

The CaliBaja Regional Economy

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THE CALIBAJA REGIONAL ECONOMY PRODUCTION, EMPLOYMENT, TRADE & INVESTMENT



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EXECUTIVE SUMMARY



CaliBaja is the largest integrated economic zone along the U.S.-Mexico border. CaliBaja is home to 7 million inhabitants and has a regional GDP of \$250 billion and an estimated \$70 billion in cross border trade flows. The CaliBaja region comprises the two southernmost counties in California (San Diego and Imperial County) and the six Mexican of Baja California (Ensenada, Mexicali, Rosarito, San Quintin, Tecate, and Tijuana).



This study uses a Location Quotient (LQ) methodology to identify high performing industries in the CaliBaja region. This study focused on CaliBaja industries with “High LQs” of 1.5 or above, in which employment is substantially (at least 50%) above the average for the United States and Mexico in a given industry. Such industries are more likely to produce for external markets, thereby bringing outside revenue, creating jobs, spurring investment and consumption, and—in the context of COVID—enabling firms to better manage market fluctuations.



CaliBaja is a “High LQ” region, especially for certain manufacturing industries. In the CaliBaja region, there were 33,027 firms employing 657,598 individuals in 70 different industries that met the 1.5 LQ threshold in 2018. Combined, these industries contributed \$38.6 billion in overall value-add to the regional economy. Among the most important “High LQ” industries were the 27 industries (38%) found in the manufacturing sector, which together accounted for 389,128 workers and generated \$21.6 billion in value-added in 2018.



Much of the region’s manufacturing capability comes from the Mexican side. In 2018, Tijuana had 41 industries with an LQ of 1.5+ (including 27 in manufacturing) and Mexicali had 49 (including 17 in manufacturing). By comparison, San Diego had 35 industries with an LQ of 1.5+ (10 of which were manufacturing industries). Imperial had 27 industries with an LQ of 1.5+, of which only one was a manufacturing industry.



CaliBaja is a North American manufacturing powerhouse for audio and video equipment, medical equipment and supplies, and semiconductors. Key manufacturing industries identified in the region are audio and video equipment manufacturing (LQ 24.1), medical equipment and supplies manufacturing (LQ 10.1), and semiconductor and other electronic component manufacturing (LQ 5.6). Each of these had employment concentrations that were at least 500% greater than the average employment in the U.S. and Mexico in these sectors. In fact, 35.6% of USMCA regional employment in audio and video equipment manufacturing and nearly 15% in medical equipment and supplies manufacturing are found in CaliBaja.



CaliBaja’s audio and video equipment manufacturing has been declining, with 2,000 jobs lost and a \$600 million drop in value added between 2008 and 2018. In 2008, the industry had an LQ of 28.8 with 50 firms employing 31,609 workers in CaliBaja; however, the industry fell to an LQ of 24.1 with 40 firms and 28,721 workers in 2018. Over that same period, the value added for this sector declined by over \$600 million.



Medical device manufacturing has been on the upswing. In 2018, the industry had a regional LQ of 10.1 (up from a regional LQ of 7.6 in 2008), a total of 353 firms (up from 297 in 2008), and a total of 74,331 employees in CaliBaja (up from 43,015 in 2008). There were 53,941 employed in this sector in Tijuana, 9,906 in San Diego, and 6,765 in Mexicali.



The strength of the CaliBaja economy has made it attractive to outside investors. Baja California attracts over a billion dollars a year in foreign direct investment (FDI), with the majority of that investment in manufacturing. Venture capital flowing into San Diego has increased sharply in recent years and topped \$2 billion in each quarter from (2020Q4 to 2021Q2), mainly in the life sciences (biotechnology, pharmaceuticals, and genomics).



CaliBaja’s educational institutions are preparing the region’s STEM

workforce. A total of 30,932 higher education degrees were conferred in San Diego County and 18,800 were conferred in Baja California in 2018, with 32% and 38% awarded in the STEM fields, respectively.



A large share of the region’s workforce crosses the border every day.

54,000 people cross the border from Baja California to work each day, including an estimated 2,627 working in the health sector as doctors, dentists, nurses, paramedics, caregivers, and other health-related occupations. On the other hand, more than 4,700 cross-border workers live in San Diego and Imperial counties and work in Mexico.



\$200 million changes crosses the CaliBaja border each day: \$70 billion each year.

In 2019, a total of \$44.1 billion was imported from Mexico via truck at the land ports in California and a total of \$25.8 billion was exported to Mexico. On average, that is almost \$200 million in goods moving between California and Mexico each day. Trade dropped by over \$6 billion in 2020 due to COVID, but bounced back by mid-year.



The region’s manufacturing strengths helped CaliBaja weather the COVID pandemic.

While COVID struck certain industries hard—with severe job losses in Arts, Entertainment, and Receptions (-51.7%) and Accommodation and Food Services (-51.4)—job losses were much lower in Manufacturing (-7%), Information (-8.4%), Professional, Scientific, and Technical Services (-5.9%).



As a binational economy, CaliBaja is more than the sum of its parts.

When we examine the combined productive capabilities of San Diego County, Imperial County, and Baja California, we can better see the importance of certain sectors that help determine the overall health of the regional economy.



Improved infrastructure is needed to create jobs and promote investment for both countries.

Continued infrastructure investments—including the construction of the Otay Mesa East port of entry for trucks and commercial vehicles—are urgently needed to enable the CaliBaja region to contribute to the growth of U.S.-Mexico production and trade in the coming decades.



Investments in STEM education and research aids industries on both sides of the border by enhancing productivity and innovation.

One potential problem (and opportunity) involves the so-called “STEM divide” where the quality of STEM education is much higher in more affluent communities as compared to lower income areas. Policies and programs should work to ensure quality STEM educational opportunities to underserved communities on both sides of the border.



Government, business, and civic leaders need to make evidence-based decisions to develop sound policies and initiatives.

Continued research and analysis of the workings of the CaliBaja regional economy must be a top priority for state and local government agencies, business entities, and civic organizations in the cross-border region. While many in the region work actively to promote cross-border collaboration, there is often a tendency to focus only on what happens on one side of the border or the other.

CALIBAJA REGIONAL ECONOMY

CALIFORNIA

San Diego
County

Imperial
County

BAJA

Ensenada
Mexicali
Rosarito
San Quintin
Tecate
Tijuana

EDUCATION

DEGREES
CONFERRED
32% STEM

30,932



INDUSTRY:
MEDICAL DEVICES
ARE ON THE RISE

353 FIRMS

74,331 EMPLOYED

53,941 in Tijuana
9,906 in San Diego
6,753 in Mexicali

\$2.5 BILLION
VALUE ADDED

\$1 billion
FOREIGN DIRECT
INVESTMENT



MEDICAL
DEVICES
AUDIO/VIDEO
SEMI
CONDUCTORS

7 million
PEOPLE
\$250 billion
REGIONAL GDP
\$70 billion
CROSS BORDER TRADE

CALIBAJA



MAJORITY OF
MANUFACTURING
IN MEXICO



54,000
PEOPLE CROSS
THE BORDER FOR
WORK EVERY DAY

FUTURE

INVESTMENT IN
STEM TRAINING
FOR THE BENEFIT OF
BOTH SIDES OF THE
BORDER

18,800



DEGREES
CONFERRED
38% STEM

EDUCATION

4,700

PEOPLE CROSS
THE BORDER FOR
WORK EVERY DAY

WORKFORCE

HIGH LQ

33,027 FIRMS

657,598 EMPLOYED

70 INDUSTRIES

\$38.6 BILLION
VALUE ADDED

CROSS BORDER
TRUCK TRANSPORT
\$44 BILLION to California
\$25 BILLION to Baja

THE CALIBAJA REGIONAL ECONOMY: PRODUCTION, EMPLOYMENT, TRADE & INVESTMENT

OVERVIEW

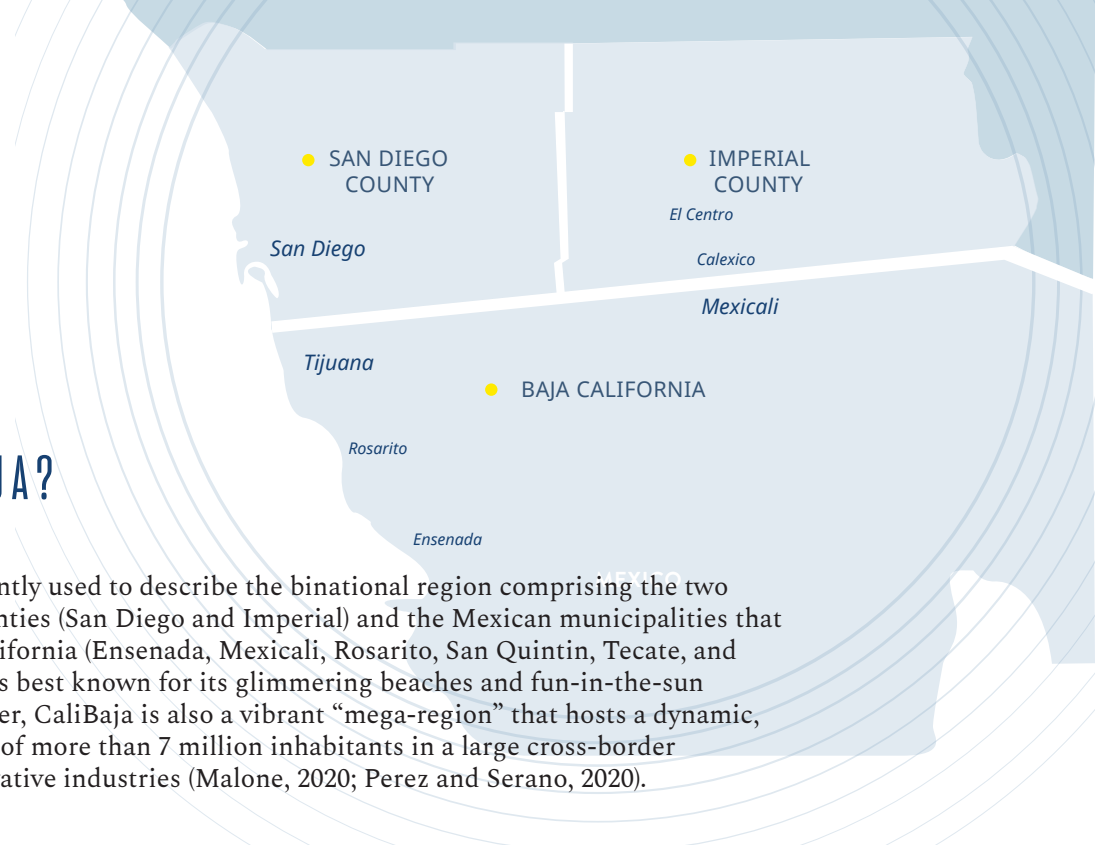
This report provides an in-depth analysis of the characteristics, dynamics, and impacts of the CaliBaja regional economy. Combining the border economies of the U.S. state of California and the Mexican state of Baja California, the CaliBaja regional economy is the largest integrated economic zone along the U.S.-Mexico border. With a regional GDP of nearly \$250 billion, “CaliBaja” is home to a diverse array of vibrant industries, including some with powerful manufacturing capabilities that drive cross-border economic activity and create jobs in both the United States and Mexico. Moreover, as a conduit for roughly \$70 billion in cross border trade, CaliBaja is a vital contributor to the \$600 U.S.-Mexico trade relationship.¹

Studying the CaliBaja regional economy is a challenging task. It requires researchers to draw on both U.S. and Mexican sources in order to compile and analyze detailed technical information that is written in two different languages, organized in distinct formats, reported in different time periods, and sometimes difficult to obtain. For this reason, binational collaboration is essential to any serious study of the CaliBaja region. Hence, this study would not be possible without the support of a team of Mexican and U.S. researchers, academic institutions, and regional business organizations with a common interest in helping to inform policy makers, business leaders, and the public about the state of the cross-border economy.²

In this sense, this report is itself a testament to the strong, binational civic community of the CaliBaja region, and its long-standing efforts to promote cross-border collaboration. Indeed, the report builds on previous studies and reports that have helped to establish a methodology for analyzing the cross-border economy by drawing on the latest available data on production, employment, trade, and investment. In this report, the authors provide updated information about the key industries that stand out as particularly dynamic contributors to the growth of the binational regional economy over the last decade. In addition, the report provides new insights on the gross regional product contributed by these key binational industries, how they have weathered recent challenges related to the COVID-19 pandemic, and the way in which new capital investment trends may shape the region’s future.

¹ U.S. Census Bureau, <https://www.census.gov/foreign-trade/balance/c2010.html>.

² The authors are particularly grateful to Lauren Lukens, Erin Garber, and Eileen Daspro and the Ahlers Center at the USD Knauss School of Business.



WHAT IS CALIBAJA?

“CaliBaja” is the label frequently used to describe the binational region comprising the two southernmost California counties (San Diego and Imperial) and the Mexican municipalities that make up the state of Baja California (Ensenada, Mexicali, Rosarito, San Quintin, Tecate, and Tijuana).³ CaliBaja is perhaps best known for its glimmering beaches and fun-in-the-sun recreational lifestyle. However, CaliBaja is also a vibrant “mega-region” that hosts a dynamic, culturally diverse population of more than 7 million inhabitants in a large cross-border metropolitan area with innovative industries (Malone, 2020; Perez and Serano, 2020).

The metropolitan areas of San Diego and Tijuana are home to 46% and 26% of the region’s population, respectively, and together constitute the core of the binational regional economy (see Table 1). Together, the other areas of the region – Imperial, Ensenada, Mexicali, San Quintin, and Rosarito – account for 28% of the region’s population. As is the case elsewhere along the U.S.-Mexico border, there is a significant economic gap between U.S. and Mexican border communities. Monthly income is substantially higher in the U.S., and workers in Mexico work more hours per week. Also, although average years of schooling have increased significantly in Mexico in recent decades, they are still lower than those observed in the United States.

TABLE 1 Socioeconomic Profile of the CaliBaja Region, 2020⁴

	San Diego	Imperial	Tijuana	Mexicali	Baja California	U.S.	Mexico
Population	3,338,514	181,352	1,910,568	1,042,395	3,739,797	328,239,523	125,515,554
Population growth	7.4%	3.5%	23.8%	11.80%	19.7%	6.1%	12.1%
Working-age population	2,112,047	106,888	1,309,290	692,885	2,512,771	197,101,578	79,691,310
Years of schooling	13.7	12.4	10.2	11	10.5	13.4	10.3
Hours worked per week	38.9	38.2	42.9	43.2	42.5	39.5	43.9
Monthly Income (USD)	\$4,795	\$3,126	\$541	\$597	\$538	\$4,406	\$416

³ In 2020, San Quintin became the sixth municipality in Baja California, but most of the economic data presented in this report is only available prior to that date.

⁴ Authors’ elaboration based on the 2019 American Community Survey and 2020 Mexican Census. Population growth rates are calculated from 2019 to 2010 for the U.S. and from 2020 to 2010 for Mexico. The working-age population denotes people between 15 and 60 years old. Years of schooling are calculated based on the working-age population. Monthly income refers to gross wage and salary income in the U.S. and net labor income in Mexico. Figures in 2020 U.S. Dollars (USD). Figures in Mexican pesos (MXN) converted to USD using an exchange rate of 19.7 MXN per 1.0 USD.

COMPILING AVAILABLE DATA ON THE CALIBAJA REGION

This study provides insight on the CaliBaja economy through a mixed-methodological approach that combines the analysis of data on employment concentrations by industry, estimates of value added from production, and additional descriptive data on investment, education, and other key indicators of the cross border regional economy. To do so, we estimate total employment by industry for the joint economies of CaliBaja as a single region, and then compare the binational region's employment concentrations to the larger U.S. and Mexican economies.

To identify key industry groups, we used the North American Industry Classification System (NAICS), or Sistema de Clasificación Industrial de América del Norte (SCIAN) codes.⁵ NAICS codes provide a two- to six-digit hierarchical classification system, with increasing levels of specificity (U.S. Census Bureau, 2021).

The employment data used here comes from the U.S. Bureau of Labor Statistics' Quarterly Census of Employment and Wages; Mexico's National Institute of Statistics and Geography's (INEGI) Economic Census (Censos Económicos); and Statistics Canada. While NAICS employment data for the U.S. and Canada are reported quarterly and annually, for Mexico they are only reported every five years, the most recent edition being the Censos Económicos 2019, which includes information from 2018. Therefore, to present NAICS-code employment data from comparable years for the three countries, the report uses information from 2018. Also, this study focuses on private employment and therefore excludes public sector workers.

To study employment concentrations in the U.S.-Mexico border region we employ Location Quotients (LQ) analysis.⁶ This technique allows us to calculate a measure of a region's employment relative to a larger area. For example, an LQ statistic can tell us how a metropolitan area or county relates to a country, or how a set of states relate to a country or continent. In this study, we use LQs to compare the concentration of employment in a given industry group within the CaliBaja region to the average concentration of that same industry in relation to the U.S. and Mexican economies.

Specifically, we calculate LQs using 4-digit NAICS codes for the following relationships:

- 1 CaliBaja relative to the combined economies of the United States, Mexico, and Canada;**
- 2 CaliBaja relative to the combined economies of the United States and Mexico (Appendix A);**
- 3 San Diego County relative to the United States (Appendix B);**
- 4 Tijuana relative to Mexico (Appendix C);**
- 5 Mexicali relative to Mexico (Appendix D);**
- 6 Imperial County relative to the U.S. (Appendix E); and**
- 7 Baja California relative to Mexico (Appendix F).**

⁵ Starting in 1997, NAICS codes provide common industry definitions for the U.S., Mexico, and Canada, which facilitates economic analyses of the three North American countries.

⁶ LQs are calculated by first, dividing regional industry employment by total regional employment, and second, dividing larger area industry employment by total larger area employment. Finally, the LQ is obtained by dividing the regional ratio by the larger area ratio.

LQ LOCATION QUOTIENTS

an LQ statistic can tell us how a metropolitan area or county relates to a country, or how a set of states relate to a country or continent.

An LQ equal to 1 indicates that the industry has the same share of its regional employment as it does in the larger area. That is, an industry with a regional LQ of 1 is about “average” in relation to the larger economy to which it is being compared. However, a regional LQ smaller than 1 indicates an industry with a smaller share of its regional employment relative to the industry share in the larger area; and an LQ greater than 1 indicates an industry with a greater share of its regional employment relative to the industry share in the larger area (U.S. Bureau of Labor Statistics. 2021). Following Bruges et al. (2014), our analysis assumes that all firms across all regions in the combined U.S. and Mexican economies are largely alike in their dependence on labor.

