2023
Metro Latino GDP Report

Silicon Valley

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2023 Metro Latino GDP Report: Silicon Valley

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Center for Economic Research & Forecasting (CERF)

CERF is a nationally recognized economic forecasting center, which provides county, state and national economic forecasts and custom economic analysis for government, business and nonprofit organizations. CERF economists Matthew Fienup and Dan Hamilton are members of the Wall Street Journal Economic Forecasting Survey, the National Association of Business Economics (NABE) Economic Outlook Survey, and the Zillow Home Price Expectations Survey (formerly, the Case-Shiller Home Price Expectations Survey). CERF was awarded 2019, 2020 and 2021 Crystal Ball Awards for the Zillow Home Price Expectations Survey. CERF's U.S. home price forecast received multiple top-3 rankings among more than 100 forecasts included in the survey. CERF is housed at California Lutheran University, a federally designated Hispanic Serving Institution.

Center for the Study of Latino Health & Culture (CESLAC)

Since 1992, CESLAC has provided cutting-edge research, education and public information about Latinos, their health and their impact on California's economy and society. CESLAC is a resource for community members, business leaders and policy makers who want to gain insightful research and information about Latinos. It offers unparalleled insight into Latino issues through an approach that combines cultural research, demographic trends and historical perspective. In addition, it has helped the University of California meet its public service goal by increasing the effectiveness of their outreach to the Latino community.

Foreword

Continuing a Centuries-Old Tradition

For three centuries, spanning from 1521 to 1821, the Viceroyalty of New Spain brought increasingly large swaths of today's North American continent into the world's first global economy. For 300 years, New Spain brought together people from the Américas, Africa, Asia and Iberia. Living next to one another, they formed families together and created new mixtures of food, language, music and spirituality – the foundation of Latino society, identity and culture in today's United States of America.

The Pueblo de San Jose was founded and populated in 1777 for the express purpose of bringing the region into the world's first global economy. The ranchos of San Mateo and Santa Clara counties, ranging from Rancho Guadalupe de la Visitación in the north (today's Visitacion Valley neighborhood) to Rancho Salsipuedes that nearly reached Watsonville, provided the early basis for Latino entrepreneurship in the Silicon Valley region

The Gold Rush shifted the region's economy from ranching to mining, and Latinos joined the new economy, investing in some mines and owning others outright. Latinos erected early office buildings, such as the Argüello building, and invested in land, banks and securities, as the region that would become Silicon Valley transitioned from mining to agriculture.

During the American Civil War, Latinos in what would become Silicon Valley formed the first network of community based political organizations, the Juntas Patrióticas Mejicanas, which funded some of the first Cinco de Mayo celebrations in the state. Local Latinos later formed the Mexican Mutual Benevolent Society to provide insurance to its members, described in 1911 by the *San José Mercury* as "one of the largest and strongest fraternal organizations in the county."

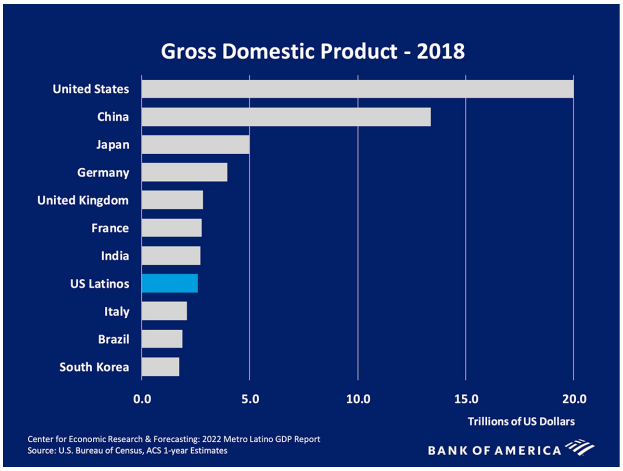
After World War II, the region skipped over the industrial phase of economic development and moved directly into High Tech, as "clean rooms" displaced fruit orchards in order to supply silicon-based computer chips for the nascent digital-age economy. Compared to the U.S. Latino GDP, the information and technology sector's share is more than three and half times larger in the Silicon Valley Metro Latino GDP.

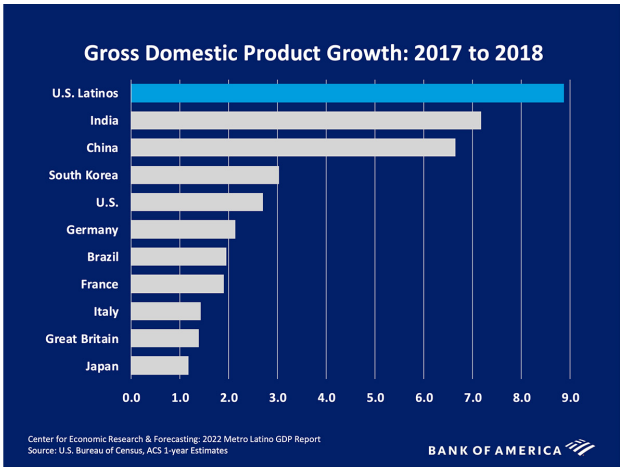
Moving into the 21st century, Latinos of the Silicon Valley Metro region continue their nearly 250-year-old tradition of moving the local, state and national GDPs to ever higher levels.

U.S. Latino GDP

The *2020 LDC U.S. Latino GDP Report*[1] provides a factual view of the large and rapidly growing economic contribution of Latinos living in the United States. In that report, we estimate the U.S. Latino GDP based on a detailed, bottom-up construction which leverages publicly available data from major U.S. agencies. At the time of publication, the most recent year for which the core building block was available was 2018. Thus, the report provides a snapshot of the total economic contribution of U.S. Latinos in that year[2].

As a summary statistic for the economic performance of Latinos in the United States, the 2018 Latino GDP is extraordinary. The total economic output (or GDP) of Latinos in the United States was $2.6 trillion in 2018, up from $2.3 trillion in 2017, and $1.7 trillion in 2010. If Latinos living in the United States were an independent country, the U.S. Latino GDP would be the eighth largest GDP in the world. The Latino GDP is larger even than the GDPs of Italy, Brazil or South Korea.



