ABOUT CALIFORNIA 100

The California 100 Initiative envisions a future that is innovative, sustainable, and equitable for all. Our mission is to strengthen California’s ability to collectively solve problems and shape our long-term future over the next 100 years.

California 100 is organized around 5 policy themes and 5 core values, and driven by interrelated stages of work: research, policy innovation, and engagement with Californians. California 100’s work is guided by an expert and intergenerational Commission.

Through various projects and activities, California 100 seeks to move California towards an aspirational vision—changing policies and practices, attitudes and mindsets, to inspire a more vibrant future. This Regional Analysis was produced as part of California 100’s research stream of work.

The California 100 initiative is incubated through the University of California and Stanford.

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The largest cities within each of the counties in the Southern Border Region include:

- San Diego (San Diego County, 1,386,932)
- Chula Vista (San Diego County, 275,487)
- Oceanside (San Diego County, 174,068)
- Escondido (San Diego County, 151,038)
- El Centro (Imperial County, 44,322)
San Diego and Imperial Counties comprise the Southern Border Region which occupies the southern border of California with Mexico. Together, they make up more than 5 percent of California’s total land area, and are home to roughly 3.5 million people—nearly 9 percent of the state’s total population. Of this total population, however, about 95 percent reside in San Diego County, compared with just 5 percent in Imperial County, despite its greater share of land.

Part of this disparity may be attributed to the differences in climate between the two. Bordered by the Laguna Mountains, San Diego has a Mediterranean climate, and the majority of its population is concentrated near its 70 miles of coastline. By contrast, the Imperial Valley region is part of the Colorado Desert that is part of the larger Sonoran Desert, and it is consequently hot and arid for much of the year. Running through Imperial County are the Algodones Sand Dunes and the Chocolate Mountains, which straddle the Salton Sea—a desert basin that is more than 200 feet below sea level. The land-locked basin is situated on the San Andreas Fault, and because of its positioning below sea level, has been cyclically collecting water flow from the Colorado River over time, then disappearing with evaporation. It was formed more permanently during the early 20th century during efforts to irrigate the Imperial Valley, when a canal breached and water flooded into the basin.

Adjacent to cities in the Southern Border region are two major metropolitan areas in Mexico:

- Tijuana (adjacent to the city of San Diego, metro size of 2,221,000 people)
- Mexicali (adjacent to the city of Calexico in Imperial County, metro size of 1,160,000 people)
The Southern Border Region Has A Large Population of Younger Hispanic/Latino Residents and Its Older Population Skews Slightly Whiter

**Figure 1**

**Source:** U.S. Census Data, 2020
Imperial County is Overwhelmingly Hispanic/Latino, More So Than Any Other County in California

**Figure 2**

**SOURCE:** U.S. Census Data, 2020

**NOTE:** Because migrant crossings are common in Imperial County as well as seasonal workers who may be excluded from the census, this population may be undercounted in both counties.
The Southern Border Region Generally Matches the Overall Political Makeup of California With a Slightly Higher Proportion of Conservative Voters in San Diego County

**Figure 3**

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<th>Republican</th>
<th>Third-Party</th>
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<td>6%</td>
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<td>38%</td>
<td>16%</td>
<td>5%</td>
<td>19%</td>
<td>21%</td>
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<tr>
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<td>38%</td>
<td>19%</td>
<td>5%</td>
<td>18%</td>
<td>19%</td>
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**SOURCE:** California Secretary of State, September 9, 2022 Report of Registration.
EARLY SAN DIEGO: SPANISH SETTLEMENT AND A MILITARY BOOM

San Diego and Imperial Counties are the ancestral homes to at least four known Native American tribes, including the Kumeyaay (Diegueño), the Payoomkawichum (Quechnejuichom/Luiseño and Acjachemen/Juaneño), the Kuupiaxchem (Cupeño), and the Cahuilla.\(^8\) Archaeological evidence indicates that indigenous people have been living in the region for at least 10,000 years.\(^9\) The region remains home to 18 tribal reservations, and in 2019, to approximately 22,500 Native American people.\(^10\)

In 1542, Spanish explorer Juan Rodríguez Cabrillo landed his ship on the shores of Point Loma, claiming the territory for the Spanish empire.\(^11\) Roughly two centuries later, the Spanish government would use this land to spread Christianity, instituting the mission system across California. In 1769, the Spanish established the Mission Basilica San Diego de Alcalá in what is now the city of San Diego.\(^12\) As the first of 21 missions constructed in California, San Diego de Alcalá foreshadowed the
sphere of Spanish influence throughout the region that continued for much of the 18th century. Around this time, the Spanish exploration expanded inland into present-day Imperial County, with the 1774 expedition of Juan Bautista de Anza eastward to Yuma, Arizona on the border with California and Mexico. 