For this report, we also compile additional measures that are relevant to the leading industries we identify. For example, we report the number of firms based on data from the U.S. Bureau of Labor Statistics and Mexican Economic Census, as well as value added by each industry group, based on data from the Mexican Economic Census and proprietary data from EMSI. We also pull together information from publicly available sources in Mexico and the U.S. to show trends in cross-border trade and investment, as well as comparable data on educational trends. In addition, we assess some of the impacts of the COVID-19 pandemic in the cross-border region by drawing on U.S. and Mexican labor surveys to get a better understanding of the impact on employment in certain industries.



CALIBAJA EMPLOYMENT CONCENTRATIONS & CROSS-BORDER MANUFACTURING

We focus on industries with LQs of 1.5 or above, which indicates an above-average degree of concentration of employment. In doing so, we are able to identify the industry groups in the binational region that have such strong productive capabilities that they stand out relative to the combined U.S. and Mexican economies, and—as mentioned in Bruges et al. (2014)—appear to have a strong export orientation.⁷

These “High LQ” industries are particularly important to the regional economy because—since they can access other consumers and obtain profits from other markets—they bring money into the region. These resources create jobs, allow savings, and spur further investment and consumption. Moreover, firms that produce for outside markets are better able to mitigate the risks associated with the fluctuations of the regional and national economies.

In 2018, there were 70 different industries in the CaliBaja region that met the 1.5 LQ threshold (see Appendix A). These sectors are made up of 33,027 firms employing 657,598 individuals and contribute \$38.6 billion in overall value-add to the regional economy. In total, 27 of these “High LQ” industries are in the manufacturing sector and many have important cross-border linkages. These 27 industries employ 389,128 workers and generate \$21.6 billion in value-added.

At the sub-regional level, Baja California had 49 industries in 2018 with an LQ of 1.5+, of which 29 were manufacturing industries. Tijuana had 41 industries with an LQ of 1.5+ and Mexicali had 49, of those, 27 and 17 were manufacturing

industries, respectively. San Diego had 35 industries with an LQ of 1.5+, of which 10 were manufacturing industries. Imperial had 27 industries with an LQ of 1.5+, of which only one was a manufacturing industry. See Appendices B-F for details for each sub-region.

Importantly, many CaliBaja industries with high LQs have strong cross-border ties and synergies. For example, the region’s manufacturing strengths are largely a reflection of the capacity of production facilities in Tijuana. Tijuana’s early industrial development took advantage of an abundance of low cost, low skilled labor, particularly in the in-bond assembly or maquiladora industry that began in the 1960s. Today, after half a century, low skilled labor remains an important component of industrial production in Tijuana. However, many firms now also rely on Tijuana’s medium and high skilled labor pool across industries that add enormous value to the region.

Indeed, in 2018 Tijuana boasted nearly 54,000 employees working in the medical equipment and supplies manufacturing industry, over 23,000 workers in the semiconductor and electronic component manufacturing industry, and nearly 23,000 workers in the audio and video equipment manufacturing industry. To a lesser extent, Baja California’s capital, Mexicali, also contributes to the region’s manufacturing capabilities, with 14,907 workers in the region’s semiconductor and electronic component manufacturing industry, and nearly 10,000 employees in the region’s medical equipment and supplies manufacturing industry. Mexicali also boasts thousands of employees in the aerospace product and parts manufacturing industry (6,953).

⁷ Industries with an LQ significantly greater than 1 appear to be export-oriented because production is assumed to exceed local demand and consumption.

At the same time, many CaliBaja firms take advantage of high skilled workers in San Diego’s “knowledge economy,” which has substantial strengths in research, development and higher education. Indeed, San Diego had nearly 34,000 workers dedicated to scientific research and development services, over 23,000 employees in computer systems design and related services, and nearly 12,000 employees at colleges and universities.

There were eight manufacturing industry groups with an LQ of 1.5 or greater in both San Diego and Baja California in 2018. In total, these industries account for approximately 52,000 jobs in San Diego and Imperial and 177,500 jobs in Baja California. Collectively, they generate 7% of the region’s Gross Domestic Product (GDP) with \$14.9 billion in value-add in San Diego (\$287,500/worker) and \$2.2 billion in value-add in Baja California (\$12,250/worker).

The largest concentrations are found in audio and video equipment manufacturing (LQ 24.1), medical equipment and supplies manufacturing (LQ 10.1), and semiconductor and other electronic component manufacturing (LQ 5.6). Each of these had employment concentrations that were at least 500% greater than the average employment in the U.S. and Mexico in these sectors. In fact, in some industries, CaliBaja accounted for a significant share of total employment in all of North America, including 35.6% of USMCA regional employment in audio and video equipment manufacturing and nearly 15% in medical equipment and supplies manufacturing.



TABLE 2 Top Cross-Border Manufacturing Industries, 2018

Manufacturing Industry	CaliBaja Employment Concentration	Firms	Jobs	Value-Add (USD MM)
Medical equipment and supplies	10.1x	353	74,331	\$2,534
Semiconductor and electronic components	5.6x	244	47,918	\$1,821
Audio and video equipment	24.1x	50	28,721	\$510
Aerospace	3.1x	110	25,256	\$3,542
Other misc (e.g. sporting goods)	4.0x	488	24,510	\$904
Electronic instruments	2.7x	207	17,360	\$5,234
Communications equipment	4.4x	87	9,053	\$2,395
Commercial and service industry machinery	1.5x	64	2,307	\$185
Total (Top Industries)	—	1,603	229,456	\$17,125

JOBS ON THE RISE

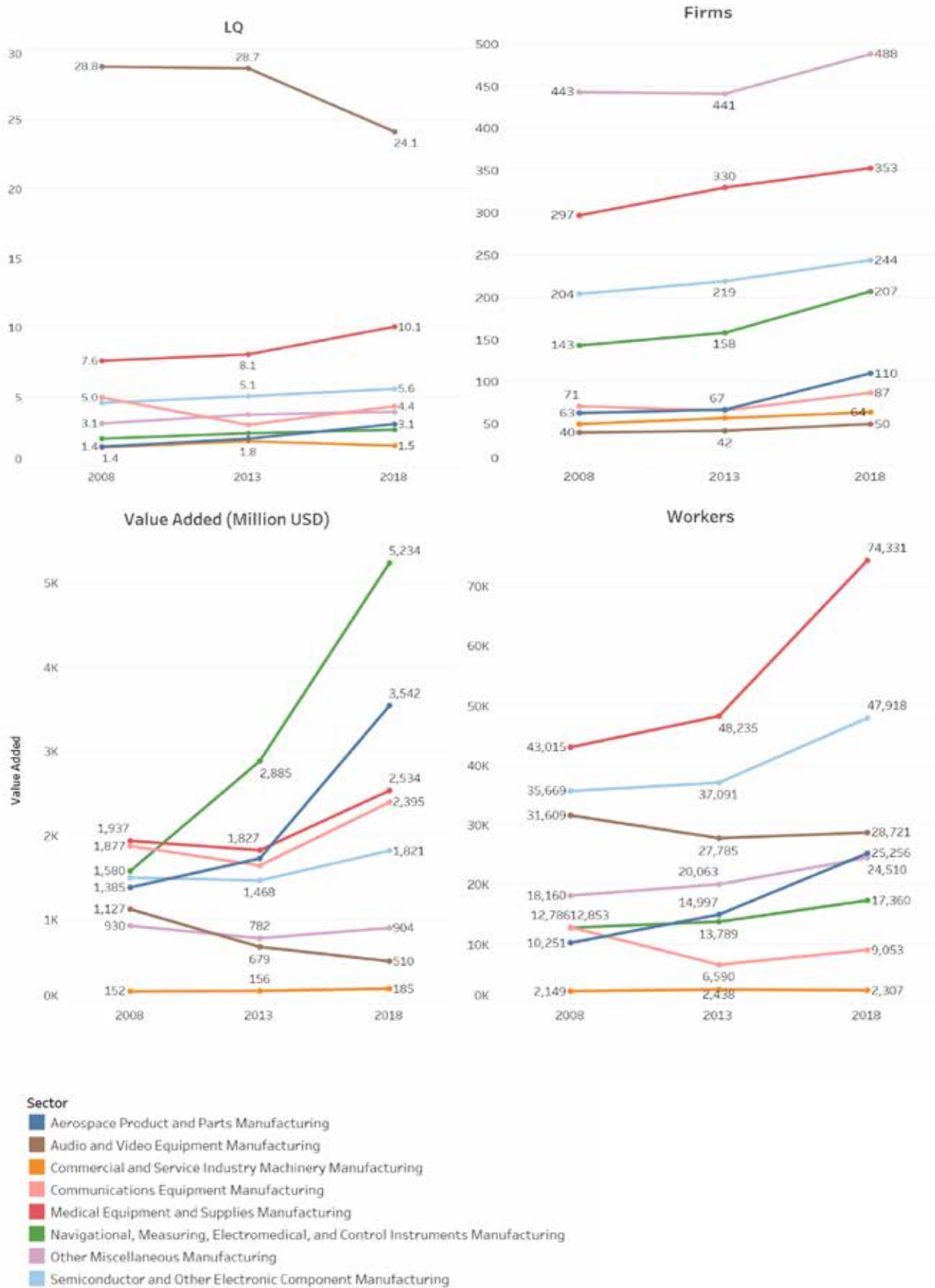
74,331

MEDICAL DEVICE
MANUFACTURING

While audio and video equipment manufacturing has the region's largest LQ, it appears to be somewhat on the decline. In 2008, the industry had an LQ of 28.8 with 50 firms employing 31,609 workers in CaliBaja; nonetheless, the industry fell to an LQ of 24.1 with 40 firms and 28,721 workers in 2018. Over that same period, the value added for this sector declined by over \$600 million. All of this suggests that CaliBaja's regional comparative advantage in audio and video equipment manufacturing has been slipping.

Meanwhile, among those industries with the highest employment concentrations, the one that appears to have grown the most substantially over the last decade is medical device manufacturing. In 2018, the industry had a regional LQ of 10.1 (up from a regional LQ of 7.6 in 2008), a total of 353 firms (up from 297 in 2008), and a total of 74,331 employees in CaliBaja (up from 43,015 in 2008). There were 53,941 employed in this sector in Tijuana, 9,906 in San Diego, and 6,765 in Mexicali.

FIGURE 1 Trends in Top Cross-Border Manufacturing Industries



INVESTMENT FLOWS IN THE CALIBAJA REGION

The strength of the CaliBaja economy has made it attractive to outside investors. The flow of funds reflects the comparative strengths of the two subregions. Baja California attracts over a billion dollars a year in foreign direct investment (FDI), with the majority of that investment in manufacturing (Mexican Ministry of Economy, 2021).

The flow of FDI into Baja California is mirrored by venture capital flowing into San Diego. Venture capital funding in San Diego has increased sharply in recent years and topped \$2 billion in each quarter from (2020Q4 to 2021Q2). By comparison, venture funding was only \$1.7 billion for all of 2017 (Freeman, 2021). Funding in 2021 through August had already surpassed the total for all of 2020 and was on pace to top \$8 billion by the end of the year. The bulk of the funding has been in the life sciences, with San Diego's strength in biotechnology, pharmaceuticals, and genomics attracting significant interest from investors. The second big area of venture investing has been technology, with a focus on software development.

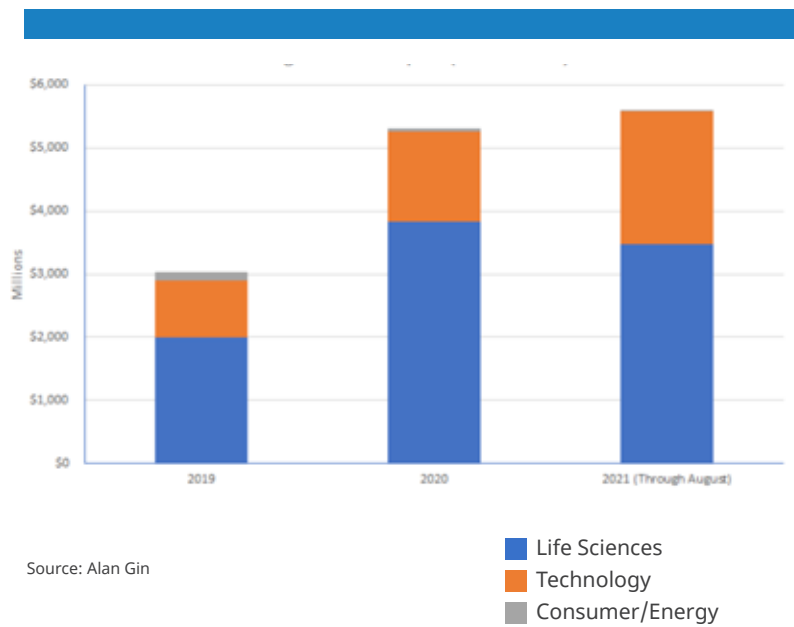
In addition to venture capital funding flowing into San Diego at every stage of the process, there is also significant FDI as well. The San Diego Economic Development Corporation estimates FDI in San Diego topped \$3 billion in 2020. Of that, 94% involved mergers and acquisitions. Again, the life sciences sector led the way with nearly three quarters of the total FDI (San Diego Economic Development Corporation, 2021).

TABLE 3 Annual FDI, Baja California, USD MM

	2017	2018	2019	2020
Total FDI	\$1,678	\$1,639	\$1,085	\$1,106
% Manufacturing	63%	78%	60%	61%
% US Companies	75%	61%	76%	76%

Source: Mexican Ministry of Economy

FIGURE 2 Trends in Venture Capital Allocations in San Diego, 2019-21



In Baja California, a total of 18,800 degrees were awarded in 2018, of which 38% were in STEM fields. Engineering was the STEM field with the highest number of degrees conferred at 3,671, followed by health sciences at 2,421 degrees. In non-STEM fields, 11,578 degrees were granted, primarily concentrated in Law, Business and the Social Sciences (ANUIES, 2021).

A significant portion of the region’s residents frequently cross the international border to work or study. Table 4 presents information on the cross-border workers in the CaliBaja region who reside in one country but cross the international border every day or at least once per week to go to work in another country; after their workday or workweek ends, they commute back to their home country.

On one hand, more than 54 thousand cross-border workers live in Baja California and work in the U.S., of which, an estimated 2,627 work in the health sector as doctors, dentists, nurses, paramedics, caregivers, and other health-related occupations. On the other hand, more than 4,700 cross-border workers live in San Diego and Imperial counties and work in Mexico. Cross-border workers benefit from the social and economic resources of both the U.S. and Mexico. In addition, more than 12,000 students live in Baja California but go to school in the United States.

TABLE 4 Cross-Border Workers and Students in the CaliBaja Region, 2020⁸

Place of Residence	Cross-Border Workers	Cross-Border Students
San Diego	2,806	—
Imperial	1,923	—
Tijuana	34,817	6,986
Mexicali	13,196	3,937

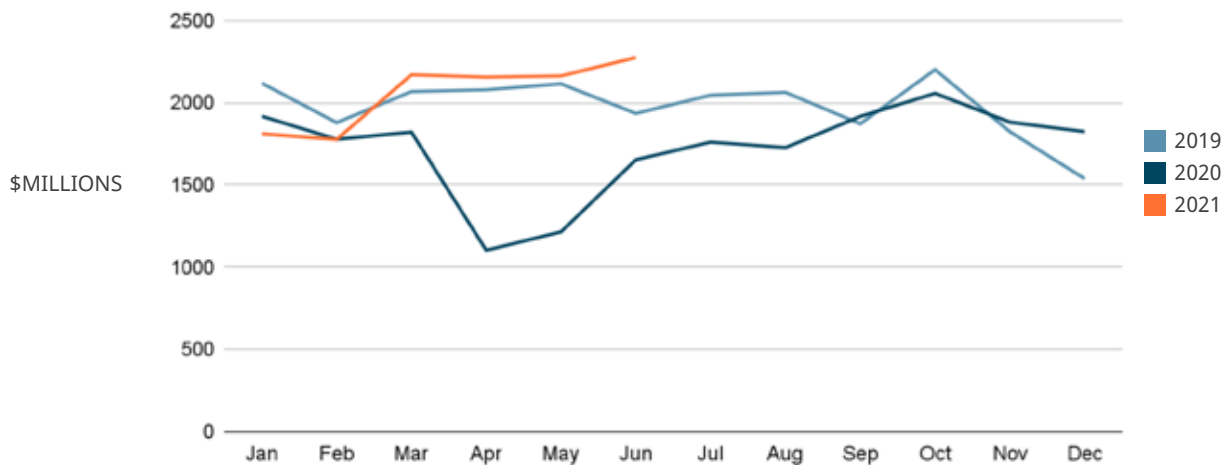
Source: Mexican Ministry of Economy

⁸ Authors’ elaboration based on the 2019 American Community Survey and 2020 Mexican Census. Cross-border workers who reside in the U.S. work in Mexico and vice versa. Cross-border students who reside in Mexico go to school in the US.

COVID-19 AND CROSS-BORDER TRADE

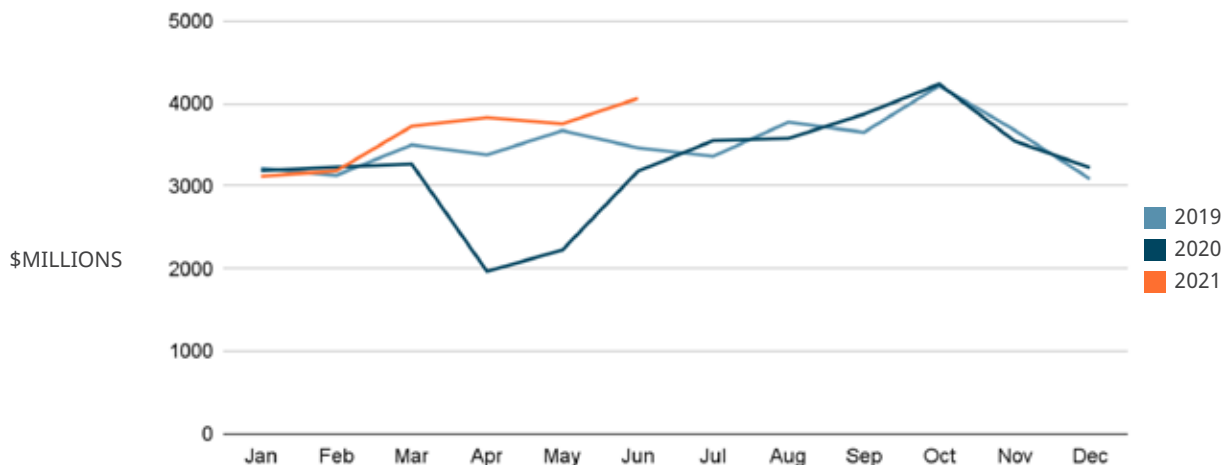
The region’s binational industries rely on the movement of goods back and forth across the border. In 2019, a total of \$44.1 billion was imported from Mexico via truck at the land ports in California and a total of \$25.8 billion was exported to Mexico. On average, that is almost \$200 million in goods moving between California and Mexico each day. Trade fell by a little over \$6 billion in 2020 with a very significant dip in the movement of goods in April, May and June. By July of 2020, trade was mostly back to pre-pandemic level and looks to have recovered in 2021 (Bureau of Transportation Statistics, 2021).