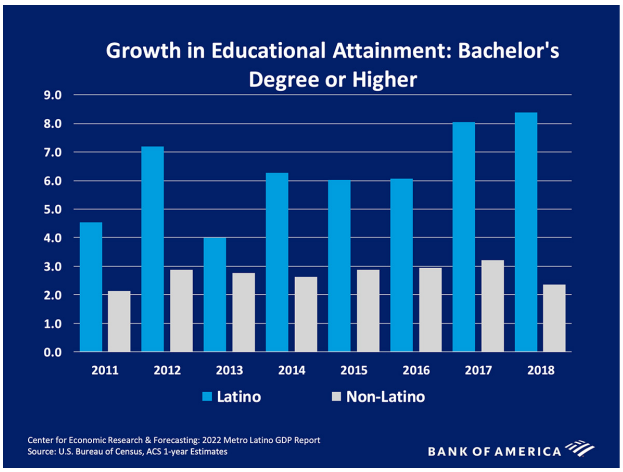


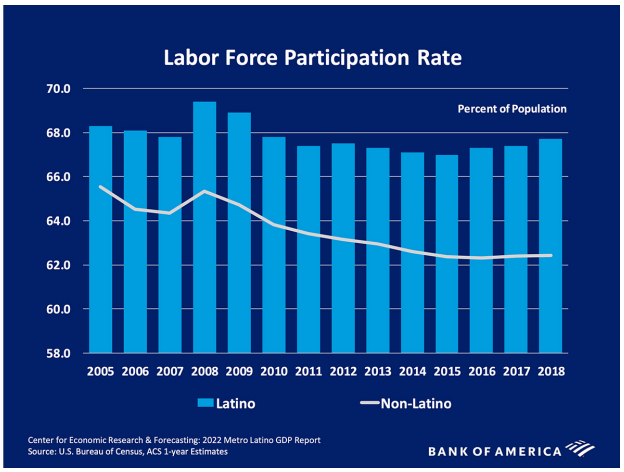
While impressive for its size, the U.S. Latino GDP is most noteworthy for its extraordinary growth rate. Among the world's 10 largest GDPs in 2018, the Latino GDP was the single fastest growing. Latino real GDP grew 21 percent faster than India's and 30 percent faster than China's. Over the entire period from 2010 to 2018, the Latino GDP was the third fastest growing, while the broader U.S. economy ranked fifth. Latino GDP grew a remarkable 74 percent faster than non-Latino GDP from 2010 to 2018.

The single largest component of rapid Latino GDP growth since 2010 is personal consumption growth. From 2010 to 2018, Latino real consumption grew 135 percent faster than non-Latino consumption. This dramatic increase is driven by large gains in personal income, which naturally flow from Latinos' rapid gains in educational attainment and strong labor force participation. Whereas the U.S. had average wage and salary growth of just 5.1 percent over the previous five years, wage and salary growth for Latinos averaged 8.6 percent. From 2010 to 2018, growth in the number of people with a

[1] *2020 LDC U.S. Latino GDP Report*: https://www.clucerf.org/2020/09/28/2020-ldc-u-s-latino-gdp-report/
[2] Author's note: the estimates provided in this report are based on source data that are revised on a regular basis. As source data are revised, these U.S. and State level Latino GDP estimates will also be revised and updated to reflect the latest information.

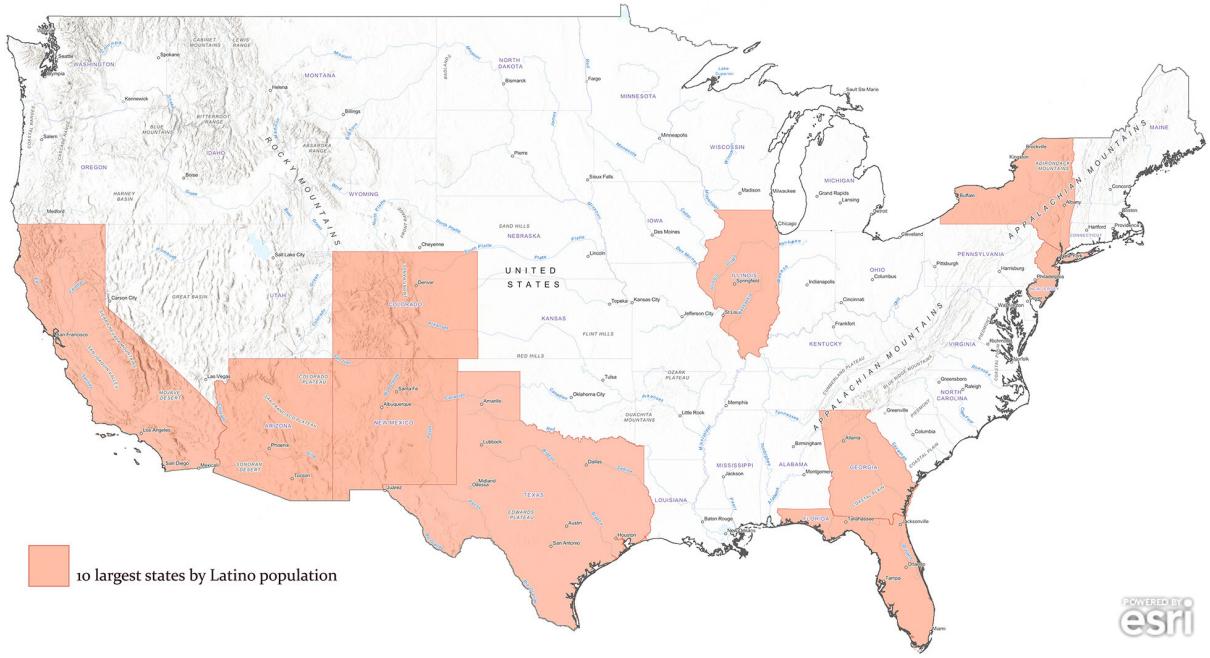
bachelor's degree or higher was 2.6 times more rapid for Latinos than Non-Latinos. And Latino labor force participation in 2018 was 67.8 percent, more than five percentage points higher than non-Latino.





State Latino GDP: 10 Largest States by Latino Population

The 2021 *Bank of America State Latino GDP* Report builds on the U.S. report by providing detailed state-level analysis of the total economic contribution of Latinos, benchmarked against the broader U.S. Latino GDP. Arizona, California, Colorado, Florida, Georgia, Illinois, New Jersey, New Mexico, New York, and Texas collectively contain more than three-quarters of the Nation's Latino population. The economic contribution of Latinos in these 10 states is even more impressive in a number of ways than that of the broader U.S. Latino cohort. The 10 had a combined 2018 Latino GDP of $2.1 trillion dollars, representing nearly 80% of the U.S. Latino GDP.