This territory remained largely unexplored throughout the 19th century. Some attempts at irrigating the region were made, but unsuccessfully, until two water engineers arrived in the 1890s. In an effort to draw investors to invest in the region, these engineers developed plans for a canal and named the region the Imperial Valley, referring to its agricultural potential. Ultimately, the two engineers helped bring water into the area via their California Development Company. The boom in population that resulted – roughly 15,000 people by 1907 – led to the creation of a new county separate from San Diego that year. Population growth stalled in the years following, however, due to extreme rain that flooded the region’s fields, temporarily disrupting its burgeoning agricultural industry.

While under Mexican rule, the region was settled by soldiers and other settlers, so that the population grew enough to become recognized as an official pueblo by Mexico, known today as Old Town San Diego. As U.S. settlers slowly moved into the area in the following decades, the city emerged as a trading center, and following statehood, would continue to expand because of merchant development. With the opening of the Panama Canal in 1914 by the U.S., San Diego served as the first entry port for the U.S. moving north from the Canal. As such, the city of San Diego celebrated its prominence by investing in the development of the Balboa Park area around its port with the Panama-California Exposition of 1915, a world’s fair that highlighted the city’s potential as a global port city. During 1915, the city had more than 2 million visitors, including President Theodore Roosevelt, who spoke to attendees in July, 1915. Today, Balboa Park is a hub for tourists, offering visitors access to gardens and 17 museums.
THE 20TH CENTURY ONWARD: MILITARY GROWTH STRAINS HOUSING CAPACITY

At the start of the 20th century, San Diego was home to a coal servicing station for the Navy’s military warships. With the start of the first World War, the military and naval presence in the region expanded. The city had been on the radar of the Navy because of lobbying efforts to have the Atlantic fleet, which had been circumnavigating the globe, visit its port in 1908. As the U.S. became involved in World War I, the Navy opened a Naval Training Station and Naval Hospital in the Balboa Park region, and later established additional military facilities in Mission Valley in 1917 and in Point Loma in 1920. Two years later in 1922, San Diego became the headquarters for the U.S. Eleventh Naval District and then home to the Navy’s largest air base. By 1930, roughly one-third of San Diego’s population was employed by the U.S. Navy.

Imperial County also played a role in the war efforts during the early 20th century. In 1865, construction began on the Southern Pacific Railroad. Initially formed to connect San Francisco and San Diego by rail, the Southern Pacific built tracks across the southwest U.S., including a stretch of tracks linking Los Angeles to Yuma, Arizona which crosses through Imperial County. Accessibility to the largely unoccupied territory of the Imperial Valley
proved to be critical for its development as a military training center. General George S. Patton, a military commander during World War II, established multiple training sites across the Mojave and Sonoran Deserts for roughly 1 million soldiers, including Pilot Knob in Imperial County, which was the largest military training ground of its time. Imperial County was also home to a number of mining efforts both during and after World War I and II. Following World War II, Imperial led the state’s effort to mine and stockpile manganese, which is used to strengthen steel.

World War II solidified the region’s position on the world stage among other notable California regions, such as Los Angeles and San Francisco. Prior to the war, San Diego hosted a second world’s fair, the 1935 California Pacific International Exposition. The 1935 Exposition built upon the structures from the 1915 Balboa Park Exposition, and also led to the construction of the Museum of Art in 1926 and Natural History Museum in 1933. After the 1935 Exposition ended, many of the facilities became self-contained temporary military bases to assist in war efforts during World War II. The federal government continued to purchase land throughout the region, including the Rancho Santa Margarita y Las Flores in the northwestern part of San Diego County, held by military veterans of the Mexican War of Independence. Under U.S. control, the large, coastal piece of land was renamed Camp Pendleton, and served as the headquarters for the 1st Marine Division.