FIGURE 3 Land-Bound Commercial Exports by Truck from California to Mexico, 2019-21



Source: Bureau of Transportation Statistics

FIGURE 4 Land-Bound Commercial Imports by Truck from Mexico to California, 2019-21

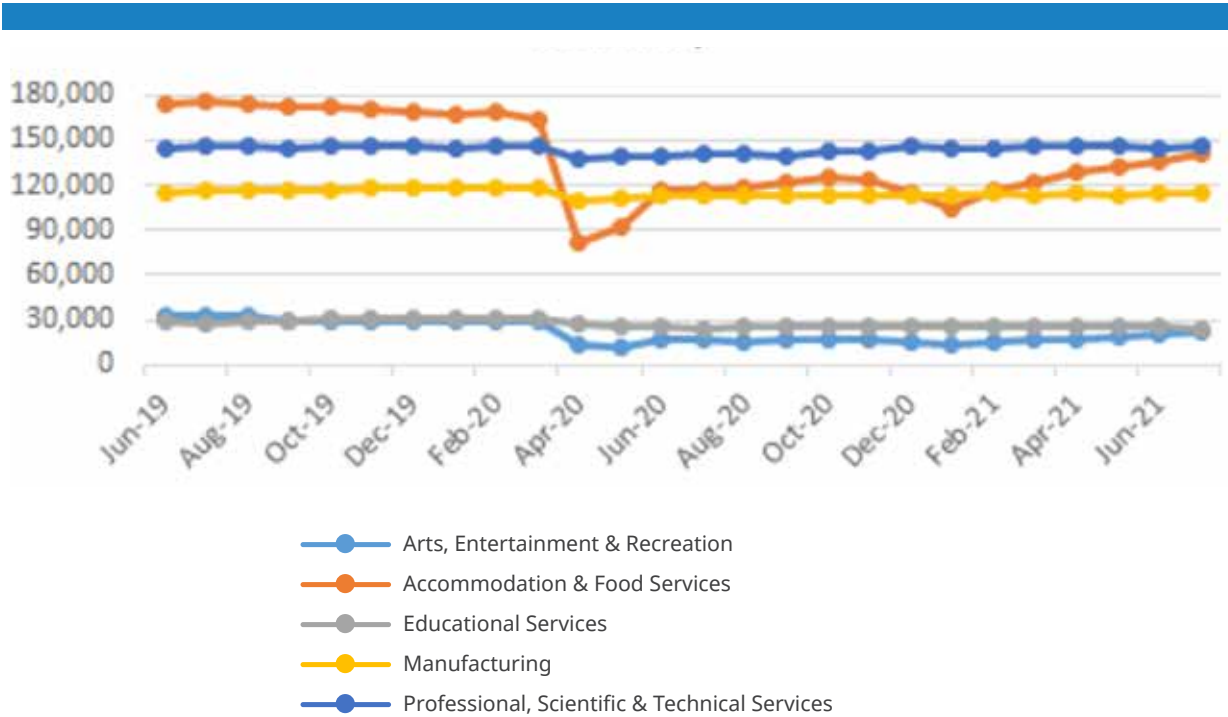


Source: Bureau of Transportation Statistics

COVID-19 AND EMPLOYMENT

As with the rest of the global economy, the economic crisis resulting from the COVID-19 pandemic hit the region hard. The economy in San Diego began shutting down in mid-March of 2020. The downturn was short, with the economy hitting bottom in April 2020 and rebounding from there. In Figure 5, a comparison of the labor market in February 2020 (the last full pre-shutdown month) with April 2020 shows that San Diego County lost almost a quarter million jobs during that period or more than 16% of all wage and salary jobs. The industries suffering the biggest job losses were Accommodation and Food Services (-86,700) and Retail Trade (-30,500). In percentage terms, the biggest losses were in Arts, Entertainment, and Recreations (-51.7%) and Accommodation and Food Services (-51.4%). All of these industries require significant personal interaction and were particularly impacted by COVID-19 restrictions.

FIGURE 5 Total Employment in San Diego County By Month and Industry, 2019-21



Source: Bureau of Labor Statistics

In contrast, the industries with high local employment concentrations and strong cross-border ties limited percentage job losses to the single digits, with Manufacturing down 7% (-8,300), Information down 8.4% (-2,000), and Professional, Scientific, and Technical Services down 5.9% (-8,700, -5.9%). In the rebound between April 2020 and the second quarter of 2021, those three sectors regained 13,600 or 71.6% of the jobs lost. This is in comparison to the hardest hit sectors (Accommodation and Food Services, Arts, Entertainment, and Recreation, Other Services, and Retail Trade) which have regained only 61.7% of the jobs lost.



CONCLUSIONS AND POLICY IMPLICATIONS

As a binational economy, CaliBaja is more than the sum of its parts. When we examine the combined productive capabilities of San Diego County, Imperial County, and Baja California, we can better see the importance of certain sectors that help determine the overall health of the regional economy.

Industries with high LQs have comparative advantages that help CaliBaja stand out when compared to other parts of the U.S., Mexico, and Canada. Industry leaders and policy makers can take advantage of this information to help foster, develop, and complement these industries.



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Reskilling for Industry 4.0: The CaliBaja region stands out in industries that involve high-end manufacturing, such as audiovisual equipment and medical device manufacturing. Supporting such industries requires a workforce that is prepared for innovation and production.

Investments in STEM education and research aids such industries on both sides of the border by enhancing productivity and innovation. San Diego's growing knowledge economy will require a steady inflow of talent as it expands and attracts more investment. On the Mexican side, manufacturing processes are becoming increasingly sophisticated and will require workers with higher levels of education than in the past.

The region's colleges and universities have so far met the challenge but more needs to be done. One potential problem (and opportunity) involves the so-called "STEM divide" where the quality of STEM education is much higher in more affluent communities as compared to lower income areas.

Policies and programs should work to ensure quality STEM educational opportunities to underserved communities on both sides of the border. Secondary and higher education institutions should also strive to build educational connections across the border, through exchanges, competitions, and other interactions that will encourage knowledge sharing and community building.



Improving Cross-Border

infrastructure: Border infrastructure promotes jobs and investment for both countries. The already significant interactions between the two regions could be made more efficient and costs could be reduced with investments that improve the flow of people, products, and information across the border.

The recent completion of critical transportation linkages in Otay Mesa—linking southbound State Route 125 (SR 125) to the eastbound State Route 905 (SR 905) and State Route 11 (SR 11) connectors—in December 2021 took over one billion dollars, more than two decades, and intense collaboration between the U.S. and Mexican governments at the federal, state, and local level.

Continued infrastructure investments of this nature—including the construction of the Otay Mesa East port of entry for trucks and commercial vehicles—are urgently needed to enable the CaliBaja region to contribute to the growth of U.S.-Mexico production and trade in the coming decades.

More and Better Data: Government, business, and civic leaders need to make evidence-based decisions to develop sound policies and initiatives. Unfortunately, answers to many of the most interesting questions about the CaliBaja region—like who crosses the border and why, and what are the specific linkages between cross-border firms—are elusive because they often require data that does not exist, is not readily obtained, or is not easily interpreted.

The inclusion of some information compiled for this report in some of the surveys collected by the Bureau of Labor Statistics and INEGI would represent an invaluable addition to the region. Also, greater alignment in the data compilation efforts of the U.S. and Mexican government is needed, especially insofar as certain economic census data are collected at different intervals in the two countries.

Above all, continued research and analysis of the workings of the CaliBaja regional economy must be a top priority for state and local government agencies, business entities, and civic organizations in the cross-border region. While many in the region work actively to promote cross-border collaboration, there is often a tendency to focus only on what happens on one side of the border or the other.

Thus, there is a need for more initiatives—within and across different organizations—to inform CaliBaja’s government, business, and civic leaders about the state of the binational regional economy and help generate ideas to promote CaliBaja’s continued growth and prosperity.



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APPENDICES

Appendix A: CaliBaja, 2018

Appendix B: San Diego, 2018

Appendix C: Tijuana, 2018

Appendix D: Mexicali, 2018

Appendix E: Imperial, 2018

Appendix F: Baja California, 2018

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Appendix A: CaliBaja, 2018

NAICS	Sector	LQ	Workers	Firms
3343	Audio and Video Equipment Manufacturing	24.1	28,721	50
3391	Medical Equipment and Supplies Manufacturing	10.1	74,331	353
3379	Other Furniture Related Product Manufacturing	6.2	5,527	56
3325	Hardware Manufacturing	6.1	4,041	14
3344	Semiconductor and Other Electronic Component Manufacturing	5.6	47,918	244
4664	Retail trade of used goods	5.3	4,565	2,582
3342	Communications Equipment Manufacturing	4.4	9,053	87
3351	Electric Lighting Equipment Manufacturing	4.2	4,280	42
3399	Other Miscellaneous Manufacturing	4.0	24,510	488
4333	Wholesale of records, toys and sporting goods	3.8	483	18
3359	Other Electrical Equipment and Component Manufacturing	3.6	12,261	80
4621	Retail trade in self-service stores	3.4	37,752	2,393
4684	Retail sale of lubricating fuels, oils and greases	3.3	14,845	972
4641	Retail sale of health care items	3.2	16,371	2,154
5417	Scientific Research and Development Services	3.2	34,019	937
3366	Ship and Boat Building	3.1	7,025	42
3364	Aerospace Product and Parts Manufacturing	3.1	25,256	110
4311	Wholesale of groceries and food	3.1	19,983	597
4651	Retail trade of perfumery and jewelery	2.9	4,044	775
3328	Coating, Engraving, Heat Treating, and Allied Activities	2.9	7,653	93
4343	Wholesale of waste materials	2.8	3,156	380
3169	Other Leather and Allied Product Manufacturing	2.8	1,088	37
8112	Electronic and Precision Equipment Repair and Maintenance	2.7	7,022	780
3371	Household and Institutional Furniture and Kitchen Cabinet Manufacturing	2.7	15,310	615
3345	Navigational, Measuring, Electromedical, and Control Instruments Manufac	2.7	17,360	207
1112	Vegetable and Melon Farming	2.7	3,707	64
3329	Other Fabricated Metal Product Manufacturing	2.6	13,129	109
3362	Motor Vehicle Body and Trailer Manufacturing	2.5	7,382	28
4682	Retail trade of parts and spare parts for automobiles, vans and trucks	2.5	7,442	1,677
4871	Scenic and Sightseeing Transportation, Land	2.4	834	22
4361	Wholesale of trucks and new parts and spare parts for cars, vans and truck	2.3	1,416	97
4342	Wholesale of raw materials for industry	2.3	13,068	1,232
4872	Scenic and Sightseeing Transportation, Water	2.2	717	59
3259	Other Chemical Product and Preparation Manufacturing	2.2	3,724	44
4335	Wholesale of minor household appliances and appliances	2.2	375	31
3152	Cut and Sew Apparel Manufacturing	2.2	12,663	608
4354	Wholesale of office and computer furniture and equipment, and other mach	2.1	2,728	274
3261	Plastics Product Manufacturing	2.0	27,750	272
8124	Parking and pensions for motor vehicles	2.0	1,265	413
4612	Retail trade of beverages, ice and tobacco	1.9	3,975	1,946
1114	Greenhouse, Nursery, and Floriculture Production	1.9	4,501	156
1141	Fishing	1.9	5,394	324
2372	Land Subdivision	1.9	2,331	132
7112	Spectator Sports	1.9	4,243	69
4885	Freight Transportation Arrangement	1.8	10,234	631

4334	Wholesale of stationery, books, magazines and newspapers	1.8	666	74
4671	Retail trade of hardware, hardware and glass	1.8	11,077	2,113
3372	Office Furniture (including Fixtures) Manufacturing	1.8	3,718	67
4662	Retail trade of furniture, computer equipment and accessories, telephones	1.8	2,817	907
7121	Museums, Historical Sites, and Similar Institutions	1.8	4,702	100
7132	Gambling Industries	1.7	4,287	120
3353	Electrical Equipment Manufacturing	1.7	5,651	42
4681	Retail of cars and trucks	1.7	3,933	326
4331	Wholesale of pharmaceutical products	1.7	1,244	64
3312	Steel Product Manufacturing from Purchased Steel	1.7	2,604	21
3222	Converted Paper Product Manufacturing	1.7	9,722	196
7131	Amusement Parks and Arcades	1.6	6,428	142
4353	Wholesale of machinery and equipment for services and commercial activities	1.6	2,331	348
1119	Other Crop Farming	1.6	1,500	111
1125	Aquaculture	1.6	957	58
4661	Retail trade of home furnishings and other household goods	1.6	3,439	800
5152	Cable and Other Subscription Programming	1.5	1,289	27
3272	Glass and Glass Product Manufacturing	1.5	3,281	53
3231	Printing and Related Support Activities	1.5	12,863	833
3333	Commercial and Service Industry Machinery Manufacturing	1.5	2,307	64
4663	Retail trade of articles for interior decoration	1.5	2,156	788
1129	Other Animal Production	1.5	440	48
6215	Medical and Diagnostic Laboratories	1.5	7,441	607
5312	Offices of Real Estate Agents and Brokers	1.5	8,741	2,791
4332	Wholesale of perfumery, cosmetics and jewelry	1.5	552	33
8121	Personal Care Services	1.4	22,911	8,070
8129	Other Personal Services	1.4	7,754	650
4632	Retail trade of clothing, costume jewelry and clothing accessories	1.4	8,739	3,770
8111	Automotive Repair and Maintenance	1.4	31,373	9,394
3254	Pharmaceutical and Medicine Manufacturing	1.4	8,120	134
7224	Drinking Places (Alcoholic Beverages)	1.4	10,931	891
6114	Business Schools and Computer and Management Training	1.4	1,611	124
4622	Retail trade in department stores	1.4	4,605	68
3334	Ventilation, Heating, Air-Conditioning, and Commercial Refrigeration Equipment	1.4	3,884	42
8132	Grantmaking and Giving Services	1.4	5,112	644
4341	Wholesale of agricultural and forestry raw materials	1.4	1,631	216
1151	Support Activities for Crop Production	1.4	7,282	221
3321	Forging and Stamping	1.3	2,483	25
2383	Building Finishing Contractors	1.3	16,623	1,568
4611	Grocery and food retail	1.3	35,151	13,659
7212	RV (Recreational Vehicle) Parks and Recreational Camps	1.3	1,399	77
4659	Retail trade of pets, gifts, religious items, disposables, crafts, and other products	1.3	3,496	1,603
3352	Household Appliance Manufacturing	1.3	2,536	16
3133	Textile and Fabric Finishing and Fabric Coating Mills	1.3	995	17
3121	Beverage Manufacturing	1.3	8,805	897
5224	Other non-stock exchange financial and credit intermediation institutions	1.3	2,634	421
3279	Other Nonmetallic Mineral Product Manufacturing	1.3	2,017	101

8114	Personal and Household Goods Repair and Maintenance	1.3	4,450	2,105
4653	Retail sale of stationery, books, magazines and newspapers	1.2	4,411	1,799
4352	Wholesale of machinery and equipment for industry	1.2	909	111
3117	Seafood Product Preparation and Packaging	1.2	909	33
5619	Other Support Services	1.2	6,888	320
7213	Rooming and Boarding Houses, Dormitories, and Workers' Camps	1.2	441	46
5616	Investigation and Security Services	1.2	21,392	568
5313	Activities Related to Real Estate	1.2	13,477	2,265
4249	Miscellaneous Nondurable Goods Merchant Wholesalers	1.2	5,742	513
4631	Retail trade of textile products, except clothing	1.1	1,249	227
3339	Other General Purpose Machinery Manufacturing	1.1	5,556	91
6212	Offices of Dentists	1.1	18,270	4,424
4881	Support Activities for Air Transportation	1.1	4,414	89
7211	Traveler Accommodation	1.1	41,548	1,126
4633	Retail trade of footwear	1.1	2,175	626
3122	Tobacco Manufacturing	1.1	250	4
8131	Religious Organizations	1.1	5,040	555
3118	Bakeries and Tortilla Manufacturing	1.1	13,911	1,958
6115	Technical and Trade Schools	1.1	2,095	240
4351	Wholesale of agricultural, forestry and fishing machinery and equipment	1.1	366	60
5414	Specialized Design Services	1.1	2,715	699
6111	Elementary and Secondary Schools	1.1	21,413	902
2362	Nonresidential Building Construction	1.1	16,854	628
5413	Architectural, Engineering, and Related Services	1.1	25,798	2,154
2361	Residential Building Construction	1.1	15,332	2,250
8134	Civic and Social Organizations	1.1	6,171	221
6214	Outpatient Care Centers	1.1	14,895	535
5259	Other Investment Pools and Funds	1.1	135	43
4652	Retail trade of entertainment articles	1.0	1,413	589
7225	Restaurants and Other Eating Places	1.0	196,768	18,297
4842	Specialized Freight Trucking	1.0	9,068	416
4851	Urban Transit Systems	1.0	3,180	44
6116	Other Schools and Instruction	1.0	7,918	1,367
5179	Other Telecommunications	1.0	1,533	119
4884	Support Activities for Road Transportation	1.0	1,885	213
6241	Individual and Family Services	1.0	38,475	28,144
5614	Business Support Services	1.0	16,349	1,334
5416	Management, Scientific, and Technical Consulting Services	1.0	24,651	4,411
4883	Support Activities for Water Transportation	1.0	1,627	38
5324	Commercial and Industrial Machinery and Equipment Rental and Leasing	1.0	3,066	299
3323	Architectural and Structural Metals Manufacturing	1.0	8,214	952
5321	Automotive Equipment Rental and Leasing	1.0	3,434	295
2379	Other Heavy and Civil Engineering Construction	1.0	1,845	51
4481	Clothing Stores	1.0	14,716	964
3273	Cement and Concrete Product Manufacturing	0.9	3,630	148
5411	Legal Services	0.9	18,066	3,758
3262	Rubber Product Manufacturing	0.9	2,885	24