Esri Geospatial Cloud | ArcGIS online[3]

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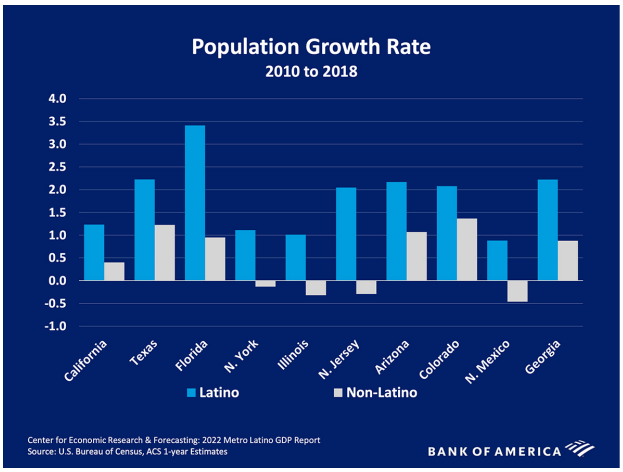
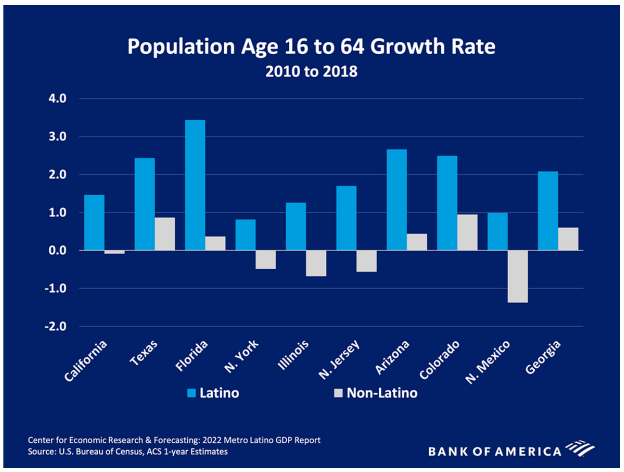
Ten Largest States by Latino Population

	Latino GDP	Share of U.S. Latino GDP
	billions of dollars	*percent*
California	706.6	27.2
Texas	476.0	18.3
Florida	258.9	10.0
New York	202.3	7.8
Illinois	100.1	3.9
New Jersey	96.9	3.7
Arizona	91.9	3.5
Colorado	55.2	2.1
Georgia	37.9	1.5
New Mexico	36.0	1.4
Total of 10 states	**2,062.0**	**79.4**

Sources: U.S. Bureau of Economic Analysis, Cal Lutheran University-CERF 2021 State Latino GDP Report

California's 2018 Latino GDP is $707 billion. If it were its own state, the California Latino GDP would be the 7th largest state GDP, larger than the entire economic output of the state of Ohio. The Texas 2018 Latino GDP is $476 billion, larger than the entire economy of Maryland, Colorado, or Minnesota. Even the smallest of the 10 target states is noteworthy. The Latino GDP of New Mexico is $36 billion, larger than the entire economy of Vermont.



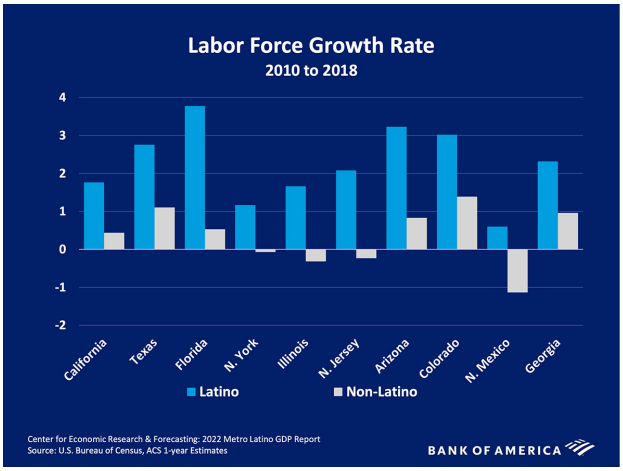


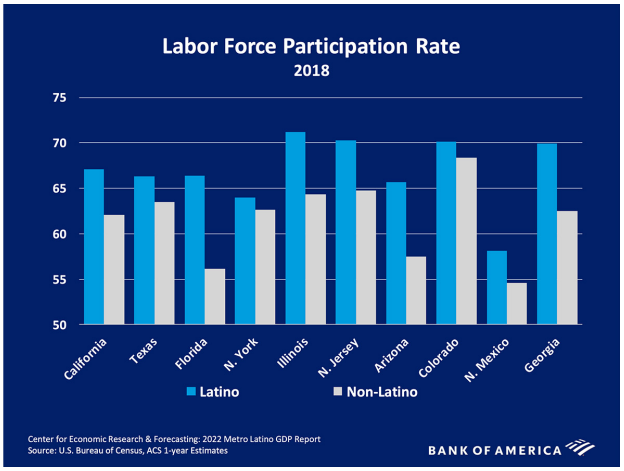
Latino population growth compares very favorably to that of Non-Latinos across all 10 states. Were it not for Latinos, the populations of Illinois, New Jersey, New Mexico, and New York would have contracted between 2010 and 2018. Non-Latino population growth was negative in each of these states, but Latino population growth was strong enough to turn each state's population growth positive overall. Even in those states with strong Non-Latino population growth, Latino population

growth enjoys a substantial growth premium between 2010 and 2018. Across all 10 states, population growth among Latinos was 3.8 times faster than population growth among Non-Latinos.

In addition to having a population that is growing more rapidly, Latinos have a younger median age than Non-Latinos. In 2018, the median age for U.S. Latinos was 29.5 years. For Non-Latinos, it was 40.6 years. Due to their age distribution, Latinos are adding substantial numbers of people in each of the 10 states to the critical category of working age adults, defined as ages 16-64. Meanwhile, Non-Latinos are experiencing a high concentration of population in the 55-64 year age range, the cohort of near-retirees. Were it not for Latinos, the working age populations of California, Illinois, New Jersey, New Mexico, and New York would have contracted from 2010 to 2018. Only five of the 10 states have growing Non-Latino working age populations: Arizona, Colorado, Florida, Georgia, and Texas.