The military presence transformed the city of San Diego. Between 1939 and 1945, the city’s population grew by 67 percent, leading to housing shortages. As the U.S. economy boomed during the war, millions of jobs were created nationally in a mobilization effort that drew thousands to the region. By the end of 1940, roughly 1,500 people poured into San Diego each week, in search of jobs in the defense industry. In order to accommodate its growing workforce, the military began absorbing land and building housing. Under the Lanham Defense Housing Act of 1940, housing was built in military boom towns, including San Diego, which developed 15,000 housing units. The largest of such developments was the Linda Vista Housing Project, which was designed to house 13,000 people, but ultimately housed nearly 20,000. Though it was the largest of its kind, Linda Vista lacked a grocery or drug store, gas station, and even sidewalks until 1943. In spite of this, between 1920 and 1950, the total value of San Diego real estate increased from $100 to $450 million.

Throughout the 20th century, housing in San Diego was additionally impacted by racial segregation, enforced by covenants that used racially-restrictive language about who was eligible to buy property in certain neighborhoods. Such covenants barred Black, Latino, Asian, and Jewish residents from purchasing homes. The use of covenants was not exclusive to San Diego, however. Across the U.S. during the Great Depression, the government subsidized the development of $120 billion in housing, 98 percent of which went to white people. In San Diego, families of color were relegated to the southeastern parts of the city, where approximately 95 percent of Black residents lived, and where property values were much lower. This trend continues today, in which the homes of majority Black neighborhoods are devalued by more than 22 percent nationwide.
A similar issue persisted in Imperial County, which had experienced an influx of Black residents in the early 20th century, in search of agricultural work. In El Centro, schools were segregated at this time, leaving Black students without an option for high school until 1929, when Douglass High School was founded by community members. In 1954, following Brown v. Board of Education, however, the school officially closed, and its land was sold to the El Centro School District, which had previously disallowed the education of Black students on its campuses.

Ultimately, the agriculture industry boomed in the region, largely due to early 20th century efforts to divert water from the Colorado River into the region via the Imperial Canal. Access to the Southern Pacific Railroad also enabled broader distribution of such agricultural output. Following the introduction of irrigation into the Valley, many farmers – who had moved west from throughout the country – had to adjust to the highly saline water of the Colorado River by installing drainage systems and switching from grain to vegetable crops. Between 1910 and 1950, the population of Imperial County jumped from nearly 14,000 to about 63,000.
Today, the overwhelming majority of the population of Imperial County is Hispanic or Latino.47 The economy still greatly depends upon the agricultural industry, and particularly upon immigrant labor. According to 2022 research from the LA Times, many of the farmworkers in the County have green cards and live in Mexico, due to the unaffordability of California.48 This regular inflow between Mexico and the U.S. has contributed to the significant proportion of Hispanic or Latino residents in Imperial County. In particular, during the mid-20th century, the United States and Mexico adopted the Bracero Program, which placed Mexican men on farms in the U.S., and many in Imperial County, on short-term labor contracts.49 Adopted in 1942, the program was intended to address labor shortages in agriculture that emerged during World War II; however, immigrants who participated in the program were often subjected to poor working conditions, including exposure to deadly chemicals, low pay, and discrimination.50

Today, Imperial County is predominantly Hispanic or Latino, and its agricultural industry continues to depend upon the labor of immigrant farmworkers. Although many farmworkers commute between countries, others have moved permanently to the U.S. Because of its proximity to the border, Imperial County has emerged as a point of entry for many Mexican migrants who move to the U.S., contributing to its significant proportion of Hispanic residents.51 Imperial County has the lowest turnout among registered voters in the state. In 2022, the ACLU repeatedly flagged this concern by sending several letters to the Imperial County Registrar of Voters to require the publication of election-related materials in Spanish under the Voting Rights Act.52 The ACLU has cited the lack of available materials as a reason for the county’s poor voter turnout.
The effects of wartime investment in San Diego can still be felt today. During World War II, the federal government began investing in research and technology development, giving rise to the University of California (UC), Division of War Research in 1941 under the purview of the UC system.53 Years earlier, in 1903, the Scripps Institution of Oceanography (SIO) was founded for research into the oceans and marine life.54 During the second World War, SIO partnered with the UC system to conduct research into naval warfare, and ultimately became the epicenter for the University of California, San Diego (UCSD) which was built around SIO in 1960.55

