0.66 0 Textile Product Mills 1.12 0.71 0 Pipeline Transportation 1.11 0.71 0 State Govt 1.11 0.83 0 Management Consulting 1.09 0.47 0 Hospitals 1.09 0.51 0 Miscellaneous Manufacturing 1.08 0.49 0 Support Activities for Transportation 1.08 0.31 0 Broadcasting (except Internet) 1.08 0.31 0 <tr< td=""><td>75</td></tr<>	75
Local Govt 1.19 0.89 0 Printing and Related Support Activities 1.18 0.89 0 Merchant Wholesalers, Durable Goods 1.17 0.58 0 Beverage & Tobacco Product Manufacturing (Mfg) 1.16 1.27 0 Waste Management and Remediation Service 1.16 0.73 0 Transit and Ground Passenger Transport 1.13 0.40 0 Financial Investment & Related Activity 1.13 0.66 0 Textile Product Mills 1.12 0.71 0 Pipeline Transportation 1.11 0.71 0 State Govt 1.11 0.83 0 Management Consulting 1.09 0.47 0 Hospitals 1.09 0.51 0 Miscellaneous Manufacturing 1.08 0.49 0 Support Activities for Transportation 1.08 0.31 0 Broadcasting (except Internet) 1.08 0.37 0 Other Information Services 1.08 0.31 0	07
Printing and Related Support Activities 1.18 0.89 0 Merchant Wholesalers, Durable Goods 1.17 0.58 0 Beverage & Tobacco Product Manufacturing (Mfg) 1.16 1.27 0 Waste Management and Remediation Service 1.16 0.73 0 Transit and Ground Passenger Transport 1.13 0.40 0 Financial Investment & Related Activity 1.13 0.66 0 Textile Product Mills 1.12 0.71 0 Pipeline Transportation 1.11 0.71 0 State Govt 1.11 0.83 0 Management Consulting 1.09 0.47 0 Hospitals 1.09 0.51 0 Miscellaneous Manufacturing 1.08 0.49 0 Support Activities for Transportation 1.08 0.31 0 Broadcasting (except Internet) 1.08 0.37 0 Other Information Services 1.08 0.31 0 Mining (except Oil and Gas) 1.07 0.28	33
Merchant Wholesalers, Durable Goods 1.17 0.58 0 Beverage & Tobacco Product Manufacturing (Mfg) 1.16 1.27 0 Waste Management and Remediation Service 1.16 0.73 0 Transit and Ground Passenger Transport 1.13 0.40 0 Financial Investment & Related Activity 1.13 0.66 0 Textile Product Mills 1.12 0.71 0 Pipeline Transportation 1.11 0.71 0 State Govt 1.11 0.83 0 Management Consulting 1.09 0.47 0 Hospitals 1.09 0.51 0 Miscellaneous Manufacturing 1.08 0.49 0 Support Activities for Transportation 1.08 0.31 0 Broadcasting (except Internet) 1.08 0.37 0 Other Information Services 1.08 0.31 0 Mining (except Oil and Gas) 1.07 0.28 0	85
Merchant Wholesalers, Durable Goods 1.17 0.58 0 Beverage & Tobacco Product Manufacturing (Mfg) 1.16 1.27 0 Waste Management and Remediation Service 1.16 0.73 0 Transit and Ground Passenger Transport 1.13 0.40 0 Financial Investment & Related Activity 1.13 0.66 0 Textile Product Mills 1.12 0.71 0 Pipeline Transportation 1.11 0.71 0 State Govt 1.11 0.83 0 Management Consulting 1.09 0.47 0 Hospitals 1.09 0.51 0 Miscellaneous Manufacturing 1.08 0.49 0 Support Activities for Transportation 1.08 0.31 0 Broadcasting (except Internet) 1.08 0.37 0 Other Information Services 1.08 0.31 0 Mining (except Oil and Gas) 1.07 0.28 0	89
Beverage & Tobacco Product Manufacturing (Mfg) 1.16 1.27 0 Waste Management and Remediation Service 1.16 0.73 0 Transit and Ground Passenger Transport 1.13 0.40 0 Financial Investment & Related Activity 1.13 0.66 0 Textile Product Mills 1.12 0.71 0 Pipeline Transportation 1.11 0.71 0 State Govt 1.11 0.83 0 Management Consulting 1.09 0.47 0 Hospitals 1.09 0.51 0 Miscellaneous Manufacturing 1.08 0.49 0 Support Activities for Transportation 1.08 0.31 0 Broadcasting (except Internet) 1.08 0.37 0 Other Information Services 1.08 0.31 0 Mining (except Oil and Gas) 1.07 0.28 0	60