In addition to contributing large numbers to the population of working age adults, Latinos are also significantly more likely to be actively working or seeking work than Non-Latinos. Across all 10 states featured here, the Latino labor force participation rate is substantially higher than that of Non-Latinos. Five of the 10 states enjoy a labor force participation premium that is even larger than the 5.3 percentage point premium enjoyed by Latinos nationally. Florida Latinos are a remarkable 10.3 percentage points more likely to be actively working than their Non-Latino counterparts. The participation premium is an impressive 8.2 percentage points in Arizona and 7.4 percent in Georgia, and 6.9 percent in Illinois.

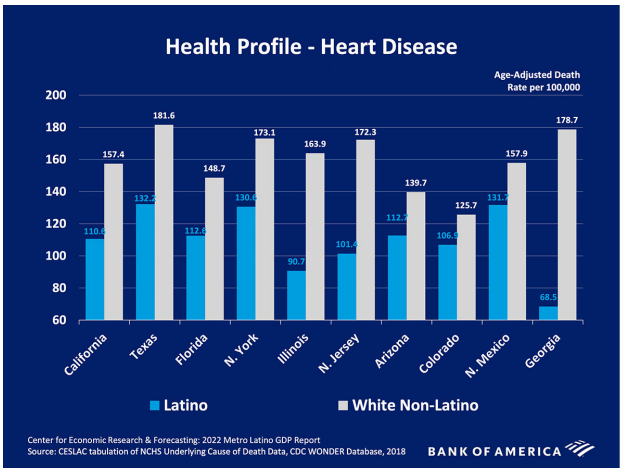


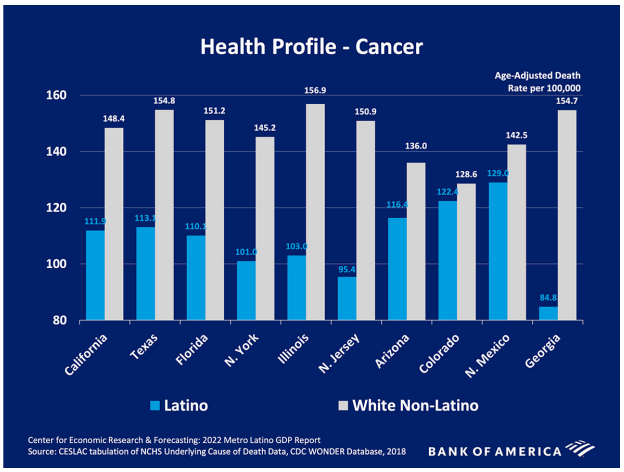


The younger age distribution, strong population growth, and higher labor force participation rate of Latinos in the 10 states have resulted in strong and consistent contributions to each state's labor force. Despite being only 29 percent of the population of the 10 states, Latinos are responsible for 65 percent of the growth of the labor force from 2010 to 2018.

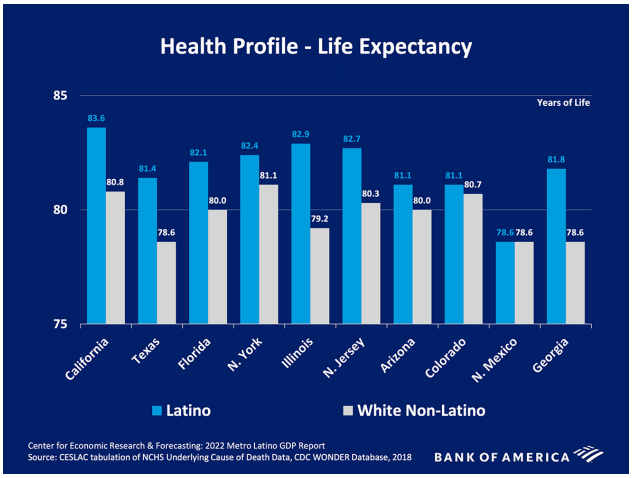
On top of more rapid population and labor force growth, more rapidly increasing educational attainment and incomes, Latinos in both the 10 states and the broader country enjoy stronger health outcomes than their non-Latino counterparts. In 2018, the top four causes of death in the U.S. were heart disease, cancer, unintentional injuries (accidents), and chronic lower respiratory

diseases. Compared to non-Hispanic Whites, Latinos in each of the 10 target states have an age-adjusted death rate that is significantly lower for each of these causes of death.





Life expectancy is one of the key summary statistics for the health of a population. In the 10 target states, the average life expectancy for Latinos ranges from being equal to that of non-Latino Whites to being more than three years longer. For the entire U.S., Latinos can expect to live an average of 81.8 years compared to 78.5 years for non-Latino Whites. Illinois boasts the largest Latino life expectancy premium. At birth, a Latino living in Illinois can expect to live a full 3.7 additional years than a non-Latino White counterpart.



From lower mortality for chronic and other noncommunicable causes of death to longer life expectancy, the strong Latino health profile provides a foundation for decades of continued Latino GDP growth.

State Latino GDP: CALIFORNIA

California's 2018 Latino GDP is $706.6 billion, larger than the entire economic output of the state of Ohio. The state's top five 2018 Latino GDP sectors are: Finance & Real Estate (15.8% share of the California Latino GDP), Government (12.7%), Professional & Business Services (9.1%),

Construction (7.1%), and Education & Healthcare (6.8%). The largest component of California's Latino GDP is personal consumption. Latino consumption totaled more than $489.4 billion in California in 2018.