Initially, the major industries of the San Diego region were affiliated with the military; however, aerospace and nuclear research brought leaders from the medical and technological industries to the region, leading to the expansion of the UCSD campus with a medical school and further research into the biomedical sciences.56 By the end of the 1960s, three research institutions had been established in San Diego: the Scripps Research Institute, focused more broadly on human health; the Salk Institute, also focused on biological research, including neuroscience and genetics; and UCSD.57 The 1970s marked increased funding for the life sciences industry, and notably, a
professor out of UCSD named Ivor Royston founded the biotechnology company, Hybritech, which was later purchased by Eli Lilly for $413 million, while its founder and employees branched off to start new firms—roughly 15% of all biotechnology companies today in San Diego can be traced back to Hybritech. Today, the County is home to nearly 1,000 biotechnology and life sciences companies, employing more than 27,000 residents.

San Diego is also home to a number of other higher-education institutions, including the Catholic research institution, the University of San Diego; a California State University (CSU) campus in San Marcos, and another CSU at the San Diego State University (SDSU). SDSU was founded in 1897 and served as a teacher-training facility for roughly 50 years. SDSU also has a branch in Imperial County, providing residents the only four-year university option in the County. Consequently, the two counties differ in their rates of educational attainment. In San Diego, nearly 40 percent of the population has achieved a bachelor’s degree, compared with just 15 percent in Imperial County. Research indicates that higher levels of education correlate with wealth and income. Imperial and San Diego are no exception: San Diego’s median household income is more than $82,000 per year, while that of Imperial is $46,000, and nearly 20 percent of its population lives in poverty.
The Colorado River has run between the Rocky Mountains and the Gulf of California for about 6 million years. In a given year, it supplies roughly 40 million people with water throughout the west. However, in the last 30 years, it has lost 20 percent of its volume. In part, this decrease has been caused by worsening drought conditions throughout the region. Moreover, climate change over the coming years is expected to inflame this problem. High temperatures evaporate water more quickly, and the Rocky Mountain region has been experiencing less rainfall on average, leading ultimately to less water flow. The Colorado River drying up presents a problem, both for the western region dependent on it, and more acutely, for the farmers in the Imperial Valley. The Imperial Valley, which sustains a large agricultural economy, is entirely dependent on this water source, as the County gets less than 3” of rain per year, on average. The majority of the water consumed from the Colorado River goes directly to irrigating agricultural land. In 2019, Imperial County contributed nearly $800 million worth of vegetable and melon crops, dominated by lettuce and broccoli. These crops only make up 40 percent of...
the County’s total agricultural output. Cumulatively, the County contributes to 4 percent of California’s total agriculture sales, and nearly 15 percent of the leafy greens consumed in the U.S. However, currently, the farmers in Imperial County use more water from the Colorado River than the entire states of Arizona and Nevada do.

In 1928, the All-American Canal connected irrigation from the Colorado River across the Imperial Valley and into Mexico. In addition to approving the All-American Canal, the Boulder Canyon Project Act also approved construction of the Hoover Dam and Imperial Dam, which collect water for use in the Yuma, Coachella, and Imperial Valleys. Today, this system of dams and canals provides the Imperial Valley with more than 3 million acre-feet of water each year to sustain its agriculture and livestock business. A single acre foot of water is equivalent to 326,000 gallons of water. This abundance of water is controlled by a limited group of farmers, roughly 500 farms in total.