4321	Wholesale of textiles and footwear	0.9	616	64
5621	Waste Collection	0.9	2,751	139
6113	Colleges, Universities, and Professional Schools	0.9	21,086	195
5311	Lessors of Real Estate	0.9	9,748	2,115
4312	Wholesale of beverages, ice and tobacco	0.9	2,196	47
8123	Drycleaning and Laundry Services	0.9	4,545	469
4482	Shoe Stores	0.9	2,774	217
3326	Spring and Wire Product Manufacturing	0.9	836	20
5418	Advertising, Public Relations, and Related Services	0.9	7,689	770
5629	Remediation and Other Waste Management Services	0.9	2,149	102
3219	Other Wood Product Manufacturing	0.9	4,268	418
6211	Offices of Physicians	0.9	35,971	4,934
3149	Other Textile Product Mills	0.9	1,835	126
8122	Death Care Services	0.9	2,806	754
6112	Junior Colleges	0.9	399	16
5419	Other Professional, Scientific, and Technical Services	0.9	10,348	1,466
3256	Soap, Cleaning Compound, and Toilet Preparation Manufacturing	0.9	2,106	59
4422	Home Furnishings Stores	0.8	3,203	238
4239	Miscellaneous Durable Goods Merchant Wholesalers	0.8	3,799	377
5223	Activities Related to Credit Intermediation	0.8	4,461	543
2381	Foundation, Structure, and Building Exterior Contractors	0.8	11,682	925
8113	Commercial and Industrial Machinery and Equipment (except Automotive a	0.8	3,965	579
7139	Other Amusement and Recreation Industries	0.8	18,452	1,577
4431	Electronics and Appliance Stores	0.8	6,081	497
6239	Other Residential Care Facilities	0.8	2,202	143
3119	Other Food Manufacturing	0.8	3,838	134
6233	Continuing Care Retirement Communities and Assisted Living Facilities for	0.8	11,442	443
3363	Motor Vehicle Parts Manufacturing	0.8	19,969	100
4539	Other Miscellaneous Store Retailers	0.8	4,187	543
5617	Services to Buildings and Dwellings	0.8	26,356	2,115
5622	Waste Treatment and Disposal	0.8	1,232	30
5322	Consumer Goods Rental	0.8	2,194	527
6213	Offices of Other Health Practitioners	0.8	11,590	2,435
5412	Accounting, Tax Preparation, Bookkeeping, and Payroll Services	0.8	13,400	2,404
3327	Machine Shops; Turned Product; and Screw, Nut, and Bolt Manufacturing	0.8	5,051	376
5611	Office Administrative Services	0.8	9,117	694
5415	Computer Systems Design and Related Services	0.8	25,477	2,417
2382	Building Equipment Contractors	0.8	25,266	2,003
4691	Retail trade exclusively through the internet, and printed catalogs, television	0.8	62	3
4453	Beer, Wine, and Liquor Stores	0.8	1,811	372
4483	Jewelry, Luggage, and Leather Goods Stores	0.7	1,503	245
4532	Office Supplies, Stationery, and Gift Stores	0.7	2,827	292
5112	Software Publishers	0.7	4,629	208
3332	Industrial Machinery Manufacturing	0.7	1,473	47
5331	Lessors of Nonfinancial Intangible Assets (except Copyrighted Works)	0.7	263	29
4533	Used Merchandise Stores	0.7	1,922	139
3271	Clay Product and Refractory Manufacturing	0.7	1,536	146

4452	Specialty Food Stores	0.7	2,472	239
4236	Household Appliances and Electrical and Electronic Goods Merchant Whol	0.7	3,879	370
5122	Sound Recording Industries	0.7	246	33
4511	Sporting Goods, Hobby, and Musical Instrument Stores	0.7	5,398	480
8133	Social Advocacy Organizations	0.7	2,384	255
4412	Other Motor Vehicle Dealers	0.7	1,700	134
5613	Employment Services	0.7	53,176	774
6244	Child Day Care Services	0.7	10,120	951
4922	Local Messengers and Local Delivery	0.7	901	85
5231	Securities and Commodity Contracts Intermediation and Brokerage	0.7	4,917	878
4451	Grocery Stores	0.7	28,169	899
3141	Textile Furnishings Mills	0.7	793	36
4855	Charter Bus Industry	0.7	394	28
4522	Department Stores	0.7	11,780	102
5615	Travel Arrangement and Reservation Services	0.7	2,853	440
7111	Performing Arts Companies	0.7	1,501	96
4841	General Freight Trucking	0.7	12,305	710
3221	Pulp, Paper, and Paperboard Mills	0.7	1,257	11
7223	Special Food Services	0.7	7,635	465
2389	Other Specialty Trade Contractors	0.7	6,999	578
6243	Vocational Rehabilitation Services	0.7	3,212	65
3341	Computer and Peripheral Equipment Manufacturing	0.6	1,924	51
4421	Furniture Stores	0.6	2,166	202
5323	General Rental Centers	0.6	380	109
5511	Management of Companies and Enterprises	0.6	23,949	401
2373	Highway, Street, and Bridge Construction	0.6	3,828	102
3112	Grain and Oilseed Milling	0.6	1,036	20
6219	Other Ambulatory Health Care Services	0.6	3,079	110
4411	Automobile Dealers	0.6	12,073	344
5222	Nondepository Credit Intermediation	0.6	5,819	446
5612	Facilities Support Services	0.6	1,575	67
4243	Apparel, Piece Goods, and Notions Merchant Wholesalers	0.6	1,409	170
4854	School and Employee Bus Transportation	0.6	2,108	29
4413	Automotive Parts, Accessories, and Tire Stores	0.6	4,978	512
8141	Private Households	0.6	2,603	2,105
4512	Book Stores and News Dealers	0.6	690	64
4541	Electronic Shopping and Mail-Order Houses	0.6	3,477	431
4461	Health and Personal Care Stores	0.6	9,147	958
4523	General Merchandise Stores, including Warehouse Clubs and Supercenter	0.6	16,874	235
3114	Fruit and Vegetable Preserving and Specialty Food Manufacturing	0.6	2,154	47
4441	Building Material and Supplies Dealers	0.6	9,821	438
6232	Residential Intellectual and Developmental Disability, Mental Health, and S	0.6	5,498	320
5121	Motion Picture and Video Industries	0.6	3,826	268
7115	Independent Artists, Writers, and Performers	0.6	458	239
4234	Professional and Commercial Equipment and Supplies Merchant Wholesal	0.6	5,710	490
4921	Couriers and Express Delivery Services	0.6	5,735	98
3322	Cutlery and Handtool Manufacturing	0.6	511	26

5242	Agencies, Brokerages, and Other Insurance Related Activities	0.6	10,371	1,757
1113	Fruit and Tree Nut Farming	0.6	1,535	179
4242	Drugs and Druggists' Sundries Merchant Wholesalers	0.5	1,943	173
5173	Wired and Wireless Telecommunications Carriers	0.5	6,863	214
6242	Community Food and Housing, and Emergency and Other Relief Services	0.5	1,482	148
4232	Furniture and Home Furnishing Merchant Wholesalers	0.5	935	116
3255	Paint, Coating, and Adhesive Manufacturing	0.5	701	25
3115	Dairy Product Manufacturing	0.5	2,018	249
2371	Utility System Construction	0.5	4,885	166
4889	Other Support Activities for Transportation	0.5	326	33
4531	Florists	0.5	445	103
3111	Animal Food Manufacturing	0.5	698	28
4244	Grocery and Related Product Merchant Wholesalers	0.5	5,794	417
6231	Nursing Care Facilities (Skilled Nursing Facilities)	0.5	11,763	141
4859	Other Transit and Ground Passenger Transportation	0.5	855	63
4246	Chemical and Allied Products Merchant Wholesalers	0.5	1,040	96
5182	Data Processing, Hosting, and Related Services	0.5	2,509	186
5191	Other Information Services	0.5	2,209	217
8139	Business, Professional, Labor, Political, and Similar Organizations	0.5	3,065	423
4233	Lumber and Other Construction Materials Merchant Wholesalers	0.5	1,672	166
3315	Foundries	0.5	1,018	23
5151	Radio and Television Broadcasting	0.4	1,733	101
6117	Educational Support Services	0.4	1,025	185
4853	Taxi and Limousine Service	0.4	493	64
4231	Motor Vehicle and Motor Vehicle Parts and Supplies Merchant Wholesalers	0.4	2,241	201
4237	Hardware, and Plumbing and Heating Equipment and Supplies Merchant W	0.4	1,753	187
4442	Lawn and Garden Equipment and Supplies Stores	0.4	968	90
2123	Nonmetallic Mineral Mining and Quarrying	0.4	789	51
5241	Insurance Carriers	0.4	7,474	212
4471	Gasoline Stations	0.4	5,585	592
3335	Metalworking Machinery Manufacturing	0.4	1,114	59
4251	Wholesale Electronic Markets and Agents and Brokers	0.4	3,187	599
4248	Beer, Wine, and Distilled Alcoholic Beverage Merchant Wholesalers	0.4	1,126	49
7114	Agents and Managers for Artists, Athletes, Entertainers, and Other Public F	0.4	160	52
3324	Boiler, Tank, and Shipping Container Manufacturing	0.4	627	17
6216	Home Health Care Services	0.4	7,820	237
5221	Depository Credit Intermediation	0.3	10,532	839
4683	Retail trade of motorcycles and other motor vehicles	0.3	100	23
1123	Poultry and Egg Production	0.3	227	13
4247	Petroleum and Petroleum Products Merchant Wholesalers	0.3	519	47
4811	Scheduled Air Transportation	0.3	2,400	20
4238	Machinery, Equipment, and Supplies Merchant Wholesalers	0.3	3,431	425
5111	Newspaper, Periodical, Book, and Directory Publishers	0.3	1,739	184
7113	Promoters of Performing Arts, Sports, and Similar Events	0.3	787	102
4542	Vending Machine Operators	0.3	184	21
4241	Paper and Paper Product Merchant Wholesalers	0.3	612	80
3241	Petroleum and Coal Products Manufacturing	0.3	675	18

3274	Lime and Gypsum Product Manufacturing	0.3	130	33
3251	Basic Chemical Manufacturing	0.3	880	20
3252	Resin, Synthetic Rubber, and Artificial and Synthetic Fibers and Filaments I	0.3	484	21
3116	Animal Slaughtering and Processing	0.3	2,754	29
3113	Sugar and Confectionery Product Manufacturing	0.3	711	36
6221	General Medical and Surgical Hospitals	0.3	19,731	119
4812	Nonscheduled Air Transportation	0.3	202	24
1121	Cattle Ranching and Farming	0.3	635	31
4543	Direct Selling Establishments	0.3	528	74
3369	Other Transportation Equipment Manufacturing	0.2	161	23
5174	Satellite Telecommunications	0.2	34	17
4235	Metal and Mineral (except Petroleum) Merchant Wholesalers	0.2	415	55
4931	Warehousing and Storage	0.2	3,326	182
4911	Postal Service	0.2	58	17
3346	Manufacturing and Reproducing Magnetic and Optical Media	0.2	49	15
3151	Apparel Knitting Mills	0.2	96	11
3253	Pesticide, Fertilizer, and Other Agricultural Chemical Manufacturing	0.1	108	9
3313	Alumina and Aluminum Production and Processing	0.1	152	8
1111	Oilseed and Grain Farming	0.1	99	7
2211	Electric Power Generation, Transmission and Distribution	0.1	644	32
4245	Farm Product Raw Material Merchant Wholesalers	0.1	70	9
3132	Fabric Mills	0.1	84	13
4831	Deep Sea, Coastal, and Great Lakes Water Transportation	0.0	19	7
3131	Fiber, Yarn, and Thread Mills	0.0	10	7
2213	Water, Sewage and Other Systems	0.0	21	40
2131	Support Activities for Mining	0.0	38	16
2111	Oil and Gas Extraction	0.0	13	5
6223	Specialty (except Psychiatric and Substance Abuse) Hospitals	0.0	0	71
6222	Psychiatric and Substance Abuse Hospitals	0.0	0	7
5251	Insurance and Employee Benefit Funds	0.0	0	5
5239	Other Financial Investment Activities	0.0	0	1,022
5232	Securities and Commodity Exchanges	0.0	0	1
5211	Monetary Authorities-Central Bank	0.0	0	4
4882	Support Activities for Rail Transportation	0.0	0	2
4879	Scenic and Sightseeing Transportation, Other	0.0	0	3
4869	Other Pipeline Transportation	0.0	0	4
4862	Pipeline Transportation of Natural Gas	0.0	0	1
4861	Pipeline Transportation of Crude Oil	0.0	0	1
4852	Interurban and Rural Bus Transportation	0.0	0	17
4832	Inland Water Transportation	0.0	0	6
4821	Rail Transportation	0.0	0	4
3365	Railroad Rolling Stock Manufacturing	0.0	0	1
3361	Motor Vehicle Manufacturing	0.0	0	6
3336	Engine, Turbine, and Power Transmission Equipment Manufacturing	0.0	0	15
3331	Agriculture, Construction, and Mining Machinery Manufacturing	0.0	0	18
3314	Nonferrous Metal (except Aluminum) Production and Processing	0.0	0	4
3311	Iron and Steel Mills and Ferroalloy Manufacturing	0.0	0	7

3212	Veneer, Plywood, and Engineered Wood Product Manufacturing	0.0	0	10
3211	Sawmills and Wood Preservation	0.0	0	5
3162	Footwear Manufacturing	0.0	0	13
3161	Leather and Hide Tanning and Finishing	0.0	0	3
3159	Apparel Accessories and Other Apparel Manufacturing	0.0	0	27
2212	Natural Gas Distribution	0.0	0	42
2122	Metal Ore Mining	0.0	0	4
2121	Coal Mining	0.0	0	1
1153	Support Activities for Forestry	0.0	0	2
1152	Support Activities for Animal Production	0.0	0	89
1133	Logging	0.0	0	1
1132	Forest Nurseries and Gathering of Forest Products	0.0	0	2
1124	Sheep and Goat Farming	0.0	0	5
1122	Hog and Pig Farming	0.0	0	1
Grand Total			2,248,131	221,748

Appendix B: San Diego, 2018

NAICS	Sector	LQ	Workers	Firms
3342	Communications Equipment Manufacturing	6.7	5,657	77
3343	Audio and Video Equipment Manufacturing	6.2	1,222	25
3366	Ship and Boat Building	5.1	6,945	38
5417	Scientific Research and Development Services	5.0	33,939	926
4872	Scenic and Sightseeing Transportation, Water	3.9	648	46
3345	Navigational, Measuring, Electromedical, and Control Instruments Manufac	3.5	14,041	195
1114	Greenhouse, Nursery, and Floriculture Production	2.9	4,495	153
7131	Amusement Parks and Arcades	2.7	5,906	40
7121	Museums, Historical Sites, and Similar Institutions	2.6	4,294	69
3364	Aerospace Product and Parts Manufacturing	2.5	12,684	76
3254	Pharmaceutical and Medicine Manufacturing	2.5	7,346	118
5152	Cable and Other Subscription Programming	2.4	1,289	26
6114	Business Schools and Computer and Management Training	2.2	1,512	109
7213	Rooming and Boarding Houses, Dormitories, and Workers' Camps	2.2	259	10
3391	Medical Equipment and Supplies Manufacturing	2.2	6,765	163
8129	Other Personal Services	2.1	7,232	451
2383	Building Finishing Contractors	2.0	16,248	1,504
6215	Medical and Diagnostic Laboratories	1.9	5,201	184
1129	Other Animal Production	1.8	350	39
3333	Commercial and Service Industry Machinery Manufacturing	1.7	1,558	50
5313	Activities Related to Real Estate	1.6	11,594	1,968
5259	Other Investment Pools and Funds	1.6	135	43
5312	Offices of Real Estate Agents and Brokers	1.6	5,153	2,350
8134	Civic and Social Organizations	1.6	6,126	212
4249	Miscellaneous Nondurable Goods Merchant Wholesalers	1.6	5,102	470
7211	Traveler Accommodation	1.6	29,923	527
5413	Architectural, Engineering, and Related Services	1.6	22,623	1,839
3344	Semiconductor and Other Electronic Component Manufacturing	1.5	5,677	130
3399	Other Miscellaneous Manufacturing	1.5	4,331	261
6214	Outpatient Care Centers	1.5	13,816	449
2372	Land Subdivision	1.5	587	97
8131	Religious Organizations	1.5	2,848	261
5414	Specialized Design Services	1.5	2,079	521
5416	Management, Scientific, and Technical Consulting Services	1.5	21,342	4,106
6241	Individual and Family Services	1.5	35,419	23,117
6115	Technical and Trade Schools	1.4	1,533	120
4881	Support Activities for Air Transportation	1.4	3,018	76
5179	Other Telecommunications	1.4	1,112	71
4855	Charter Bus Industry	1.4	394	18
2361	Residential Building Construction	1.4	10,694	2,105
8121	Personal Care Services	1.4	9,640	1,505
4481	Clothing Stores	1.3	13,505	899
8114	Personal and Household Goods Repair and Maintenance	1.3	1,030	229
4884	Support Activities for Road Transportation	1.3	1,332	138
4482	Shoe Stores	1.3	2,599	197