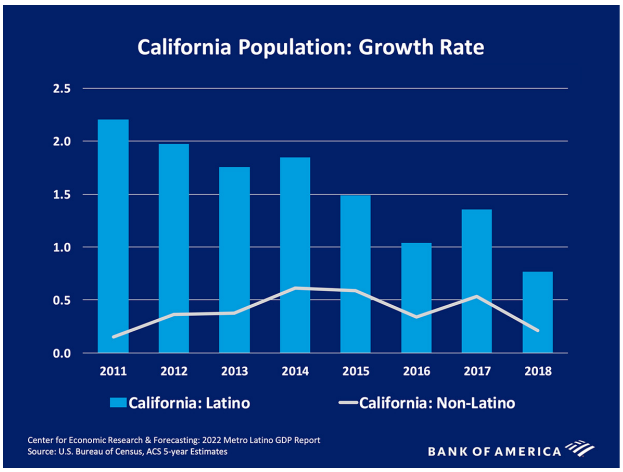
California: Gross Domestic Product

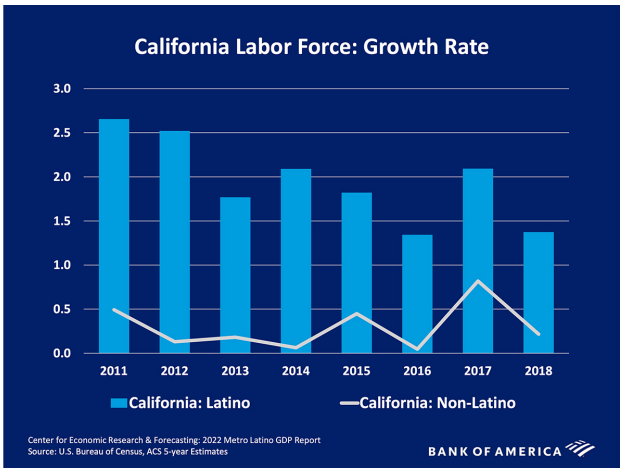
	State Latino GDP Industry Share *percent*	*Statewide GDP* Industry Share *percent*
Agricultural/Natural Resources	3.8	1.3
Mining/Quarrying	0.4	0.4
Construction	7.1	3.8
Durables Manufacturing	6.4	6.6
Non-Durables Manufacturing	6.2	4.1
Wholesale Trade	5.5	5.3
Retail Trade	6.2	4.9
Transportation/Warehousing/Utilities	6.2	4.0
Information/Technology	4.9	9.4
Finance/Insurance/Real Estate	15.8	22.2
Professional/Business Services	9.1	13.3
Education/Healthcare/Social Assistance	6.8	7.3
Leisure/Hospitality	6.4	4.4
Personal/Repair/Maintenance Svcs	2.6	1.9
Government Services	12.7	11.2
Total All Industries	**100**	**100**

Sources: U.S. Bureau of Economic Analysis, Cal Lutheran University-CERF

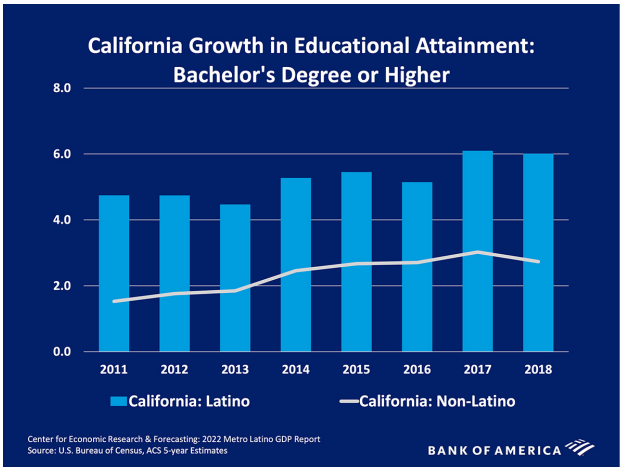
Seven different industry sectors account for out-sized shares of the state's Latino GDP. For example, while Construction accounts for only 3.8 percent of California GDP, it accounts for 7.1 percent of the California Latino GDP. Six other industry sectors account for a larger share of the California Latino GDP than the corresponding share of the broader state GDP. These include Agriculture, Non-Durable Manufacturing, Retail Trade, and Leisure & Hospitality, and Government. In general, California's Latino economy is more diversified than the broader state economy. In this way, not only are Latinos an engine of economic growth, but they also provide a broad foundation of support for the state's economy.

Latinos are making strong and consistent contributions to California's population and labor force. While the population of California increased steadily from 2010 to 2018, Latino population growth was more than four times that of Non-Latinos. From 2010 to 2018, California's Non-Latino population grew by 3.2 percent. Over that same period, the state's Latino population grew by 13.1 percent. The Latino labor force growth premium is even more impressive. From 2010-18, California's Latino labor force grew nearly seven times as quickly as the Non-Latino labor force (16.8 percent growth for Latinos compared to 2.4 percent for Non-Latinos).





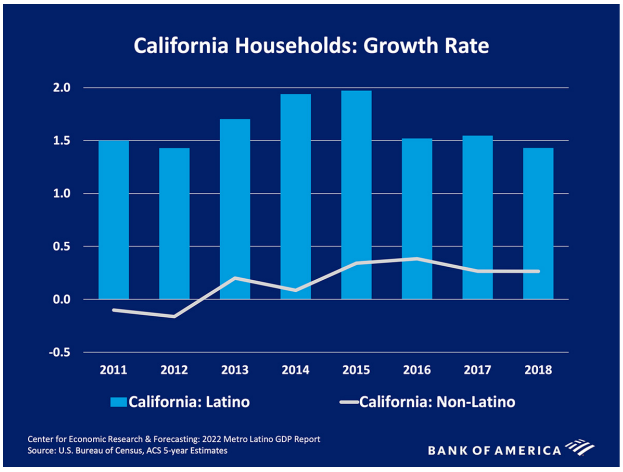
The economic contribution of Latinos in California, as with U.S. Latinos broadly, is driven by rapid gains in human capital, strong work ethic, and a positive health profile. From 2010 to 2018, Latino educational attainment grew at a rate 2.5 times faster than the educational attainment of Non-Latinos. Over those 9 years, California Latinos' labor force participation rate was an average of 4.6 percentage points higher than Non-Latinos. In 2018, Latino labor force participation was 5.0 percentage points higher.

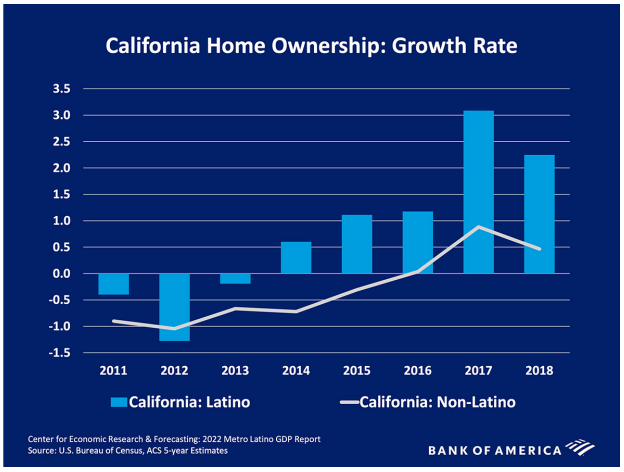


Latinos provide a very large and positive demographic punch in California through both the addition of workers and the formation of households. The number of Latino households grew at a rate nearly 11 times that of Non-Latinos. From 2010 to 2018, the number of Latino households in California grew nearly 14 percent, while the number of Non-Latino households grew just one percent. A healthy rate of household formation is vital to economic growth, as new households increase current and future economic activity.