The reason the Imperial Valley uses, and is allowed to use so much water, is because of laws dating back to an agreement between the states occupying the southwest corner of the U.S. In 1922, representatives from seven states signed the Colorado River Compact delineating how the water would be distributed. California was entitled to the most per the agreement, roughly one-third of the river’s flow. Within the Imperial Valley, the law dictated that the majority of such water would be set aside for use by farmers. The total amount of water distributed, however, overestimated what would ultimately be
available to the states. Initially, these overestimates exceeded available water by nearly 2 million acre-feet per year. However, due to climate change and drought, the available water flow has continued to decline and the River is chronically over-tapped.80

Of the water allotted to California, the Imperial Irrigation District (IID) uses the majority.81 In 2003, however, the IID transferred roughly 10 percent of its allotment to the county of San Diego in exchange for $100 million per year.82 San Diego now gets roughly 55 percent of its water supply from Imperial County.83 It has continued to diversify its water supply over the years, however, and in 2015, opened a desalination plant which is able to provide residents with nearly 50 million gallons of water per day.84 San Diego is additionally investing in projects in an effort to ensure that nearly half of the County’s water supply is sourced locally by 2035.85 Although water from the desalination plant costs twice that of imported water from the Colorado River, San Diego officials hope it will serve as a more reliable water source into the future.86

Although the Imperial Valley has continued to sustain its economy on the water it has been apportioned after the transfer in 2003, concerns exist about the future of the region. Lake Mead and Lake Powell, reservoirs of the Colorado River, sit at their lowest levels ever, below 30 percent and government officials are urging states to cut down their water usage in order to avoid an even greater crisis.87 Looming water restrictions may prove to be a disaster for the Imperial Valley however. Recent estimates indicate that about 1 of 6 residents in Imperial County are employed by the agriculture industry, though this number may be higher due to auxiliary roles which rely on the industry.88 Moreover, nearly 20 percent of the County’s population lives in poverty, and its population is more than 85 percent Hispanic or Latino.89,90 Studies indicate that the region’s dependency on its agriculture business is a major contributor to these trends; work in the agriculture industry tends to be seasonal and low wage.91

Moreover, despite cities like El Centro ranked as among the least expensive metro areas in California – about 10 percent cheaper than the average California metropolitan area – unemployment rates are consistently higher here than in other cities in California.92 In part, the high unemployment rate can be explained by the prevalence of seasonal work. However, research indicates that for some residents, jobs – particularly jobs that pay a living wage outside of retail and fast food – are hard to find.93 Government agencies remain large employers in the region, yet many of these jobs are with the U.S. Customs and Border Protection or one of the eight local jails and prisons, which serve a total population of nearly 180,000 people.94 Only a fraction of the population here has achieved a bachelor’s degree, and for those who do attend a four-year university, many choose not to come back.95 In order to combat this pattern, initiatives like the Imperial Valley Economic Development Corporation are working to draw new industries and companies to the region, hoping to improve the high rates of unemployment by expanding the job opportunities available to Imperial County residents.96
HOUSING AND WILDFIRES IN SAN DIEGO

Although San Diego’s population has only grown incrementally in recent years, the region has experienced a housing crisis for years. As of 2018, the Regional Housing Needs Assessment Determination indicated that San Diego County requires an additional 171,685 housing units across all income levels, particularly in regions with existing transportation infrastructure. Already, many San Diego workers commute from nearby Riverside County where the median home price is $623,659, compared with San Diego’s $950,455 according to Zillow. Building the needed housing is expected to face enhanced scrutiny, as the risk of wildfire across the County increases. In 2021, the California Attorney General blocked development on a 1,119-unit housing development in Otay Ranch, a wildland region near Chula Vista that has recorded 60 wildfires. Likewise, developments near Escondido and Santee have faced similar outcomes, with local governments blocking proposed projects.