5122	Sound Recording Industries	1.3	231	30
4239	Miscellaneous Durable Goods Merchant Wholesalers	1.3	3,799	373
6112	Junior Colleges	1.3	330	8
6116	Other Schools and Instruction	1.3	5,502	685
5616	Investigation and Security Services	1.3	11,772	308
4422	Home Furnishings Stores	1.3	3,121	232
3152	Cut and Sew Apparel Manufacturing	1.2	1,111	68
2381	Foundation, Structure, and Building Exterior Contractors	1.2	11,063	849
3341	Computer and Peripheral Equipment Manufacturing	1.2	1,924	48
4431	Electronics and Appliance Stores	1.2	5,939	484
7112	Spectator Sports	1.2	1,721	63
7225	Restaurants and Other Eating Places	1.2	127,624	6,251
5321	Automotive Equipment Rental and Leasing	1.2	2,583	191
4539	Other Miscellaneous Store Retailers	1.2	4,137	531
6212	Offices of Dentists	1.2	11,234	1,874
6233	Continuing Care Retirement Communities and Assisted Living Facilities for	1.2	10,942	405
5324	Commercial and Industrial Machinery and Equipment Rental and Leasing	1.2	1,889	158
5331	Lessors of Nonfinancial Intangible Assets (except Copyrighted Works)	1.2	263	29
7132	Gambling Industries	1.2	1,359	8
5622	Waste Treatment and Disposal	1.1	1,112	21
5112	Software Publishers	1.1	4,629	206
5411	Legal Services	1.1	12,859	2,423
5223	Activities Related to Credit Intermediation	1.1	3,465	417
6211	Offices of Physicians	1.1	29,263	2,759
8132	Grantmaking and Giving Services	1.1	1,587	207
5415	Computer Systems Design and Related Services	1.1	23,447	2,305
4533	Used Merchandise Stores	1.1	1,922	138
3118	Bakeries and Tortilla Manufacturing	1.1	3,435	142
8111	Automotive Repair and Maintenance	1.1	10,275	1,647
4511	Sporting Goods, Hobby, and Musical Instrument Stores	1.1	5,398	467
7111	Performing Arts Companies	1.1	1,379	73
5617	Services to Buildings and Dwellings	1.1	23,118	1,966
4236	Household Appliances and Electrical and Electronic Goods Merchant Whol	1.1	3,833	361
4453	Beer, Wine, and Liquor Stores	1.1	1,733	363
5419	Other Professional, Scientific, and Technical Services	1.1	7,989	875
4532	Office Supplies, Stationery, and Gift Stores	1.1	2,716	281
5231	Securities and Commodity Contracts Intermediation and Brokerage	1.1	4,917	411
7139	Other Amusement and Recreation Industries	1.1	14,615	781
8133	Social Advocacy Organizations	1.1	2,364	249
4452	Specialty Food Stores	1.1	2,402	230
8123	Drycleaning and Laundry Services	1.1	3,141	334
5311	Lessors of Real Estate	1.1	6,412	1,173
4483	Jewelry, Luggage, and Leather Goods Stores	1.1	1,416	233
2382	Building Equipment Contractors	1.1	23,002	1,819
4885	Freight Transportation Arrangement	1.1	2,368	190
3169	Other Leather and Allied Product Manufacturing	1.1	116	11
2362	Nonresidential Building Construction	1.0	8,458	444

4412	Other Motor Vehicle Dealers	1.0	1,643	130
4922	Local Messengers and Local Delivery	1.0	871	76
2379	Other Heavy and Civil Engineering Construction	1.0	1,182	43
5173	Wired and Wireless Telecommunications Carriers	1.0	6,715	198
5511	Management of Companies and Enterprises	1.0	23,740	392
4451	Grocery Stores	1.0	27,101	851
5629	Remediation and Other Waste Management Services	1.0	1,540	78
4522	Department Stores	1.0	11,278	93
6243	Vocational Rehabilitation Services	1.0	3,212	60
5615	Travel Arrangement and Reservation Services	1.0	2,128	209
2389	Other Specialty Trade Contractors	1.0	6,554	535
6213	Offices of Other Health Practitioners	1.0	8,895	1,537
6113	Colleges, Universities, and Professional Schools	1.0	11,995	96
7224	Drinking Places (Alcoholic Beverages)	1.0	3,759	264
4421	Furniture Stores	1.0	2,143	196
7223	Special Food Services	0.9	6,641	383
5222	Nondepository Credit Intermediation	0.9	5,725	431
5611	Office Administrative Services	0.9	4,810	618
5418	Advertising, Public Relations, and Related Services	0.9	4,479	555
4243	Apparel, Piece Goods, and Notions Merchant Wholesalers	0.9	1,379	162
4411	Automobile Dealers	0.9	11,515	329
5619	Other Support Services	0.9	2,854	258
3359	Other Electrical Equipment and Component Manufacturing	0.9	1,294	51
5242	Agencies, Brokerages, and Other Insurance Related Activities	0.9	10,371	1,441
4512	Book Stores and News Dealers	0.9	690	62
8141	Private Households	0.9	2,559	2,073
4541	Electronic Shopping and Mail-Order Houses	0.9	3,477	431
3332	Industrial Machinery Manufacturing	0.9	1,019	38
4234	Professional and Commercial Equipment and Supplies Merchant Wholesalers	0.9	5,691	485
6242	Community Food and Housing, and Emergency and Other Relief Services	0.9	1,466	85
5613	Employment Services	0.9	30,488	578
7212	RV (Recreational Vehicle) Parks and Recreational Camps	0.9	574	34
5412	Accounting, Tax Preparation, Bookkeeping, and Payroll Services	0.8	8,454	1,629
3149	Other Textile Product Mills	0.8	536	49
4461	Health and Personal Care Stores	0.8	8,771	921
4242	Drugs and Druggists' Sundries Merchant Wholesalers	0.8	1,943	170
4413	Automotive Parts, Accessories, and Tire Stores	0.8	4,575	470
7115	Independent Artists, Writers, and Performers	0.8	421	224
4441	Building Material and Supplies Dealers	0.8	9,408	418
3327	Machine Shops; Turned Product; and Screw, Nut, and Bolt Manufacturing	0.8	2,927	195
4232	Furniture and Home Furnishing Merchant Wholesalers	0.8	935	113
6232	Residential Intellectual and Developmental Disability, Mental Health, and Substance Abuse Services	0.8	5,136	268
4911	Postal Service	0.8	58	16
4859	Other Transit and Ground Passenger Transportation	0.8	855	60
6219	Other Ambulatory Health Care Services	0.8	2,444	90
5151	Radio and Television Broadcasting	0.8	1,685	37
1112	Vegetable and Melon Farming	0.8	719	27

4921	Couriers and Express Delivery Services	0.8	4,951	67
4523	General Merchandise Stores, including Warehouse Clubs and Supercenter	0.8	15,040	209
3351	Electric Lighting Equipment Manufacturing	0.8	361	23
4531	Florists	0.8	445	99
1113	Fruit and Tree Nut Farming	0.8	1,378	170
5322	Consumer Goods Rental	0.8	1,104	141
6111	Elementary and Secondary Schools	0.8	6,266	171
6231	Nursing Care Facilities (Skilled Nursing Facilities)	0.7	11,427	131
5621	Waste Collection	0.7	1,284	81
1119	Other Crop Farming	0.7	440	28
4246	Chemical and Allied Products Merchant Wholesalers	0.7	1,022	89
8139	Business, Professional, Labor, Political, and Similar Organizations	0.7	3,033	410
2373	Highway, Street, and Bridge Construction	0.7	2,272	63
5182	Data Processing, Hosting, and Related Services	0.7	2,264	176
4233	Lumber and Other Construction Materials Merchant Wholesalers	0.7	1,645	158
6244	Child Day Care Services	0.7	6,037	655
5612	Facilities Support Services	0.7	1,028	46
5614	Business Support Services	0.7	5,973	471
1141	Fishing	0.7	44	22
4244	Grocery and Related Product Merchant Wholesalers	0.7	5,257	390
5191	Other Information Services	0.7	2,047	200
6117	Educational Support Services	0.7	1,018	181
4853	Taxi and Limousine Service	0.7	493	63
6239	Other Residential Care Facilities	0.7	1,083	46
3231	Printing and Related Support Activities	0.7	2,795	314
5241	Insurance Carriers	0.6	7,474	207
4231	Motor Vehicle and Motor Vehicle Parts and Supplies Merchant Wholesalers	0.6	2,195	191
4237	Hardware, and Plumbing and Heating Equipment and Supplies Merchant W	0.6	1,725	179
8112	Electronic and Precision Equipment Repair and Maintenance	0.6	644	145
3279	Other Nonmetallic Mineral Product Manufacturing	0.6	490	29
2371	Utility System Construction	0.6	3,357	118
3323	Architectural and Structural Metals Manufacturing	0.6	2,358	102
5221	Depository Credit Intermediation	0.6	10,165	812
4442	Lawn and Garden Equipment and Supplies Stores	0.6	929	84
3379	Other Furniture Related Product Manufacturing	0.6	209	21
4251	Wholesale Electronic Markets and Agents and Brokers	0.6	3,127	590
4248	Beer, Wine, and Distilled Alcoholic Beverage Merchant Wholesalers	0.6	1,126	47
7114	Agents and Managers for Artists, Athletes, Entertainers, and Other Public F	0.6	160	52
4471	Gasoline Stations	0.6	5,113	541
3335	Metalworking Machinery Manufacturing	0.5	966	49
5111	Newspaper, Periodical, Book, and Directory Publishers	0.5	1,706	150
4811	Scheduled Air Transportation	0.5	2,400	19
3256	Soap, Cleaning Compound, and Toilet Preparation Manufacturing	0.5	571	32
1123	Poultry and Egg Production	0.5	227	13
4842	Specialized Freight Trucking	0.5	2,390	272
6216	Home Health Care Services	0.5	7,534	225
5121	Motion Picture and Video Industries	0.5	2,025	220

3371	Household and Institutional Furniture and Kitchen Cabinet Manufacturing	0.5	1,236	121
4542	Vending Machine Operators	0.5	184	19
8122	Death Care Services	0.5	641	69
3261	Plastics Product Manufacturing	0.5	2,769	83
3251	Basic Chemical Manufacturing	0.5	694	13
8113	Commercial and Industrial Machinery and Equipment (except Automotive a	0.5	955	126
3372	Office Furniture (including Fixtures) Manufacturing	0.5	494	34
5323	General Rental Centers	0.5	161	17
4241	Paper and Paper Product Merchant Wholesalers	0.5	580	72
4238	Machinery, Equipment, and Supplies Merchant Wholesalers	0.5	3,124	391
4812	Nonscheduled Air Transportation	0.4	202	24
3312	Steel Product Manufacturing from Purchased Steel	0.4	252	6
3255	Paint, Coating, and Adhesive Manufacturing	0.4	275	10
3119	Other Food Manufacturing	0.4	944	60
4247	Petroleum and Petroleum Products Merchant Wholesalers	0.4	431	38
3321	Forging and Stamping	0.4	407	15
3273	Cement and Concrete Product Manufacturing	0.4	776	32
5174	Satellite Telecommunications	0.4	34	14
4543	Direct Selling Establishments	0.4	528	70
7113	Promoters of Performing Arts, Sports, and Similar Events	0.4	578	67
3346	Manufacturing and Reproducing Magnetic and Optical Media	0.4	49	11
3328	Coating, Engraving, Heat Treating, and Allied Activities	0.4	497	45
6221	General Medical and Surgical Hospitals	0.4	16,661	26
3339	Other General Purpose Machinery Manufacturing	0.3	916	55
4883	Support Activities for Water Transportation	0.3	292	18
4841	General Freight Trucking	0.3	3,138	405
2123	Nonmetallic Mineral Mining and Quarrying	0.3	297	17
4235	Metal and Mineral (except Petroleum) Merchant Wholesalers	0.3	398	49
3114	Fruit and Vegetable Preserving and Specialty Food Manufacturing	0.3	502	13
3329	Other Fabricated Metal Product Manufacturing	0.3	756	41
3141	Textile Furnishings Mills	0.3	140	18
4854	School and Employee Bus Transportation	0.3	536	8
3353	Electrical Equipment Manufacturing	0.3	368	16
3313	Alumina and Aluminum Production and Processing	0.3	152	5
3219	Other Wood Product Manufacturing	0.3	595	54
3115	Dairy Product Manufacturing	0.2	358	13
3113	Sugar and Confectionery Product Manufacturing	0.2	175	12
3259	Other Chemical Product and Preparation Manufacturing	0.2	181	19
3369	Other Transportation Equipment Manufacturing	0.2	72	15
1151	Support Activities for Crop Production	0.2	724	71
3334	Ventilation, Heating, Air-Conditioning, and Commercial Refrigeration Equipr	0.2	247	18
4931	Warehousing and Storage	0.2	2,125	123
3322	Cutlery and Handtool Manufacturing	0.2	65	17
3133	Textile and Fabric Finishing and Fabric Coating Mills	0.2	51	6
3111	Animal Food Manufacturing	0.2	104	14
2211	Electric Power Generation, Transmission and Distribution	0.2	644	28
3241	Petroleum and Coal Products Manufacturing	0.2	178	12

3272	Glass and Glass Product Manufacturing	0.1	122	16
3363	Motor Vehicle Parts Manufacturing	0.1	846	55
3352	Household Appliance Manufacturing	0.1	86	9
1121	Cattle Ranching and Farming	0.1	195	13
3252	Resin, Synthetic Rubber, and Artificial and Synthetic Fibers and Filaments I	0.1	112	13
1125	Aquaculture	0.1	8	3
3315	Foundries	0.1	133	7
4245	Farm Product Raw Material Merchant Wholesalers	0.1	70	9
3253	Pesticide, Fertilizer, and Other Agricultural Chemical Manufacturing	0.1	34	5
3324	Boiler, Tank, and Shipping Container Manufacturing	0.1	78	6
3116	Animal Slaughtering and Processing	0.1	402	6
3262	Rubber Product Manufacturing	0.1	103	8
4831	Deep Sea, Coastal, and Great Lakes Water Transportation	0.1	19	6
2131	Support Activities for Mining	0.0	38	15
2111	Oil and Gas Extraction	0.0	13	5
6223	Specialty (except Psychiatric and Substance Abuse) Hospitals	0.0	0	28
6222	Psychiatric and Substance Abuse Hospitals	0.0	0	5
5251	Insurance and Employee Benefit Funds	0.0	0	5
5239	Other Financial Investment Activities	0.0	0	1,019
5232	Securities and Commodity Exchanges	0.0	0	1
5211	Monetary Authorities-Central Bank	0.0	0	4
4889	Other Support Activities for Transportation	0.0	0	22
4882	Support Activities for Rail Transportation	0.0	0	1
4879	Scenic and Sightseeing Transportation, Other	0.0	0	3
4871	Scenic and Sightseeing Transportation, Land	0.0	0	9
4869	Other Pipeline Transportation	0.0	0	3
4862	Pipeline Transportation of Natural Gas	0.0	0	1
4861	Pipeline Transportation of Crude Oil	0.0	0	1
4852	Interurban and Rural Bus Transportation	0.0	0	3
4851	Urban Transit Systems	0.0	0	9
4832	Inland Water Transportation	0.0	0	2
4821	Rail Transportation	0.0	0	2
3362	Motor Vehicle Body and Trailer Manufacturing	0.0	0	5
3361	Motor Vehicle Manufacturing	0.0	0	4
3336	Engine, Turbine, and Power Transmission Equipment Manufacturing	0.0	0	11
3331	Agriculture, Construction, and Mining Machinery Manufacturing	0.0	0	10
3326	Spring and Wire Product Manufacturing	0.0	0	3
3325	Hardware Manufacturing	0.0	0	4
3314	Nonferrous Metal (except Aluminum) Production and Processing	0.0	0	4
3311	Iron and Steel Mills and Ferroalloy Manufacturing	0.0	0	6
3274	Lime and Gypsum Product Manufacturing	0.0	0	1
3271	Clay Product and Refractory Manufacturing	0.0	0	15
3222	Converted Paper Product Manufacturing	0.0	0	24
3221	Pulp, Paper, and Paperboard Mills	0.0	0	3
3212	Veneer, Plywood, and Engineered Wood Product Manufacturing	0.0	0	7
3211	Sawmills and Wood Preservation	0.0	0	1
3162	Footwear Manufacturing	0.0	0	7

3161	Leather and Hide Tanning and Finishing	0.0	0	2
3159	Apparel Accessories and Other Apparel Manufacturing	0.0	0	13
3151	Apparel Knitting Mills	0.0	0	2
3132	Fabric Mills	0.0	0	4
3131	Fiber, Yarn, and Thread Mills	0.0	0	2
3122	Tobacco Manufacturing	0.0	0	1
3121	Beverage Manufacturing	0.0	0	168
3117	Seafood Product Preparation and Packaging	0.0	0	2
3112	Grain and Oilseed Milling	0.0	0	6
2213	Water, Sewage and Other Systems	0.0	0	27
2212	Natural Gas Distribution	0.0	0	39
1153	Support Activities for Forestry	0.0	0	2
1152	Support Activities for Animal Production	0.0	0	88
1133	Logging	0.0	0	1
1132	Forest Nurseries and Gathering of Forest Products	0.0	0	2
1124	Sheep and Goat Farming	0.0	0	2
1122	Hog and Pig Farming	0.0	0	1
Grand Total			1,203,116	109,261