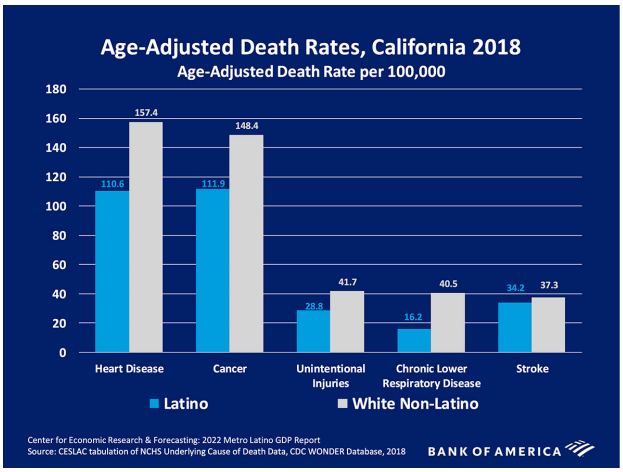
The growth of Latino households is accompanied by strong growth of Latino home ownership. While both Latino and non-Latino home ownership declined during the years following the Great Recession, since 2014, growth of Latino home ownership has been consistently positive and significantly higher than that of Non-Latinos. By comparison, the number of Non-Latino homeowners in California actually decreased from 2010 to 2018. From 2010 to 2018, the number

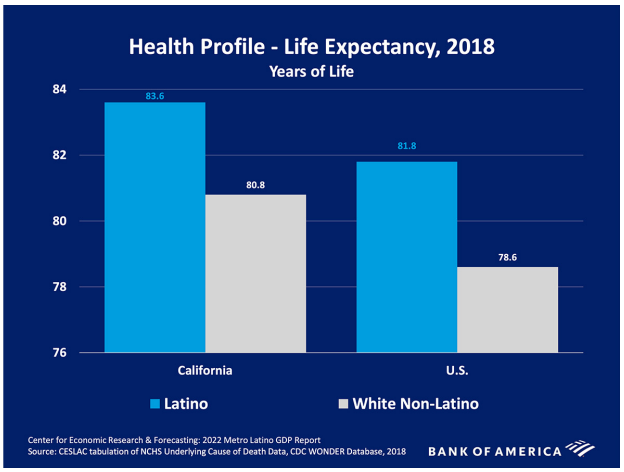
of Latino homeowners in California grew by 6.5 percent. During those same years, homeownership among Non-Latinos shrank by 2.3 percent.





Latinos in California also boast stronger health outcomes than their non-Latino counterparts. In the United States in 2018, the top causes of death were heart disease, cancer, unintentional injuries, chronic lower respiratory disease and stroke. In California, the Latino age-adjusted mortality rates for all top five causes of death are lower than Non-Hispanic White rates. Latino rates range from approximately 8 to 60 percent lower. California Latinos' age-adjusted mortality rate is 25 percent lower than the state's White Non-Latinos for cancer and 30 percent lower for heart disease. California Latinos also enjoy greater longevity, with a life expectancy that is nearly three years longer than Non-Hispanic Whites (83.6 years compared to 80.8).





The family values, hard work, and strong health profile of Latinos in California and in the U.S. are a tremendous source of economic vitality.

Metro Latino GDP: Silicon Valley

The Silicon Valley is neither a federally- nor state-designated Metropolitan Statistical Area (MSA). For the purpose of this report, the Silicon Valley Metro Area is defined as the combination of San Mateo and Santa Clara Counties. This definition is distinct from the federally-designated "San Jose MSA," which is defined as Santa Clara and San Benito Counties. We believe that the Silicon Valley, as we have defined it, is aligned with the common understanding of the geographic area represented by that iconic name and is also the correct area of interest for economic analysis.

Together, San Mateo and Santa Clara Counties cover a total area of 2,048 square miles and are home to 2.7 million residents. As defined here, Silicon Valley represents the 5th largest metropolitan area in California and the 22nd largest in the United States. Silicon Valley is home to nearly 678,000 Latinos, representing 25 percent of the region's population. This makes Silicon Valley the nation's 19th largest metro area by Latino population. For comparison, the number of Latinos living in Silicon Valley is slightly larger than the 647,000 Latinos living in the Atlanta MSA and slightly smaller than the 680,000 living in the Denver MSA.

The Silicon Valley economy is unlike that of almost any comparable geography. The foundation of the Silicon Valley economy is the technology industry for which the region is named. Information & Technology accounts for over 24 percent of Silicon Valley's 2018 GDP. By comparison, Information & Technology accounts for just 9.4 percent of California GDP. Accompanying Technology is robust activity in other high-value added sectors of the Silicon Valley economy, such as Manufacturing, Financial Activities and Professional and Business Services. Together, these four sectors account for nearly 70 percent of all economic activity in Silicon Valley.

The Silicon Valley (San Mateo & Santa Clara Counties)
Average Annual Salary by Industry: 2018

Industry	Annual Salary
Information and Technology	$346,530
Durable and Non-Durable Manufacturing	$211,768
Financial Activities	$169,498
Professional and Business Services	$157,261
Construction	$89,767
Public Sector/Government	$79,943
Education and Health Services	$74,334
Trade, Transportation, and Utilities	$69,517
Natural Resources and Mining	$48,411
Personal/Repair/Maintenance Services	$47,495
Leisure and Hospitality Services	$32,339
All Industries	**$132,443**

Source: State of California Employment Development Department

Not surprisingly, these high value sectors produce high paying jobs. Each of the four leading sectors of the Silicon Valley economy have average annual salaries well above $100,000. Professional and Business Services has an average salary of more than $150,000, while Financial Activities has an average salary of nearly $170,000. Manufacturing boasts an average of more than $200,000, and Information and Technology has an astonish average salary of nearly $350,000 per year. It is

noteworthy and auspicious for the Silicon Valley economy that an outsized share of its workforce is employed in high-paying industries.

Silicon Valley's high incomes are accompanied by extraordinary home prices. In 2018, the median single-family home price was $1.32 million in Santa Clara County and $1.58 million in San Mateo County. Silicon Valley's housing affordability is poor relative to almost anywhere. Whereas 54 percent of Americans and 28 percent of Californians can afford the median home in their respective geography, only 16 percent of Silicon Valley residents can afford the region's median home. This stunningly-low housing affordability is an important part of the story of the Silicon Valley economy and, as discussed later in this report, explains important differences between the economic contribution of Latinos living in Silicon Valley and that of Latinos living in nearly every other Metro Area in the nation.