Recently released fire maps, developed by the California Department of Forestry and Fire Protection’s Fire and Resource Assessment Program (FRAP), indicate that more of San Diego is at risk of wildfires since the last assessment in 2007. Because of this risk, representatives from the building industry in San Diego expect that development that meets the needs of local housing standards will be increasingly difficult. Already, many San Diego residents – particularly those in inland regions – have faced challenges securing home insurance because of the increased risk: in 2019, insurers dropped nearly 4 percent of homeowners across the County because of increased wildfire threat. That year, policies under the FAIR Plan, the state-run program that offers fire insurance to homeowners, also jumped by 225 percent.
As a border region with roots in Mexican history, San Diego and Imperial counties have been culturally and economically influenced for centuries by their neighbor to the south. Today, the Southern Border Region is often grouped with Baja California to form the “Cali Baja Megaregion,” which connects the countries by their economies, trade relationships, and often, a shared workforce. The region's economy and labor force are greatly impacted by border relations because of the substantial cross-border activity in the area. In fact, San Diego's Metropolitan Transit system operates a trolley that connects the downtown area to the Mexico border. As such, many commuters make their way from areas like Tijuana to San Diego on a regular basis for work or school. For some of these
commuters, Tijuana appeals because of its relative affordability compared to San Diego, as consumer prices are estimated to be 62 percent lower in Tijuana than San Diego, including for rent. The influx of Americans, however, has led to gentrification in Tijuana, where rents have doubled in the last 10 years pricing existing residents out of neighborhoods. Wait times at the border to cross into San Diego have also risen.

In 2022, the Cali-Baja region had a gross domestic product of between $250 and $300 billion. The San Diego Workforce Partnership describes the regional economy as split into a “knowledge economy” centered in San Diego...

### Table 1: Socioeconomic Profile of the Cali-Baja Region, 2020

<table>
<thead>
<tr>
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<th>San Diego</th>
<th>Imperial</th>
<th>Tijuana</th>
<th>Mexicali</th>
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and a manufacturing economy based in Tijuana. The initial development of this regional economy was heavily influenced by UC San Diego's research endeavors, those of its affiliated research institutions, and those of its graduates. Other businesses started to set up shop in San Diego as the area gained notoriety in sectors like telecommunications and biotechnology, and the area drew in significant amounts of venture capital.

Through maquiladora factories and a plentiful supply of inexpensive, unskilled labor, Tijuana developed a sizable manufacturing capacity on the Mexican side of the border. Automobile parts, audio and video gear, medical supplies and equipment, semiconductors and electronics, and communications gear are among the major industries there that manufacture goods. The manufacturing environment in Tijuana has attracted significant foreign direct investment of more than $1 billion a year.

One key aspect to the regional economy comes from significant cross-border trade throughout the region. According to the California Chamber of Commerce, California exports to Mexico were $24.1 billion in 2020, while imports to the state from Mexico were $47.9 billion, including $4.9 billion in fruits and vegetables. Most of that trade happens at the entry points into Cali-Baja, which include...
San Ysidro, Otay Mesa, Tecate, Calexico, and Andrade. However, inadequate border infrastructure and ensuing lengthy wait times to cross have been documented in numerous studies as having negative economic effects. Threats to close the border in 2019 raised concerns about the flow of goods like produce, medical devices, and automotive parts.113

Pollution is an ongoing challenge at the border because of traffic, factories, and different air pollution standards. The rise in border wait times can be attributed to more traffic, as well as increased security inspections following 9/11. On average, stops that once took 30 minutes can now take up to several hours.114 Moreover, the movement of vehicles through the region, when driving and idling, has contributed to worsening air quality. Directly north of the border, in San Ysidro, where roughly 85 percent of the population is Hispanic or Latino, levels of particulate matter are 10 times higher than cities further north.115 The problems with air pollution are magnified by the hundreds of maquiladoras, or factories, which release high levels of carbon monoxide and ozone into the air.116 Reports from border cities, including San Diego and Brownsville, Texas have cited higher rates of birth defects among children born to mothers who work in these factories.117

In 2022, sewage pipes broke along Tijuana’s Matadero Canyon, causing millions of gallons of sewage to spill from the Tijuana River into the Pacific Ocean at Imperial Beach, California.118 Consequently, the International Boundary and Water Commission between the U.S. and Mexico has jointly announced a project to address these sanitation issues, with an investment of $474 million.119 The investment is expected to reduce the amount of untreated sewage flowing into the Pacific Ocean,
and follows a provision from the 2020 United States–Mexico–Canada Agreement (USMCA) discussing how to treat such wastewater.120

In May 2022, the mayors of San Diego and Tijuana signed a collaboration agreement to work together on issues ranging from public safety, border wait times, environmental issues, among others.121 Although the agreement marks future efforts to focus on these problems, the two regions have a long history of economic collaboration: for example, San Diego has a significant life science business presence, employing more than 30,000 people across 1,100 companies.122 As such, Tijuana is often referred to as the medical device manufacturing capital of Mexico, with firms like Thermo Fisher running manufacturing plants for their devices in Tijuana.123 A 2014 KPMG study found that Mexico offers a significant cost advantage to manufacturing such goods, when compared with the U.S.124