Appendix C: Tijuana, 2018

NAICS	Sector	LQ	Workers	Firms	Value Added (Million USD)
3343	Audio and Video Equipment Manufacturing	18.7	22,836	18	225.7
3391	Medical Equipment and Supplies Manufacturing	15.1	53,941	115	591.6
7112	Spectator Sports	14.8	2,432	3	49.7
3328	Coating, Engraving, Heat Treating, and Allied Activities	9.1	6,198	22	77.5
3329	Other Fabricated Metal Product Manufacturing	6.5	9,045	31	146.5
3359	Other Electrical Equipment and Component Manufacturing	6.4	10,721	23	103.5
3399	Other Miscellaneous Manufacturing	6.1	15,293	122	257.3
3362	Motor Vehicle Body and Trailer Manufacturing	6.1	4,059	8	151.6
3344	Semiconductor and Other Electronic Component Manufac	5.7	23,237	64	241.9
3364	Aerospace Product and Parts Manufacturing	5.4	4,561	11	77.6
3345	Navigational, Measuring, Electromedical, and Control Inst	4.3	2,017	5	51.8
3372	Office Furniture (including Fixtures) Manufacturing	4.2	2,647	20	30.4
3371	Household and Institutional Furniture and Kitchen Cabinet	4.2	11,538	212	113.5
3321	Forging and Stamping	4.0	1,841	6	15.0
3122	Tobacco Manufacturing	3.9	250	3	2.3
3379	Other Furniture Related Product Manufacturing	3.8	1,832	14	16.7
3333	Commercial and Service Industry Machinery Manufacturin	3.7	644	5	8.7
3222	Converted Paper Product Manufacturing	3.2	7,798	86	324.3
3261	Plastics Product Manufacturing	3.1	20,094	128	268.3
3342	Communications Equipment Manufacturing	2.7	2,881	8	37.3
2379	Other Heavy and Civil Engineering Construction	2.7	638	3	11.1
3279	Other Nonmetallic Mineral Product Manufacturing	2.6	1,353	30	17.7
5621	Waste Collection	2.6	763	24	12.3
3339	Other General Purpose Machinery Manufacturing	2.5	2,780	17	44.4
3334	Ventilation, Heating, Air-Conditioning, and Commercial Re	2.5	2,876	13	41.5
6214	Outpatient Care Centers	2.4	577	42	6.5
6239	Other Residential Care Facilities	2.2	533	53	0.7
3351	Electric Lighting Equipment Manufacturing	2.1	865	10	13.1
5614	Business Support Services	1.9	8,578	491	131.1
4854	School and Employee Bus Transportation	1.8	1,160	12	5.3
5191	Other Information Services	1.8	147	11	1.4
4885	Freight Transportation Arrangement	1.8	5,120	276	57.4
4889	Other Support Activities for Transportation	1.7	305	5	1.8
3231	Printing and Related Support Activities	1.6	4,280	237	33.0
6231	Nursing Care Facilities (Skilled Nursing Facilities)	1.6	55	4	0.0
3159	Apparel Accessories and Other Apparel Manufacturing	1.6	237	9	1.8
3325	Hardware Manufacturing	1.5	580	4	13.2
6212	Offices of Dentists	1.5	3,508	1,317	21.6
4664	Retail trade of used goods	1.5	1,781	1,046	5.9
4641	Retail sale of health care items	1.5	10,103	1,059	77.7
3219	Other Wood Product Manufacturing	1.4	2,702	155	41.7
5619	Other Support Services	1.4	1,862	29	31.0
5418	Advertising, Public Relations, and Related Services	1.4	2,592	123	13.1
5321	Automotive Equipment Rental and Leasing	1.4	506	59	6.7

7224	Drinking Places (Alcoholic Beverages)	1.4	3,457	299	20.6
8112	Electronic and Precision Equipment Repair and Maintenance	1.3	1,866	307	16.6
6115	Technical and Trade Schools	1.3	360	77	1.8
4841	General Freight Trucking	1.3	4,671	130	43.5
4311	Wholesale of groceries and food	1.3	11,664	317	171.1
3353	Electrical Equipment Manufacturing	1.3	1,959	15	34.9
3315	Foundries	1.3	810	11	12.9
6244	Child Day Care Services	1.3	1,762	95	9.3
3133	Textile and Fabric Finishing and Fabric Coating Mills	1.3	537	6	16.1
5323	General Rental Centers	1.2	102	33	0.6
6232	Residential Intellectual and Developmental Disability, Mer	1.2	140	19	0.2
4651	Retail trade of perfumery and jewelry	1.2	2,282	415	15.0
4621	Retail trade in self-service stores	1.2	18,461	1,097	401.5
4343	Wholesale of waste materials	1.2	1,835	176	10.9
3141	Textile Furnishings Mills	1.2	583	10	10.5
5313	Activities Related to Real Estate	1.2	1,237	146	24.6
3262	Rubber Product Manufacturing	1.1	1,554	12	16.7
3273	Cement and Concrete Product Manufacturing	1.1	1,367	30	119.5
3121	Beverage Manufacturing	1.1	4,177	299	113.0
4331	Wholesale of pharmaceutical products	1.1	1,083	43	20.6
6211	Offices of Physicians	1.1	3,077	1,048	20.2
5312	Offices of Real Estate Agents and Brokers	1.1	1,572	210	40.5
4335	Wholesale of minor household appliances and appliances	1.1	253	17	2.5
8124	Parking and pensions for motor vehicles	1.1	913	259	6.9
2362	Nonresidential Building Construction	1.1	4,588	89	60.6
3169	Other Leather and Allied Product Manufacturing	1.1	316	17	1.8
4684	Retail sale of lubricating fuels, oils and greases	1.0	6,530	366	85.3
3323	Architectural and Structural Metals Manufacturing	1.0	3,705	398	44.0
6213	Offices of Other Health Practitioners	1.0	1,312	414	9.0
2382	Building Equipment Contractors	1.0	987	62	20.4
8121	Personal Care Services	1.0	7,035	3,262	26.3
3352	Household Appliance Manufacturing	1.0	1,379	5	31.8
7121	Museums, Historical Sites, and Similar Institutions	1.0	229	11	-1.5
5411	Legal Services	1.0	2,673	712	30.5
2372	Land Subdivision	1.0	882	15	13.4
7132	Gambling Industries	1.0	892	47	10.9
4332	Wholesale of perfumery, cosmetics and jewelry	1.0	506	25	12.4
5419	Other Professional, Scientific, and Technical Services	1.0	1,282	292	9.2
5617	Services to Buildings and Dwellings	0.9	1,808	51	9.6
6111	Elementary and Secondary Schools	0.9	8,651	422	62.3
6215	Medical and Diagnostic Laboratories	0.9	1,184	206	16.3
6113	Colleges, Universities, and Professional Schools	0.9	4,691	52	34.0
8111	Automotive Repair and Maintenance	0.9	10,042	3,158	58.8
5412	Accounting, Tax Preparation, Bookkeeping, and Payroll S	0.9	2,443	354	33.9
4931	Warehousing and Storage	0.9	596	19	10.1
5311	Lessors of Real Estate	0.9	1,712	382	17.4
3256	Soap, Cleaning Compound, and Toilet Preparation Manuf	0.9	982	11	20.2

4682	Retail trade of parts and spare parts for automobiles, vans	0.8	3,514	722	88.9
8129	Other Personal Services	0.8	266	103	1.6
7225	Restaurants and Other Eating Places	0.8	34,590	5,409	216.1
4354	Wholesale of office and computer furniture and equipmen	0.8	1,511	132	50.1
3322	Cutlery and Handtool Manufacturing	0.8	400	5	5.7
5414	Specialized Design Services	0.8	338	79	3.1
4342	Wholesale of raw materials for industry	0.8	6,384	530	182.7
7139	Other Amusement and Recreation Industries	0.8	2,155	374	17.2
4361	Wholesale of trucks and new parts and spare parts for cal	0.8	674	47	24.8
3152	Cut and Sew Apparel Manufacturing	0.8	4,732	220	54.5
8122	Death Care Services	0.8	1,262	378	9.2
5616	Investigation and Security Services	0.8	4,212	131	38.8
4353	Wholesale of machinery and equipment for services and c	0.7	1,473	200	35.3
8123	Drycleaning and Laundry Services	0.7	486	52	3.3
5179	Other Telecommunications	0.7	299	22	3.1
5612	Facilities Support Services	0.7	281	10	2.1
7223	Special Food Services	0.7	722	37	6.1
6241	Individual and Family Services	0.7	1,549	218	1.0
4662	Retail trade of furniture, computer equipment and accessc	0.7	1,521	509	11.7
6221	General Medical and Surgical Hospitals	0.7	1,627	52	17.7
3255	Paint, Coating, and Adhesive Manufacturing	0.7	350	7	6.9
6116	Other Schools and Instruction	0.7	1,148	324	3.9
2381	Foundation, Structure, and Building Exterior Contractors	0.7	282	27	2.2
4334	Wholesale of stationery, books, magazines and newspaper	0.7	341	32	3.9
3119	Other Food Manufacturing	0.7	1,232	28	19.7
7113	Promoters of Performing Arts, Sports, and Similar Events	0.6	166	22	-0.2
5413	Architectural, Engineering, and Related Services	0.6	1,370	158	17.4
2383	Building Finishing Contractors	0.6	120	19	1.0
5613	Employment Services	0.6	17,408	96	139.7
4333	Wholesale of records, toys and sporting goods	0.6	107	13	1.0
8132	Grantmaking and Giving Services	0.6	1,289	168	3.4
4884	Support Activities for Road Transportation	0.6	265	29	2.6
3149	Other Textile Product Mills	0.6	924	33	6.8
5415	Computer Systems Design and Related Services	0.6	1,251	63	16.1
3259	Other Chemical Product and Preparation Manufacturing	0.6	342	15	18.7
4681	Retail of cars and trucks	0.6	1,750	106	46.4
2361	Residential Building Construction	0.5	1,931	54	18.1
4851	Urban Transit Systems	0.5	1,739	10	8.6
5324	Commercial and Industrial Machinery and Equipment Ren	0.5	516	40	19.4
5416	Management, Scientific, and Technical Consulting Service	0.5	2,031	164	26.0
7211	Traveler Accommodation	0.5	5,237	256	73.3
5242	Agencies, Brokerages, and Other Insurance Related Activ	0.5	727	127	4.9
4622	Retail trade in department stores	0.5	2,356	36	56.2
6233	Continuing Care Retirement Communities and Assisted Li	0.5	127	13	0.1
8114	Personal and Household Goods Repair and Maintenance	0.5	1,619	809	7.4
4632	Retail trade of clothing, costume jewelery and clothing acc	0.5	4,297	2,029	24.3
6112	Junior Colleges	0.5	49	5	0.4

4663	Retail trade of articles for interior decoration	0.5	1,000	357	5.2
4661	Retail trade of home furnishings and other household goo	0.5	1,495	356	44.1
4653	Retail sale of stationery, books, magazines and newspaper	0.5	2,440	1,039	10.0
3118	Bakeries and Tortilla Manufacturing	0.5	5,093	772	81.7
4652	Retail trade of entertainment articles	0.5	898	337	15.5
4611	Grocery and food retail	0.5	17,166	7,342	136.0
3327	Machine Shops; Turned Product; and Screw, Nut, and Bol	0.5	677	60	6.0
5224	Other non-stock exchange financial and credit intermediat	0.5	1,278	199	38.8
4612	Retail trade of beverages, ice and tobacco	0.5	1,282	668	15.4
3363	Motor Vehicle Parts Manufacturing	0.4	9,888	20	140.0
5322	Consumer Goods Rental	0.4	358	129	2.0
4631	Retail trade of textile products, except clothing	0.4	642	99	5.9
5151	Radio and Television Broadcasting	0.4	366	22	5.8
3115	Dairy Product Manufacturing	0.4	899	132	16.7
4633	Retail trade of footwear	0.4	1,064	316	8.3
2373	Highway, Street, and Bridge Construction	0.4	614	14	10.5
5615	Travel Arrangement and Reservation Services	0.4	488	166	5.1
4659	Retail trade of pets, gifts, religious items, disposables, cra	0.4	1,447	710	5.3
8131	Religious Organizations	0.4	784	110	2.7
2389	Other Specialty Trade Contractors	0.4	173	7	4.9
4321	Wholesale of textiles and footwear	0.3	311	37	9.8
3272	Glass and Glass Product Manufacturing	0.3	390	18	4.6
8113	Commercial and Industrial Machinery and Equipment (exc	0.3	742	127	7.8
3271	Clay Product and Refractory Manufacturing	0.3	692	36	8.1
5417	Scientific Research and Development Services	0.3	69	6	0.5
5223	Activities Related to Credit Intermediation	0.3	299	47	4.2
4855	Charter Bus Industry	0.3	55	6	0.3
3116	Animal Slaughtering and Processing	0.3	686	11	31.0
4842	Specialized Freight Trucking	0.3	693	50	5.8
3324	Boiler, Tank, and Shipping Container Manufacturing	0.3	145	4	2.9
3113	Sugar and Confectionery Product Manufacturing	0.3	509	12	4.0
3335	Metalworking Machinery Manufacturing	0.3	44	4	0.2
6114	Business Schools and Computer and Management Trainin	0.3	45	5	0.1
5182	Data Processing, Hosting, and Related Services	0.2	109	7	0.2
7131	Amusement Parks and Arcades	0.2	185	52	2.7
2371	Utility System Construction	0.2	298	12	3.8
3274	Lime and Gypsum Product Manufacturing	0.2	52	17	0.2
3221	Pulp, Paper, and Paperboard Mills	0.2	117	4	1.3
4312	Wholesale of beverages, ice and tobacco	0.2	611	14	17.3
7213	Rooming and Boarding Houses, Dormitories, and Worker:	0.2	49	15	0.3
6117	Educational Support Services	0.2	7	3	0.2
3254	Pharmaceutical and Medicine Manufacturing	0.2	312	9	8.3
3162	Footwear Manufacturing	0.1	369	4	3.6
5611	Office Administrative Services	0.1	790	33	9.9
3326	Spring and Wire Product Manufacturing	0.1	52	4	3.3
4852	Interurban and Rural Bus Transportation	0.1	240	8	7.2
3151	Apparel Knitting Mills	0.1	78	6	0.5

4341	Wholesale of agricultural and forestry raw materials	0.1	154	38	-2.7
7111	Performing Arts Companies	0.1	37	8	0.1
4683	Retail trade of motorcycles and other motor vehicles	0.1	30	9	0.1
7115	Independent Artists, Writers, and Performers	0.1	3	3	0.0
3114	Fruit and Vegetable Preserving and Specialty Food Manuf	0.0	52	8	0.7
Grand Total			561,160	48,759	7,125

Appendix D: Mexicali, 2018

NAICS	Sector	LQ	Workers	Firms	Value Added (Million USD)
3364	Aerospace Product and Parts Manufacturing	19.4	6,953	17	144.3
3259	Other Chemical Product and Preparation Manufacturing	11.4	2,877	6	26.0
3344	Semiconductor and Other Electronic Component Manufacturing	8.7	14,907	28	256.4
3325	Hardware Manufacturing	7.8	1,258	3	11.7
8112	Electronic and Precision Equipment Repair and Maintenance	7.2	4,276	191	35.1
3391	Medical Equipment and Supplies Manufacturing	6.6	9,906	53	93.1
3329	Other Fabricated Metal Product Manufacturing	5.4	3,169	20	39.4
4842	Specialized Freight Trucking	4.9	5,172	30	39.1
3326	Spring and Wire Product Manufacturing	4.3	705	8	10.3
7132	Gambling Industries	3.9	1,491	46	26.6
3339	Other General Purpose Machinery Manufacturing	3.5	1,608	12	60.1
3312	Steel Product Manufacturing from Purchased Steel	2.9	1,157	7	41.5
5231	Securities and Commodity Contracts Intermediation and Broker	2.8	314	116	2.9
3343	Audio and Video Equipment Manufacturing	2.8	1,451	3	17.5
6212	Offices of Dentists	2.6	2,478	827	12.9
6244	Child Day Care Services	2.5	1,469	103	7.3
7212	RV (Recreational Vehicle) Parks and Recreational Camps	2.4	40	11	0.2
3399	Other Miscellaneous Manufacturing	2.4	2,541	50	20.3
3328	Coating, Engraving, Heat Treating, and Allied Activities	2.4	687	20	10.5
5323	General Rental Centers	2.2	76	37	0.2
5621	Waste Collection	2.2	271	18	8.4
3372	Office Furniture (including Fixtures) Manufacturing	2.1	565	9	11.6
4881	Support Activities for Air Transportation	2.1	688	5	8.2
3121	Beverage Manufacturing	2.0	3,207	238	127.4
4664	Retail trade of used goods	1.9	934	528	2.5
4841	General Freight Trucking	1.8	2,721	67	44.4
4684	Retail sale of lubricating fuels, oils and greases	1.8	4,759	369	73.2
4361	Wholesale of trucks and new parts and spare parts for cars, va	1.8	637	35	9.2
3231	Printing and Related Support Activities	1.8	1,969	172	15.2
5321	Automotive Equipment Rental and Leasing	1.7	264	27	14.1
2382	Building Equipment Contractors	1.7	688	39	9.7
2362	Nonresidential Building Construction	1.7	3,070	53	20.8
4885	Freight Transportation Arrangement	1.6	2,030	74	19.0
4621	Retail trade in self-service stores	1.6	10,541	758	168.5
8123	Drycleaning and Laundry Services	1.6	452	38	2.4
2371	Utility System Construction	1.6	930	20	12.3
6239	Other Residential Care Facilities	1.6	162	17	0.3
3116	Animal Slaughtering and Processing	1.6	1,613	7	58.9
5616	Investigation and Security Services	1.6	3,656	70	28.6
8113	Commercial and Industrial Machinery and Equipment (except A	1.6	1,456	192	18.3
4343	Wholesale of waste materials	1.5	1,000	129	27.8
5312	Offices of Real Estate Agents and Brokers	1.5	949	85	35.5
3362	Motor Vehicle Body and Trailer Manufacturing	1.5	427	9	7.4
7224	Drinking Places (Alcoholic Beverages)	1.5	1,587	177	8.1

6211	Offices of Physicians	1.5	1,783	621	11.4
5413	Architectural, Engineering, and Related Services	1.5	1,365	69	15.6
6232	Residential Intellectual and Developmental Disability, Mental Hk	1.4	68	11	0.0
3327	Machine Shops; Turned Product; and Screw, Nut, and Bolt Mar	1.4	895	67	17.3
8111	Automotive Repair and Maintenance	1.4	6,583	2,703	32.0
4682	Retail trade of parts and spare parts for automobiles, vans and	1.4	2,415	542	55.0
6113	Colleges, Universities, and Professional Schools	1.4	3,021	28	29.3
4651	Retail trade of perfumery and jewelry	1.4	1,090	210	8.2
4612	Retail trade of beverages, ice and tobacco	1.3	1,596	797	12.1
4311	Wholesale of groceries and food	1.3	5,017	152	82.6
5611	Office Administrative Services	1.3	3,235	16	70.2
4342	Wholesale of raw materials for industry	1.3	4,306	386	257.5
5412	Accounting, Tax Preparation, Bookkeeping, and Payroll Service	1.3	1,531	186	12.4
4641	Retail sale of health care items	1.3	3,797	636	46.4
5411	Legal Services	1.3	1,463	302	14.1
3119	Other Food Manufacturing	1.3	1,007	22	13.6
2383	Building Finishing Contractors	1.3	105	19	0.7
3273	Cement and Concrete Product Manufacturing	1.3	676	24	12.0
4922	Local Messengers and Local Delivery	1.3	14	3	0.1
8121	Personal Care Services	1.2	3,624	1,836	11.0
4335	Wholesale of minor household appliances and appliances	1.2	122	14	4.9
4341	Wholesale of agricultural and forestry raw materials	1.2	843	67	24.1
6233	Continuing Care Retirement Communities and Assisted Living F	1.2	126	8	0.5
5322	Consumer Goods Rental	1.2	402	159	2.3
4334	Wholesale of stationery, books, magazines and newspapers	1.2	249	28	8.3
5311	Lessors of Real Estate	1.2	973	325	21.9
3114	Fruit and Vegetable Preserving and Specialty Food Manufactur	1.2	805	7	9.5
4681	Retail of cars and trucks	1.1	1,504	142	26.3
6213	Offices of Other Health Practitioners	1.1	612	207	2.7
5419	Other Professional, Scientific, and Technical Services	1.1	638	156	6.2
8132	Grantmaking and Giving Services	1.1	1,013	125	2.0
3256	Soap, Cleaning Compound, and Toilet Preparation Manufacturi	1.1	537	12	132.1
6215	Medical and Diagnostic Laboratories	1.1	593	123	6.9
4661	Retail trade of home furnishings and other household goods	1.1	1,353	279	30.2
5223	Activities Related to Credit Intermediation	1.0	416	33	4.3
5121	Motion Picture and Video Industries	1.0	433	12	13.7
2361	Residential Building Construction	1.0	1,548	32	27.1
5617	Services to Buildings and Dwellings	1.0	846	40	5.4
2381	Foundation, Structure, and Building Exterior Contractors	1.0	175	22	3.4
3331	Agriculture, Construction, and Mining Machinery Manufacturing	1.0	250	3	9.5
6116	Other Schools and Instruction	1.0	685	176	2.3
7225	Restaurants and Other Eating Places	1.0	16,888	3,387	106.8
3219	Other Wood Product Manufacturing	0.9	738	104	20.7
5324	Commercial and Industrial Machinery and Equipment Rental an	0.9	374	56	6.3
6115	Technical and Trade Schools	0.9	104	20	0.4
6231	Nursing Care Facilities (Skilled Nursing Facilities)	0.9	13	3	0.0
5414	Specialized Design Services	0.9	152	49	1.4