Waste Management and Remediation Service 1.16 0.73 0. Transit and Ground Passenger Transport 1.13 0.40 0. Financial Investment & Related Activity 1.13 0.66 0. Textile Product Mills 1.12 0.71 0. Pipeline Transportation 1.11 0.71 0. State Govt 1.11 0.83 0. Management Consulting 1.09 0.47 0. Hospitals 1.09 0.51 0. Miscellaneous Manufacturing 1.08 0.49 0. Support Activities for Transportation 1.08 0.31 0. Broadcasting (except Internet) 1.08 0.37 0. Other Information Services 1.08 0.31 0. Mining (except Oil and Gas) 1.07 0.28 0.	94
Transit and Ground Passenger Transport 1.13 0.40 0.71 Financial Investment & Related Activity 1.13 0.66 0.71 Textile Product Mills 1.12 0.71 0.71 Pipeline Transportation 1.11 0.71 0.71 State Govt 1.11 0.83 0.71 Management Consulting 1.09 0.47 0.71 Hospitals 1.09 0.51 0.71 Miscellaneous Manufacturing 1.08 0.49 0.71 Support Activities for Transportation 1.08 0.31 0.71 Broadcasting (except Internet) 1.08 0.37 0.72 Other Information Services 1.08 0.31 0.72 Mining (except Oil and Gas) 1.07 0.28 0.72	60
Financial Investment & Related Activity 1.13 0.66 0.71 Textile Product Mills 1.12 0.71 0.71 Pipeline Transportation 1.11 0.71 0.71 State Govt 1.11 0.83 0.71 Management Consulting 1.09 0.47 0.00 Hospitals 1.09 0.51 0.00 Miscellaneous Manufacturing 1.08 0.49 0.00 Support Activities for Transportation 1.08 0.31 0.00 Broadcasting (except Internet) 1.08 0.37 0.00 Other Information Services 1.08 0.31 0.00 Mining (except Oil and Gas) 1.07 0.28 0.00	45
Textile Product Mills 1.12 0.71 0.71 Pipeline Transportation 1.11 0.71 0.71 State Govt 1.11 0.83 0.71 Management Consulting 1.09 0.47 0.00 Hospitals 1.09 0.51 0.00 Miscellaneous Manufacturing 1.08 0.49 0.00 Support Activities for Transportation 1.08 0.31 0.00 Broadcasting (except Internet) 1.08 0.37 0.00 Other Information Services 1.08 0.31 0.00 Mining (except Oil and Gas) 1.07 0.28 0.00	73
Pipeline Transportation 1.11 0.71 0.71 State Govt 1.11 0.83 0.71 Management Consulting 1.09 0.47 0.00 Hospitals 1.09 0.51 0.00 Miscellaneous Manufacturing 1.08 0.49 0.00 Support Activities for Transportation 1.08 0.31 0.00 Broadcasting (except Internet) 1.08 0.37 0.00 Other Information Services 1.08 0.31 0.00 Mining (except Oil and Gas) 1.07 0.28 0.00	73
State Govt 1.11 0.83 0.00 Management Consulting 1.09 0.47 0.00 Hospitals 1.09 0.51 0.00 Miscellaneous Manufacturing 1.08 0.49 0.00 Support Activities for Transportation 1.08 0.31 0.00 Broadcasting (except Internet) 1.08 0.37 0.00 Other Information Services 1.08 0.31 0.00 Mining (except Oil and Gas) 1.07 0.28 0.00	37
Management Consulting 1.09 0.47 0.00 Hospitals 1.09 0.51 0.00 Miscellaneous Manufacturing 1.08 0.49 0.00 Support Activities for Transportation 1.08 0.31 0.00 Broadcasting (except Internet) 1.08 0.37 0.00 Other Information Services 1.08 0.31 0.00 Mining (except Oil and Gas) 1.07 0.28 0.00	64
Hospitals 1.09 0.51 0. Miscellaneous Manufacturing 1.08 0.49 0. Support Activities for Transportation 1.08 0.31 0. Broadcasting (except Internet) 1.08 0.37 0. Other Information Services 1.08 0.31 0. Mining (except Oil and Gas) 1.07 0.28 0.	40
Miscellaneous Manufacturing 1.08 0.49 0. Support Activities for Transportation 1.08 0.31 0. Broadcasting (except Internet) 1.08 0.37 0. Other Information Services 1.08 0.31 0. Mining (except Oil and Gas) 1.07 0.28 0.	40
Support Activities for Transportation 1.08 0.31 0.00 Broadcasting (except Internet) 1.08 0.37 0.00 Other Information Services 1.08 0.31 0.00 Mining (except Oil and Gas) 1.07 0.28 0.00	51
Broadcasting (except Internet) 1.08 0.37 0.00 Other Information Services 1.08 0.31 0.00 Mining (except Oil and Gas) 1.07 0.28 0.00	30
Other Information Services 1.08 0.31 0. Mining (except Oil and Gas) 1.07 0.28 0.	35
Mining (except Oil and Gas) 1.07 0.28 0.	31
	26
	38
	33
	35
	49
	31
	23
	38
	38
	26
	27
	33
	19
	18
	21
	08
	04
	00
	00
	00
	00
	00