The 2018 Silicon Valley Latino GDP is $56.2 billion, larger than the entire economy of states like Arkansas or South Dakota and nearly as large as North Dakota. The largest component of the Silicon Valley Latino GDP is personal consumption. Latino consumption in Silicon Valley totaled $44.3 billion in 2018, representing a consumption market larger than the entire economy of the state of Wyoming or Vermont.

Silicon Valley's top five 2018 Latino GDP sectors are: Professional & Business Services ($7.7 billion), Information & Technology ($7.3 billion), Durable Goods Manufacturing ($6.4 billion), Non-Durable Goods Manufacturing ($5.5 billion), and Construction ($4.4 billion). All five are among Silicon Valley's six highest paying sectors.

Silicon Valley: Gross Domestic Product

	Valley Latino GDP by Industry *billions of dollars*	***Valleywide GDP*** by Industry *billions of dollars*
Agricultural/Natural Resources	0.3	0.4
Mining/Quarrying	0.0	0.2
Construction	4.4	11.1
Durables Manufacturing	6.4	69.9
Non-Durables Manufacturing	5.5	25.5
Wholesale Trade	2.3	13.8
Retail Trade	1.9	15.2
Transportation/Warehousing/Utilities	3.2	11.9
Information/Technology	7.3	107.5
Finance/Insurance/Real Estate	3.4	56.3
Professional/Business Services	7.7	76.8
Education/Healthcare/Social Assistance	4.1	24.7
Leisure/Hospitality	4.0	10.4
Personal/Repair/Maintenance Svcs	1.5	4.5
Government Services	4.2	17.5
Total All Industries	**56.2**	**445.7**

Sources: U.S. Bureau of Economic Analysis, Cal Lutheran University-CERF

Silicon Valley's Latino economy is highly diversified. Strikingly, eight different industry sectors account for out-sized shares of Silicon Valley's Latino GDP. For example, while Non-Durable Goods Manufacturing accounts for only 5.7 percent of the overall Silicon Valley GDP, it accounts for 9.8

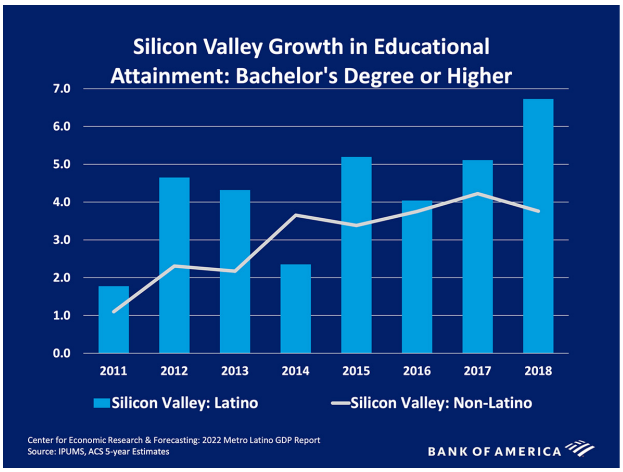
percent of Silicon Valley's Latino GDP. While Construction accounts for only 2.5 percent of the overall Silicon Valley GDP, it accounts for 7.8 percent of the Silicon Valley's Latino GDP. Six other industry sectors account for a substantially larger share of the Silicon Valley Latino GDP than the industry's corresponding share of the broader Metro Area GDP. These include Wholesale Trade, Transportation & Warehousing, Education & Healthcare, Leisure & Hospitality, Personal & repair Services, and Government. In this way, Silicon Valley's Latino economy is less concentrated and more diverse than the broader regional economy. Because of this diversification, the Latino segment of the economy provides a broad foundation of support for the Silicon Valley economy.

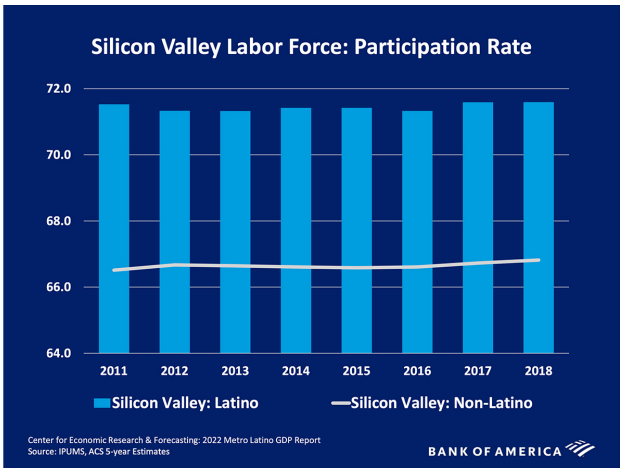
Silicon Valley: Gross Domestic Product

	Valley Latino GDP Industry Share *percent*	***Valleywide GDP*** Industry Share *percent*
Agricultural/Natural Resources	0.5	0.1
Mining/Quarrying	0.0	0.0
Construction	7.8	2.5
Durables Manufacturing	11.3	15.7
Non-Durables Manufacturing	9.8	5.7
Wholesale Trade	4.0	3.1
Retail Trade	3.3	3.4
Transportation/Warehousing/Utilities	5.7	2.7
Information/Technology	13.1	24.1
Finance/Insurance/Real Estate	6.1	12.6
Professional/Business Services	13.8	17.2
Education/Healthcare/Social Assistance	7.3	5.6
Leisure/Hospitality	7.2	2.3
Personal/Repair/Maintenance Svcs	2.6	1.0
Government Services	7.4	3.9
Total All Industries	**100**	**100**

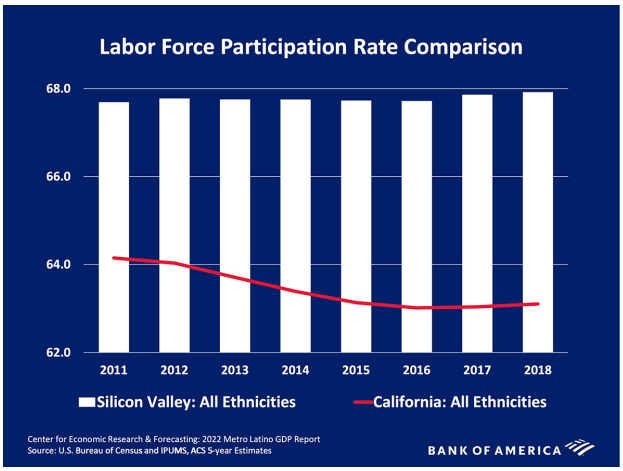
Sources: U.S. Bureau of Economic Analysis, Cal Lutheran University-CERF