6111	Elementary and Secondary Schools	0.9	3,473	162	27.0
8129	Other Personal Services	0.9	115	48	0.7
4662	Retail trade of furniture, computer equipment and accessories,	0.9	794	210	7.0
4622	Retail trade in department stores	0.8	1,604	20	20.7
7139	Other Amusement and Recreation Industries	0.8	923	185	5.1
8114	Personal and Household Goods Repair and Maintenance	0.8	1,048	588	4.2
6241	Individual and Family Services	0.8	725	100	0.7
1141	Fishing	0.8	1,204	33	3.9
4353	Wholesale of machinery and equipment for services and comm	0.8	643	96	11.2
3323	Architectural and Structural Metals Manufacturing	0.8	1,141	227	14.0
3118	Bakeries and Tortilla Manufacturing	0.8	3,350	592	72.5
3274	Lime and Gypsum Product Manufacturing	0.7	78	14	-1.0
4312	Wholesale of beverages, ice and tobacco	0.7	1,019	18	26.5
4663	Retail trade of articles for interior decoration	0.7	624	234	3.4
7131	Amusement Parks and Arcades	0.7	251	29	1.2
5224	Other non-stock exchange financial and credit intermediation in	0.7	844	132	12.8
5313	Activities Related to Real Estate	0.7	321	57	2.9
8122	Death Care Services	0.7	490	164	2.4
4611	Grocery and food retail	0.7	10,548	3,171	101.3
3363	Motor Vehicle Parts Manufacturing	0.7	6,210	15	105.4
8131	Religious Organizations	0.7	567	70	2.6
4632	Retail trade of clothing, costume jewelry and clothing accesso	0.6	2,314	797	11.5
5151	Radio and Television Broadcasting	0.6	243	21	1.9
4884	Support Activities for Road Transportation	0.6	122	11	1.0
4921	Couriers and Express Delivery Services	0.6	237	6	0.8
2373	Highway, Street, and Bridge Construction	0.6	406	10	3.9
1151	Support Activities for Crop Production	0.6	106	6	1.3
5111	Newspaper, Periodical, Book, and Directory Publishers	0.6	210	7	2.4
5614	Business Support Services	0.6	1,133	169	17.9
5415	Computer Systems Design and Related Services	0.6	549	25	6.9
6214	Outpatient Care Centers	0.6	60	10	0.8
5418	Advertising, Public Relations, and Related Services	0.6	449	56	6.0
4931	Warehousing and Storage	0.6	168	10	3.7
4351	Wholesale of agricultural, forestry and fishing machinery and ec	0.6	109	14	8.8
8124	Parking and pensions for motor vehicles	0.6	206	92	1.3
4631	Retail trade of textile products, except clothing	0.6	348	74	2.6
4653	Retail sale of stationery, books, magazines and newspapers	0.5	1,119	451	3.4
4633	Retail trade of footwear	0.5	550	142	3.9
4659	Retail trade of pets, gifts, religious items, disposables, crafts, ar	0.5	722	320	3.9
7211	Traveler Accommodation	0.5	1,907	121	25.5
4851	Urban Transit Systems	0.5	619	11	6.7
7223	Special Food Services	0.4	186	16	0.6
1125	Aquaculture	0.4	120	12	0.4
3279	Other Nonmetallic Mineral Product Manufacturing	0.4	86	18	0.8
3371	Household and Institutional Furniture and Kitchen Cabinet Man	0.4	457	151	3.4
7111	Performing Arts Companies	0.4	68	7	0.2
3152	Cut and Sew Apparel Manufacturing	0.4	934	139	5.7

4652	Retail trade of entertainment articles	0.3	272	117	6.8
5416	Management, Scientific, and Technical Consulting Services	0.3	516	51	3.0
3255	Paint, Coating, and Adhesive Manufacturing	0.3	66	4	2.6
4331	Wholesale of pharmaceutical products	0.3	119	16	3.7
7213	Rooming and Boarding Houses, Dormitories, and Workers' Car	0.3	30	7	0.1
4683	Retail trade of motorcycles and other motor vehicles	0.3	42	8	0.1
5615	Travel Arrangement and Reservation Services	0.3	128	36	1.2
3333	Commercial and Service Industry Machinery Manufacturing	0.2	18	4	0.1
3115	Dairy Product Manufacturing	0.2	223	57	0.8
5613	Employment Services	0.2	2,722	39	41.0
3111	Animal Food Manufacturing	0.2	62	3	2.9
2389	Other Specialty Trade Contractors	0.1	14	3	0.1
3379	Other Furniture Related Product Manufacturing	0.0	5	3	-0.0
Grand Total			236,711	28,152	3,380

Appendix E: Imperial, 2018

NAICS	Sector	LQ	Workers	Firms
1112	Vegetable and Melon Farming	90.4	2,988	37
1151	Support Activities for Crop Production	54.2	6,558	116
1119	Other Crop Farming	47.0	1,060	83
1129	Other Animal Production	12.6	90	9
1121	Cattle Ranching and Farming	7.8	440	18
3111	Animal Food Manufacturing	5.5	124	5
4249	Miscellaneous Nondurable Goods Merchant Wholesalers	5.5	640	43
1111	Oilseed and Grain Farming	5.0	99	7
7212	RV (Recreational Vehicle) Parks and Recreational Camps	3.6	87	11
4481	Clothing Stores	3.3	1,211	65
5612	Facilities Support Services	2.7	146	6
4523	General Merchandise Stores, including Warehouse Clubs and Supercenter	2.6	1,834	26
4884	Support Activities for Road Transportation	2.5	94	15
5621	Waste Collection	2.5	164	8
4482	Shoe Stores	2.4	175	20
4247	Petroleum and Petroleum Products Merchant Wholesalers	2.4	88	9
1113	Fruit and Tree Nut Farming	2.4	157	9
4841	General Freight Trucking	2.4	871	71
4885	Freight Transportation Arrangement	2.1	169	18
8113	Commercial and Industrial Machinery and Equipment (except Automotive a	2.0	152	11
4413	Automotive Parts, Accessories, and Tire Stores	2.0	403	42
4842	Specialized Freight Trucking	2.0	332	31
4244	Grocery and Related Product Merchant Wholesalers	1.9	537	27
6219	Other Ambulatory Health Care Services	1.9	206	5
5324	Commercial and Industrial Machinery and Equipment Rental and Leasing	1.9	108	9
4483	Jewelry, Luggage, and Leather Goods Stores	1.8	87	12
2123	Nonmetallic Mineral Mining and Quarrying	1.6	55	3
5616	Investigation and Security Services	1.4	484	14
4471	Gasoline Stations	1.4	472	51
8131	Religious Organizations	1.4	96	14
4453	Beer, Wine, and Liquor Stores	1.4	78	9
2373	Highway, Street, and Bridge Construction	1.4	160	4
4532	Office Supplies, Stationery, and Gift Stores	1.2	111	11
4522	Department Stores	1.2	502	9
4238	Machinery, Equipment, and Supplies Merchant Wholesalers	1.2	307	34
4411	Automobile Dealers	1.2	558	15
2213	Water, Sewage and Other Systems	1.1	21	4
4451	Grocery Stores	1.1	1,068	48
4441	Building Material and Supplies Dealers	1.0	413	20
4412	Other Motor Vehicle Dealers	1.0	57	4
4461	Health and Personal Care Stores	1.0	376	37
2389	Other Specialty Trade Contractors	1.0	238	30
6211	Offices of Physicians	1.0	900	88
7225	Restaurants and Other Eating Places	1.0	3,661	222
4422	Home Furnishings Stores	0.9	82	6

5223	Activities Related to Credit Intermediation	0.9	99	15
4452	Specialty Food Stores	0.9	70	9
6214	Outpatient Care Centers	0.9	285	14
4431	Electronics and Appliance Stores	0.8	142	13
5414	Specialized Design Services	0.8	41	5
5322	Consumer Goods Rental	0.8	40	9
5311	Lessors of Real Estate	0.7	161	42
4931	Warehousing and Storage	0.7	289	26
4442	Lawn and Garden Equipment and Supplies Stores	0.7	39	6
8111	Automotive Repair and Maintenance	0.7	231	52
4241	Paper and Paper Product Merchant Wholesalers	0.7	32	8
6212	Offices of Dentists	0.7	235	25
6244	Child Day Care Services	0.7	220	26
6239	Other Residential Care Facilities	0.6	38	4
5173	Wired and Wireless Telecommunications Carriers	0.6	148	14
6213	Offices of Other Health Practitioners	0.6	206	29
5151	Radio and Television Broadcasting	0.6	48	6
2361	Residential Building Construction	0.6	171	31
3118	Bakeries and Tortilla Manufacturing	0.6	67	4
5221	Depository Credit Intermediation	0.6	367	27
2382	Building Equipment Contractors	0.6	453	60
5412	Accounting, Tax Preparation, Bookkeeping, and Payroll Services	0.6	201	43
4243	Apparel, Piece Goods, and Notions Merchant Wholesalers	0.5	30	8
8122	Death Care Services	0.5	24	3
5416	Management, Scientific, and Technical Consulting Services	0.5	257	50
8129	Other Personal Services	0.5	59	17
6231	Nursing Care Facilities (Skilled Nursing Facilities)	0.5	268	3
8132	Grantmaking and Giving Services	0.5	24	6
6216	Home Health Care Services	0.4	233	9
2362	Nonresidential Building Construction	0.4	129	11
5222	Nondepository Credit Intermediation	0.4	94	15
5121	Motion Picture and Video Industries	0.4	61	3
8141	Private Households	0.4	44	32
8123	Drycleaning and Laundry Services	0.4	44	7
5313	Activities Related to Real Estate	0.4	104	48
4539	Other Miscellaneous Store Retailers	0.4	50	12
7211	Traveler Accommodation	0.4	263	25
6111	Elementary and Secondary Schools	0.4	110	5
5617	Services to Buildings and Dwellings	0.4	279	35
4231	Motor Vehicle and Motor Vehicle Parts and Supplies Merchant Wholesalers	0.4	46	10
4236	Household Appliances and Electrical and Electronic Goods Merchant Whol	0.4	46	9
8121	Personal Care Services	0.4	93	22
5411	Legal Services	0.4	144	38
4235	Metal and Mineral (except Petroleum) Merchant Wholesalers	0.4	17	6
4246	Chemical and Allied Products Merchant Wholesalers	0.3	18	7
8134	Civic and Social Organizations	0.3	45	9
2381	Foundation, Structure, and Building Exterior Contractors	0.3	105	15

4233	Lumber and Other Construction Materials Merchant Wholesalers	0.3	27	8
4251	Wholesale Electronic Markets and Agents and Brokers	0.3	60	9
7224	Drinking Places (Alcoholic Beverages)	0.3	43	10
5111	Newspaper, Periodical, Book, and Directory Publishers	0.3	33	4
4421	Furniture Stores	0.3	23	6
4237	Hardware, and Plumbing and Heating Equipment and Supplies Merchant W	0.3	28	8
2371	Utility System Construction	0.3	55	4
5619	Other Support Services	0.3	31	4
5312	Offices of Real Estate Agents and Brokers	0.3	31	19
2383	Building Finishing Contractors	0.3	77	12
6233	Continuing Care Retirement Communities and Assisted Living Facilities for	0.3	87	4
6242	Community Food and Housing, and Emergency and Other Relief Services	0.3	16	3
8133	Social Advocacy Organizations	0.3	20	6
5511	Management of Companies and Enterprises	0.2	209	8
3329	Other Fabricated Metal Product Manufacturing	0.2	22	7
5413	Architectural, Engineering, and Related Services	0.2	108	21
8139	Business, Professional, Labor, Political, and Similar Organizations	0.2	32	13
6215	Medical and Diagnostic Laboratories	0.2	20	6
5419	Other Professional, Scientific, and Technical Services	0.2	49	8
6116	Other Schools and Instruction	0.1	23	6
5613	Employment Services	0.1	187	34
1114	Greenhouse, Nursery, and Floriculture Production	0.1	6	3
5415	Computer Systems Design and Related Services	0.1	73	10
5614	Business Support Services	0.1	30	8
4234	Professional and Commercial Equipment and Supplies Merchant Wholesal	0.1	19	5
7223	Special Food Services	0.1	18	6
8114	Personal and Household Goods Repair and Maintenance	0.0	0	5
8112	Electronic and Precision Equipment Repair and Maintenance	0.0	0	2
7139	Other Amusement and Recreation Industries	0.0	0	14
7131	Amusement Parks and Arcades	0.0	0	2
7121	Museums, Historical Sites, and Similar Institutions	0.0	0	2
7115	Independent Artists, Writers, and Performers	0.0	0	1
6243	Vocational Rehabilitation Services	0.0	0	4
6241	Individual and Family Services	0.0	0	4,588
6232	Residential Intellectual and Developmental Disability, Mental Health, and S	0.0	0	4
6221	General Medical and Surgical Hospitals	0.0	0	2
6117	Educational Support Services	0.0	0	1
6115	Technical and Trade Schools	0.0	0	2
6113	Colleges, Universities, and Professional Schools	0.0	0	1
5629	Remediation and Other Waste Management Services	0.0	0	9
5622	Waste Treatment and Disposal	0.0	0	1
5615	Travel Arrangement and Reservation Services	0.0	0	3
5611	Office Administrative Services	0.0	0	7
5418	Advertising, Public Relations, and Related Services	0.0	0	2
5417	Scientific Research and Development Services	0.0	0	3
5323	General Rental Centers	0.0	0	1
5321	Automotive Equipment Rental and Leasing	0.0	0	7

5242	Agencies, Brokerages, and Other Insurance Related Activities	0.0	0	51
5241	Insurance Carriers	0.0	0	4
5239	Other Financial Investment Activities	0.0	0	2
5231	Securities and Commodity Contracts Intermediation and Brokerage	0.0	0	1
4922	Local Messengers and Local Delivery	0.0	0	2
4921	Couriers and Express Delivery Services	0.0	0	2
4889	Other Support Activities for Transportation	0.0	0	2
4883	Support Activities for Water Transportation	0.0	0	1
4882	Support Activities for Rail Transportation	0.0	0	1
4881	Support Activities for Air Transportation	0.0	0	2
4869	Other Pipeline Transportation	0.0	0	1
4859	Other Transit and Ground Passenger Transportation	0.0	0	2
4853	Taxi and Limousine Service	0.0	0	1
4852	Interurban and Rural Bus Transportation	0.0	0	2
4851	Urban Transit Systems	0.0	0	3
4811	Scheduled Air Transportation	0.0	0	1
4543	Direct Selling Establishments	0.0	0	4
4542	Vending Machine Operators	0.0	0	2
4533	Used Merchandise Stores	0.0	0	1
4531	Florists	0.0	0	4
4512	Book Stores and News Dealers	0.0	0	2
4511	Sporting Goods, Hobby, and Musical Instrument Stores	0.0	0	13
4248	Beer, Wine, and Distilled Alcoholic Beverage Merchant Wholesalers	0.0	0	2
4242	Drugs and Druggists' Sundries Merchant Wholesalers	0.0	0	3
4239	Miscellaneous Durable Goods Merchant Wholesalers	0.0	0	4
4232	Furniture and Home Furnishing Merchant Wholesalers	0.0	0	3
3399	Other Miscellaneous Manufacturing	0.0	0	2
3391	Medical Equipment and Supplies Manufacturing	0.0	0	2
3372	Office Furniture (including Fixtures) Manufacturing	0.0	0	1
3364	Aerospace Product and Parts Manufacturing	0.0	0	1
3346	Manufacturing and Reproducing Magnetic and Optical Media	0.0	0	1
3345	Navigational, Measuring, Electromedical, and Control Instruments Manufac	0.0	0	1
3344	Semiconductor and Other Electronic Component Manufacturing	0.0	0	1
3341	Computer and Peripheral Equipment Manufacturing	0.0	0	1
3339	Other General Purpose Machinery Manufacturing	0.0	0	1
3335	Metalworking Machinery Manufacturing	0.0	0	2
3334	Ventilation, Heating, Air-Conditioning, and Commercial Refrigeration Equip	0.0	0	1
3332	Industrial Machinery Manufacturing	0.0	0	1
3331	Agriculture, Construction, and Mining Machinery Manufacturing	0.0	0	1
3327	Machine Shops; Turned Product; and Screw, Nut, and Bolt Manufacturing	0.0	0	3
3323	Architectural and Structural Metals Manufacturing	0.0	0	1
3274	Lime and Gypsum Product Manufacturing	0.0	0	1
3273	Cement and Concrete Product Manufacturing	0.0	0	2
3271	Clay Product and Refractory Manufacturing	0.0	0	1
3256	Soap, Cleaning Compound, and Toilet Preparation Manufacturing	0.0	0	1
3255	Paint, Coating, and Adhesive Manufacturing	0.0	0	1
3254	Pharmaceutical and Medicine Manufacturing	0.0	0	1