These efforts at cooperation led to the two cities’ recognition as the 2024 World Design Capital, a designation which recognizes cities globally for their development of effective economic, social, and environmental designs.125 As the first cities selected as a pair, San Diego and Tijuana have a history of collaboration and integrated communities. More than 90,000 passenger vehicles cross between San Diego and Tijuana on a daily basis, representing the busiest border crossing in the Western Hemisphere.126 The two are also joined by the pedestrian crossing, the Cross Border Xpress at the Tijuana International Airport, which connects into a terminal across the border in San Diego.127
Further east, Mexicali on the Mexican side of the border and Calexico in California’s Imperial Valley share a unique cultural bond due to their proximity and historical ties. Many residents have family members or friends on both sides of the border, leading to regular cross-border social interactions. People frequently commute for work, education, and leisure activities, contributing to a sense of interconnectedness and cultural exchange. As of 2014, students enrolled in Imperial Valley College (IVC) can participate in an exchange program with CETYS University in Mexicali, Mexico, completing their first two years at IVC, and their final two at CETYS.\textsuperscript{128}

Mexicali’s population of more than 1 million people dwarfs Calexico’s 181,000, though almost all of Calexico’s residents are Hispanic. Regardless of their two vastly different sizes, the two cities’ shared interests and histories connect them.\textsuperscript{129} “Calexico began as a tent settlement of the Imperial Land Company, incorporated in 1901 to cultivate land west of the Colorado River. Initially water could only arrive via Mexicali, a fledgling irrigated colony to the south settled by, among others, cotton-growing Chinese migrants.”\textsuperscript{130} Agriculture continues to dominate the economy on both sides: Laborers from Mexicali flood the Imperial Valley each day to work the land. The Mexican side continues to produce asparagus, broccoli, cotton, and wheat.

Moreover, the environmental dynamics in the Mexicali-Calexico region are influenced by the arid desert conditions and agricultural activities. Water resources, particularly the Colorado River, play a vital role in sustaining agricultural productivity on both sides of the border. The region faces challenges related to water management, ensuring adequate supply, and addressing potential environmental impacts. By the time the Colorado River reaches Mexico, just a fraction of its water remains, reducing the agricultural opportunities and legacy in Mexicali. The Colorado River is particularly important to Tijuana. About 90 percent of the densely populated city’s water comes from the river. As taps dried up in some areas of the city, sometimes as a result of poor management, local water authorities blamed the drought.\textsuperscript{131}
San Diego’s history as a manufacturing and military remains critical to its economy today. The manufacturing industry includes shipbuilding and industrial machinery and metal production, supporting more than 110,000 jobs across 3,150 companies.\textsuperscript{132, 133} Similarly, the military presence in the region contributes roughly $55 billion, and nearly 350,000 jobs, to San Diego’s Gross Regional Product as of 2020.\textsuperscript{134} Although these two industries remain major contributors to the economy today, San Diego’s economy has continued to diversify.
San Diego’s economy is diversified across a series of industries. Figure 6 illustrates the distribution of employment by industry.

**San Diego’s Economy is Diversified Across a Series of Industries**

San Diego’s unemployment rate hovers around 3 percent, and supports businesses across tourism, agriculture, and the life sciences and biotechnology.\(^{135,136}\) Annually, tourism generates nearly $18 billion to the local economy, drawing more than 35 million tourists each year to attractions like the San Diego Zoo, Legoland, and SeaWorld.\(^{137}\) Within the agriculture industry, San Diego ranks among the top producers of avocados and nursery crops in the nation, while supporting roughly 5,000 farmers across 250,000 acres.\(^{138}\)