3252	Resin, Synthetic Rubber, and Artificial and Synthetic Fibers and Filaments	0.0	0	1
3251	Basic Chemical Manufacturing	0.0	0	1
3231	Printing and Related Support Activities	0.0	0	1
3219	Other Wood Product Manufacturing	0.0	0	3
3212	Veneer, Plywood, and Engineered Wood Product Manufacturing	0.0	0	1
3211	Sawmills and Wood Preservation	0.0	0	1
3152	Cut and Sew Apparel Manufacturing	0.0	0	2
3149	Other Textile Product Mills	0.0	0	1
3121	Beverage Manufacturing	0.0	0	4
3116	Animal Slaughtering and Processing	0.0	0	1
3113	Sugar and Confectionery Product Manufacturing	0.0	0	1
2379	Other Heavy and Civil Engineering Construction	0.0	0	2
2372	Land Subdivision	0.0	0	1
2212	Natural Gas Distribution	0.0	0	3
2211	Electric Power Generation, Transmission and Distribution	0.0	0	3
2131	Support Activities for Mining	0.0	0	1
2122	Metal Ore Mining	0.0	0	1
1125	Aquaculture	0.0	0	2
1124	Sheep and Goat Farming	0.0	0	3
Grand Total			35,956	7,278

Appendix F: Baja California, 2018

NAICS	Sector	LQ	Workers	Firms	Value Added (Million USD)
3343	Audio and Video Equipment Manufacturing	12.5	27,499	25	260.8
3391	Medical Equipment and Supplies Manufacturing	10.5	67,566	188	734.6
7212	RV (Recreational Vehicle) Parks and Recreational Camps	10.4	738	32	2.6
7112	Spectator Sports	8.6	2,522	6	52.9
3364	Aerospace Product and Parts Manufacturing	8.2	12,572	33	233.7
3379	Other Furniture Related Product Manufacturing	6.2	5,318	35	49.1
3362	Motor Vehicle Body and Trailer Manufacturing	6.1	7,382	23	185.4
3325	Hardware Manufacturing	5.9	4,041	10	57.4
3328	Coating, Engraving, Heat Treating, and Allied Activities	5.9	7,156	48	91.3
3344	Semiconductor and Other Electronic Component Manufacturing	5.8	42,241	113	541.5
3351	Electric Lighting Equipment Manufacturing	5.3	3,919	19	44.9
3329	Other Fabricated Metal Product Manufacturing	4.9	12,351	61	186.9
3399	Other Miscellaneous Manufacturing	4.5	20,179	225	290.8
3345	Navigational, Measuring, Electromedical, and Control Instruments M	3.9	3,319	11	65.6
3359	Other Electrical Equipment and Component Manufacturing	3.6	10,967	29	105.6
3259	Other Chemical Product and Preparation Manufacturing	3.3	3,543	25	47.3
3372	Office Furniture (including Fixtures) Manufacturing	2.9	3,224	32	42.1
3371	Household and Institutional Furniture and Kitchen Cabinet Manufact	2.8	14,074	494	135.4
4871	Scenic and Sightseeing Transportation, Land	2.6	834	13	2.2
8112	Electronic and Precision Equipment Repair and Maintenance	2.5	6,378	633	52.4
3321	Forging and Stamping	2.5	2,076	10	17.4
6239	Other Residential Care Facilities	2.5	1,081	93	0.6
5621	Waste Collection	2.5	1,303	50	24.9
3333	Commercial and Service Industry Machinery Manufacturing	2.4	749	14	9.6
3339	Other General Purpose Machinery Manufacturing	2.4	4,640	35	109.3
3222	Converted Paper Product Manufacturing	2.2	9,722	172	365.0
3122	Tobacco Manufacturing	2.2	250	3	2.3
4664	Retail trade of used goods	2.2	4,565	2,582	13.7
3261	Plastics Product Manufacturing	2.1	24,981	189	362.7
3231	Printing and Related Support Activities	2.1	10,068	518	81.6
4883	Support Activities for Water Transportation	1.9	1,335	19	16.6
3353	Electrical Equipment Manufacturing	1.9	5,283	26	91.3
6214	Outpatient Care Centers	1.8	794	72	7.4
5629	Remediation and Other Waste Management Services	1.8	609	15	5.5
3169	Other Leather and Allied Product Manufacturing	1.8	972	26	7.4
6232	Residential Intellectual and Developmental Disability, Mental Health,	1.8	362	48	0.4
7132	Gambling Industries	1.8	2,928	112	49.7
3334	Ventilation, Heating, Air-Conditioning, and Commercial Refrigeration	1.7	3,637	23	52.1
3342	Communications Equipment Manufacturing	1.7	3,396	10	40.9
5619	Other Support Services	1.7	4,003	58	47.3
6212	Offices of Dentists	1.6	6,801	2,525	39.1
3279	Other Nonmetallic Mineral Product Manufacturing	1.6	1,527	72	19.2
7224	Drinking Places (Alcoholic Beverages)	1.6	7,129	617	36.8
6244	Child Day Care Services	1.5	3,863	270	19.1

3272	Glass and Glass Product Manufacturing	1.5	3,159	37	60.6
2379	Other Heavy and Civil Engineering Construction	1.5	663	6	11.7
3117	Seafood Product Preparation and Packaging	1.5	909	31	10.6
4333	Wholesale of records, toys and sporting goods	1.5	483	18	7.9
5323	General Rental Centers	1.5	219	91	1.0
4885	Freight Transportation Arrangement	1.5	7,697	423	89.6
4842	Specialized Freight Trucking	1.4	6,346	113	50.0
4621	Retail trade in self-service stores	1.4	37,752	2,393	749.9
3312	Steel Product Manufacturing from Purchased Steel	1.4	2,352	15	70.2
4854	School and Employee Bus Transportation	1.4	1,572	21	8.8
5312	Offices of Real Estate Agents and Brokers	1.3	3,557	422	102.5
4684	Retail sale of lubricating fuels, oils and greases	1.3	14,845	972	274.6
5321	Automotive Equipment Rental and Leasing	1.3	851	97	21.6
4641	Retail sale of health care items	1.3	16,371	2,154	148.1
4841	General Freight Trucking	1.3	8,296	234	103.8
5614	Business Support Services	1.3	10,346	855	151.9
3121	Beverage Manufacturing	1.3	8,805	725	394.8
3273	Cement and Concrete Product Manufacturing	1.3	2,854	114	192.6
4311	Wholesale of groceries and food	1.2	19,983	597	304.1
3133	Textile and Fabric Finishing and Fabric Coating Mills	1.2	944	11	22.1
3326	Spring and Wire Product Manufacturing	1.2	836	17	14.2
4651	Retail trade of perfumery and jewelry	1.2	4,044	775	27.0
8123	Drycleaning and Laundry Services	1.1	1,360	128	8.2
6115	Technical and Trade Schools	1.1	562	118	2.6
4343	Wholesale of waste materials	1.1	3,156	380	40.1
3262	Rubber Product Manufacturing	1.1	2,782	16	55.2
6211	Offices of Physicians	1.1	5,808	2,087	36.9
3221	Pulp, Paper, and Paperboard Mills	1.1	1,257	8	49.2
5191	Other Information Services	1.1	162	17	1.4
3219	Other Wood Product Manufacturing	1.1	3,673	361	63.6
6213	Offices of Other Health Practitioners	1.1	2,489	869	14.6
2372	Land Subdivision	1.1	1,744	34	32.1
6231	Nursing Care Facilities (Skilled Nursing Facilities)	1.1	68	7	0.1
8121	Personal Care Services	1.1	13,178	6,543	44.2
2362	Nonresidential Building Construction	1.1	8,267	173	87.3
2382	Building Equipment Contractors	1.0	1,811	124	30.8
5411	Legal Services	1.0	5,063	1,297	50.3
3152	Cut and Sew Apparel Manufacturing	1.0	11,552	538	101.1
8111	Automotive Repair and Maintenance	1.0	20,867	7,695	111.7
3352	Household Appliance Manufacturing	1.0	2,450	7	42.2
4889	Other Support Activities for Transportation	1.0	326	9	1.8
4682	Retail trade of parts and spare parts for automobiles, vans and truck	1.0	7,442	1,677	183.1
4881	Support Activities for Air Transportation	1.0	1,396	11	15.3
7121	Museums, Historical Sites, and Similar Institutions	1.0	408	29	-1.0
5418	Advertising, Public Relations, and Related Services	1.0	3,210	213	20.2
5121	Motion Picture and Video Industries	1.0	1,740	45	50.6
6113	Colleges, Universities, and Professional Schools	1.0	9,091	98	69.2

5419	Other Professional, Scientific, and Technical Services	1.0	2,310	583	21.6
6215	Medical and Diagnostic Laboratories	0.9	2,220	417	27.9
5412	Accounting, Tax Preparation, Bookkeeping, and Payroll Services	0.9	4,745	732	51.0
4361	Wholesale of trucks and new parts and spare parts for cars, vans and	0.9	1,416	97	35.1
4342	Wholesale of raw materials for industry	0.9	13,068	1,232	745.8
6233	Continuing Care Retirement Communities and Assisted Living Facili	0.9	413	34	0.7
5313	Activities Related to Real Estate	0.9	1,779	249	29.0
5616	Investigation and Security Services	0.9	9,136	246	82.7
3323	Architectural and Structural Metals Manufacturing	0.9	5,856	849	69.4
8132	Grantmaking and Giving Services	0.9	3,501	431	5.4
3332	Industrial Machinery Manufacturing	0.9	454	8	6.7
5311	Lessors of Real Estate	0.9	3,175	900	43.7
6111	Elementary and Secondary Schools	0.9	15,037	726	108.8
7225	Restaurants and Other Eating Places	0.9	65,483	11,824	411.4
4335	Wholesale of minor household appliances and appliances	0.9	375	31	7.4
3119	Other Food Manufacturing	0.9	2,894	74	35.4
2383	Building Finishing Contractors	0.9	298	52	2.1
5617	Services to Buildings and Dwellings	0.8	2,959	114	18.1
4354	Wholesale of office and computer furniture and equipment, and othe	0.8	2,728	274	66.6
8129	Other Personal Services	0.8	463	182	2.7
8124	Parking and pensions for motor vehicles	0.8	1,265	413	9.1
5414	Specialized Design Services	0.8	595	173	5.4
1141	Fishing	0.8	5,350	302	42.1
7139	Other Amusement and Recreation Industries	0.8	3,837	782	24.7
6116	Other Schools and Instruction	0.8	2,393	676	7.8
3327	Machine Shops; Turned Product; and Screw, Nut, and Bolt Manufact	0.8	2,124	178	30.4
4612	Retail trade of beverages, ice and tobacco	0.8	3,975	1,946	38.0
3315	Foundries	0.8	885	16	18.2
5413	Architectural, Engineering, and Related Services	0.8	3,067	294	36.5
6241	Individual and Family Services	0.8	3,056	439	2.4
1125	Aquaculture	0.8	949	53	12.0
3256	Soap, Cleaning Compound, and Toilet Preparation Manufacturing	0.7	1,535	26	152.5
4931	Warehousing and Storage	0.7	912	33	14.4
4334	Wholesale of stationery, books, magazines and newspapers	0.7	666	74	13.6
3141	Textile Furnishings Mills	0.7	653	18	11.0
6221	General Medical and Surgical Hospitals	0.7	3,070	91	30.2
4671	Retail trade of hardware, hardware and glass	0.7	11,077	2,113	194.6
5322	Consumer Goods Rental	0.7	1,050	377	5.3
8122	Death Care Services	0.7	2,141	682	13.6
4662	Retail trade of furniture, computer equipment and accessories, telep	0.7	2,817	907	21.7
8113	Commercial and Industrial Machinery and Equipment (except Autom	0.7	2,858	442	54.6
4681	Retail of cars and trucks	0.7	3,933	326	80.8
2361	Residential Building Construction	0.7	4,467	114	52.8
2381	Foundation, Structure, and Building Exterior Contractors	0.7	514	61	5.8
4331	Wholesale of pharmaceutical products	0.7	1,244	64	24.6
4353	Wholesale of machinery and equipment for services and commercia	0.7	2,331	348	48.3
4922	Local Messengers and Local Delivery	0.6	30	7	0.2

7211	Traveler Accommodation	0.6	11,362	574	142.5
4661	Retail trade of home furnishings and other household goods	0.6	3,439	800	92.3
6216	Home Health Care Services	0.6	53	3	1.5
5324	Commercial and Industrial Machinery and Equipment Rental and Le	0.6	1,069	132	30.1
6219	Other Ambulatory Health Care Services	0.6	429	15	0.5
8114	Personal and Household Goods Repair and Maintenance	0.6	3,420	1,871	14.1
4663	Retail trade of articles for interior decoration	0.6	2,156	788	10.3
2371	Utility System Construction	0.6	1,473	44	20.0
4332	Wholesale of perfumery, cosmetics and jewelry	0.6	552	33	12.6
5179	Other Telecommunications	0.6	421	48	3.5
4632	Retail trade of clothing, costume jewelry and clothing accessories	0.6	8,739	3,770	43.6
3324	Boiler, Tank, and Shipping Container Manufacturing	0.6	549	11	15.5
4884	Support Activities for Road Transportation	0.6	459	60	4.0
5612	Facilities Support Services	0.6	401	15	3.2
8131	Religious Organizations	0.6	2,096	280	6.5
4622	Retail trade in department stores	0.6	4,605	68	94.8
3112	Grain and Oilseed Milling	0.6	1,036	14	66.1
3114	Fruit and Vegetable Preserving and Specialty Food Manufacturing	0.6	1,652	34	16.5
3118	Bakeries and Tortilla Manufacturing	0.6	10,409	1,812	167.3
4341	Wholesale of agricultural and forestry raw materials	0.5	1,631	216	40.1
4851	Urban Transit Systems	0.5	3,180	32	25.6
3252	Resin, Synthetic Rubber, and Artificial and Synthetic Fibers and Filam	0.5	372	7	1.9
3116	Animal Slaughtering and Processing	0.5	2,352	22	90.2
4611	Grocery and food retail	0.5	35,151	13,659	279.2
4659	Retail trade of pets, gifts, religious items, disposables, crafts, and otl	0.5	3,496	1,603	13.4
7223	Special Food Services	0.5	976	76	6.9
5223	Activities Related to Credit Intermediation	0.5	897	111	9.6
5224	Other non-stock exchange financial and credit intermediation institut	0.5	2,634	421	58.6
3322	Cutlery and Handtool Manufacturing	0.5	446	9	6.0
2373	Highway, Street, and Bridge Construction	0.5	1,396	35	16.7
5622	Waste Treatment and Disposal	0.5	120	8	1.0
5415	Computer Systems Design and Related Services	0.5	1,957	102	24.5
4921	Couriers and Express Delivery Services	0.5	784	29	5.5
3335	Metalworking Machinery Manufacturing	0.5	148	8	1.0
4653	Retail sale of stationery, books, magazines and newspapers	0.5	4,411	1,799	17.7
4352	Wholesale of machinery and equipment for industry	0.5	909	111	26.9
3363	Motor Vehicle Parts Manufacturing	0.5	19,123	45	274.3
3255	Paint, Coating, and Adhesive Manufacturing	0.5	426	14	9.5
4631	Retail trade of textile products, except clothing	0.5	1,249	227	9.1
4633	Retail trade of footwear	0.5	2,175	626	15.4
3149	Other Textile Product Mills	0.5	1,299	76	11.5
4351	Wholesale of agricultural, forestry and fishing machinery and equipm	0.4	366	60	13.1
5613	Employment Services	0.4	22,501	162	214.1
5416	Management, Scientific, and Technical Consulting Services	0.4	3,052	255	38.0
7113	Promoters of Performing Arts, Sports, and Similar Events	0.4	209	35	-0.2
3241	Petroleum and Coal Products Manufacturing	0.4	497	6	8.4
3115	Dairy Product Manufacturing	0.4	1,660	236	57.6

4652	Retail trade of entertainment articles	0.4	1,413	589	23.6
5611	Office Administrative Services	0.4	4,307	69	89.8
3271	Clay Product and Refractory Manufacturing	0.4	1,536	130	16.3
3111	Animal Food Manufacturing	0.4	470	9	11.1
4872	Scenic and Sightseeing Transportation, Water	0.4	69	13	0.7
6112	Junior Colleges	0.4	69	8	0.5
2123	Nonmetallic Mineral Mining and Quarrying	0.4	437	31	5.7
7213	Rooming and Boarding Houses, Dormitories, and Workers' Camps	0.4	182	36	1.0
4321	Wholesale of textiles and footwear	0.4	616	64	14.8
4312	Wholesale of beverages, ice and tobacco	0.4	2,196	47	48.9
7115	Independent Artists, Writers, and Performers	0.4	37	14	0.0
7131	Amusement Parks and Arcades	0.4	522	100	4.4
5615	Travel Arrangement and Reservation Services	0.3	725	228	7.8
6114	Business Schools and Computer and Management Training	0.3	99	15	0.3
4691	Retail trade exclusively through the internet, and printed catalogs, te	0.3	62	3	0.5
5182	Data Processing, Hosting, and Related Services	0.3	245	10	6.3
3274	Lime and Gypsum Product Manufacturing	0.3	130	31	-0.8
2389	Other Specialty Trade Contractors	0.3	207	13	5.2
3254	Pharmaceutical and Medicine Manufacturing	0.2	774	15	10.9
5417	Scientific Research and Development Services	0.2	80	8	0.6
3369	Other Transportation Equipment Manufacturing	0.2	89	8	0.7
3366	Ship and Boat Building	0.2	80	4	0.6
7111	Performing Arts Companies	0.2	122	23	0.3
3113	Sugar and Confectionery Product Manufacturing	0.2	536	23	4.1
3253	Pesticide, Fertilizer, and Other Agricultural Chemical Manufacturing	0.1	74	4	9.8
4683	Retail trade of motorcycles and other motor vehicles	0.1	100	23	5.6
3251	Basic Chemical Manufacturing	0.1	186	6	1.3
6117	Educational Support Services	0.1	7	3	0.2
5122	Sound Recording Industries	0.1	15	3	0.0
3151	Apparel Knitting Mills	0.1	96	9	0.6
3132	Fabric Mills	0.0	84	9	0.2
3131	Fiber, Yarn, and Thread Mills	0.0	10	5	0.0
Grand Total			1,009,059	104,144	13,545



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