**SOURCE:** Data USA, “San Diego, CA.”
As the U.S. braces for impending climate change in the coming years, some experts believe that the Imperial Valley may play a key role in supplying lithium, a metal used in the batteries of electric vehicles.\(^{139}\) In August 2022, Governor Newsom signed an executive order mandating that all vehicles sold by 2035 be zero-emission, which will likely increase demand for lithium as car manufacturers increasingly move to battery-powered vehicles.\(^{140}\) Beneath the Salton Sea Basin exists some of the largest lithium deposits in the world in liquid form that can be extracted without mining.\(^{141}\)

In 2020, the California state legislature authorized the California Energy Commission to form the Lithium Valley Commission to investigate the risks associated with lithium extraction in the region with a deadline of October 2022. Although the Commission missed its first deadline, and its published materials thus far do not adequately address the environmental and health risks to the low-income communities living around the Salton Sea, the potential to transition to a more diversified economy still persists.\(^{142}\)

Already, the Imperial Valley is home to 11 geothermal plants around the Salton Sea, which collect heat from the earth in the form of steam, and use it to power turbines for elec-
tricity generation. If lithium extraction proves possible from beneath the Salton Sea, estimates indicate 600,000 tons of lithium per year could be produced from the brine extracted by the geothermal plants. As of 2021, the price per ton in the U.S. is roughly $17,000, with only one production operation located in Nevada. The majority of lithium is collected internationally (roughly 85%) between Australia, Chile, Argentina, and China.

Although the future of this industry promises greater job prospects and economic growth for the region, some experts are concerned lithium extraction will only lead to exploitation of the Imperial Valley. In Chile, foreign companies have been extracting billions of dollars worth of lithium for years on lands occupied by indigenous people. In 2016, the Washington Post reported that one company had signed an agreement with the six indigenous communities in a particular region of Chile, offering annual payments up to $60,000 in exchange for the rights to mine lithium, generating an estimated $250 million per year.
HEALTH CONCERNS IN THE IMPERIAL VALLEY

Fernando Leiva, a professor at UC Santa Cruz, predicts a similar outcome in the Imperial Valley — the profits yielded from mining lithium in the Salton Sea are unlikely to go to the residents of the region, but rather to outside corporations. The region, too, is facing existing negative health consequences from its proximity to the Salton Sea, which releases inhalable particulate matter as it slowly evaporates. Burning of agricultural fields to remove residues after a crop harvest, as well as the heavy industrial activity across the border in Mexicali, also contributes to the poor air quality. Likewise ubiquity of low-wage, seasonal work in the Imperial Valley leads regularly to high unemployment, often at rates reaching above 16 percent.

Proponents of lithium extraction believe that the industry could address both of these challenges. The mayor of Calipatria, where the geothermal plants are located, believes lithium extraction would not only bring in new jobs for residents, but also attract others to move to the region, thus spurring the economy. Initial drafts from the Lithium Valley Commission indicate the industry could create 800 jobs by 2028. Moreover, a growth in population and a bolstered economy may also bring money and attention to the environmental challenges around the Salton Sea.

Figure 8 The Imperial Valley has Some of the Highest Rates of Asthma in the State

SOURCE: CalEnviroScreen 4.0
NOTE: Rates of asthma in the Imperial Valley are some of the highest in the state and hospitalizations for children with asthma are double California's average.
San Diego and Imperial Counties comprise nearly 10 percent of California’s population, with more residents concentrated in San Diego along the coastal, southern cities. In the last decade, San Diego has experienced a steady growth in its population, on average, due to its temperate climate, miles of beaches, and a strong economy. Dating back to its early history, San Diego County boasts a robust military presence, and is home to the U.S. Navy’s largest West Coast base. Despite its much smaller population size, Imperial County has also been experiencing steady population growth, on average, in the last 10 years. Due to the region’s proximity to Mexico, the region also enjoys an interconnected relationship with its southern neighbor, with whom it shares a strong cultural, trading, and economic relationship.

As the population in the Southern Border region increases, so too does the shortage of water in the region. Prolonged drought driven by climate change and population growth have contributed to water scarcity, heightening concerns for the future of Imperial County’s agriculturally-dependent economy. In response, the region has implemented several water conservation and management programs, as San Diego County has constructed desalination plants with the goal of sourcing water locally in the near future. Rising temperatures, however, have also contributed to greater wildfire risk, which threatens communities, habitats, and air quality, particularly in San Diego.
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