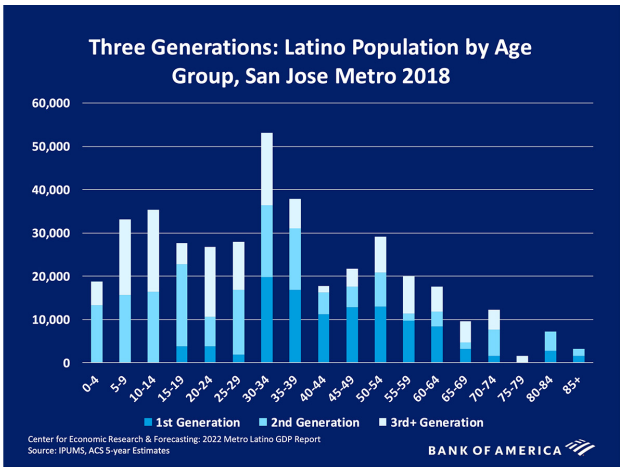
As with larger geographies, the economic contribution of Latinos in Silicon Valley is driven by rapid gains in human capital and a strong work ethic. From 2010 to 2018, the number of Latinos with a bachelor's degree grew at a rate nearly 1.5 times faster than that of Silicon Valley Non-Latinos. Over those same years, Silicon Valley Latinos' labor force participation rate was an average of 4.8 percentage points higher than Non-Latinos'. This Latino labor force participation premium has been remarkably steady, ranging from 4.7 to 5.0 during the eight years that we analyze.





Silicon Valley Latinos' labor force participation premium is especially noteworthy given that labor force participation for all ethnicities is considerably higher in Silicon Valley than in the state, more broadly. From 2010 to 2018 the all-ethnicities labor force participation rate increased from 67.5 percent to 67.9 percent in the Silicon Valley. Over the same period, California's all-ethnicities labor force participation rate decreased from 64.2 to 63.1.





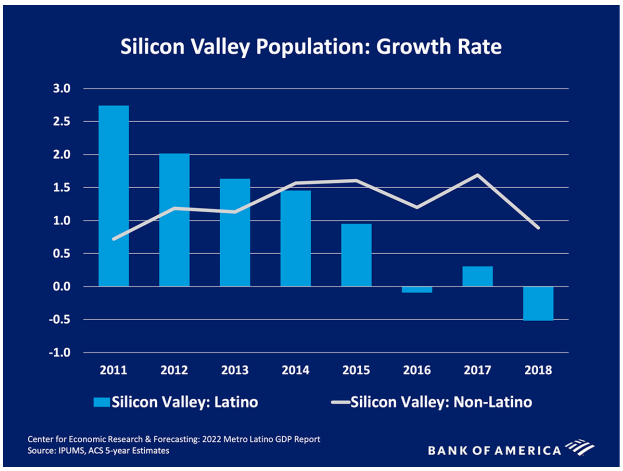
Silicon Valley's Latino workers are younger on average than their Non-Latino counterparts. In the Silicon Valley, Latinos coming of age and entering the labor force are also overwhelmingly second- and third-generation Americans. These children and grandchildren of immigrants are combining the extraordinary and selfless work ethic of their elders with rapid educational attainment to boost not just Latino GDP but overall GDP growth in Silicon Valley, the state and the nation.

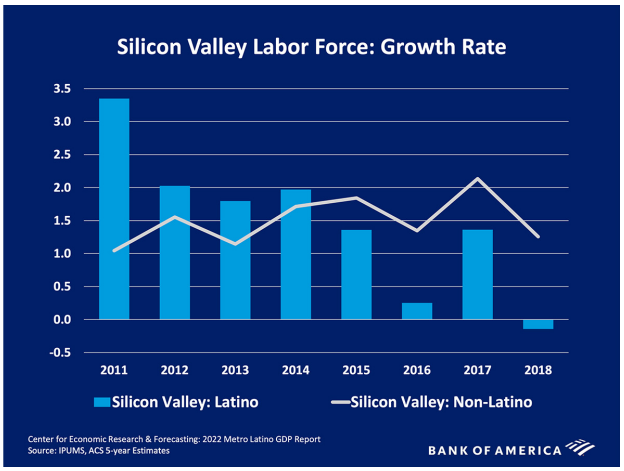
While the story of the economic contribution of Silicon Valley Latinos, to this point, is consistent with that which is detailed in each of the geographies already discussed and in previous Metro Latino GDP reports[4], it is when we begin to examine population and labor force growth that the story in Silicon Valley begins to diverge in meaningful ways from the story familiar to so many other Metro Areas around the country. In addition, there are essentially two different episodes of

[4] To compare each of the Metro Areas currently analyzed and reported in separate Bank of America Metro Latino GDP Reports, please visit: https://www.clucerf.org/2022-metro-latino-gdp/

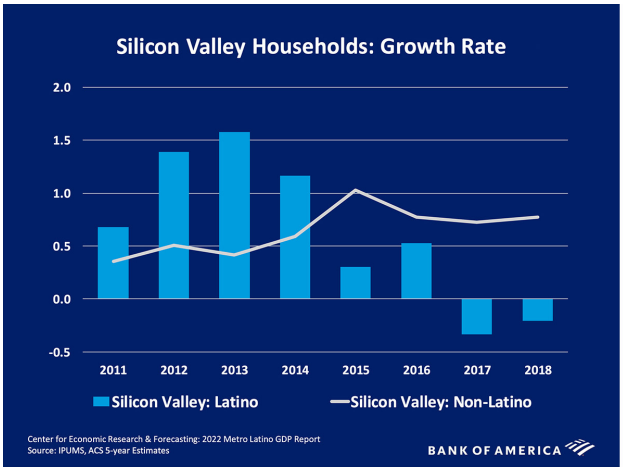
economic history worth noting in Silicon Valley, one from 2010 to 2015 and one from 2015 to 2018. From 2010 to 2015, Latinos made strong and consistent contributions to Silicon Valley's population and labor force, just as they did in the other geographies discussed earlier in this report. During these years, Silicon Valley's Latino population grew at a rate 43 percent faster than that of Non-Latinos. From 2010 to 2015, the number of Latino's in the Silicon Valley's labor force grew at a rate 46 percent faster than Non-Latinos.

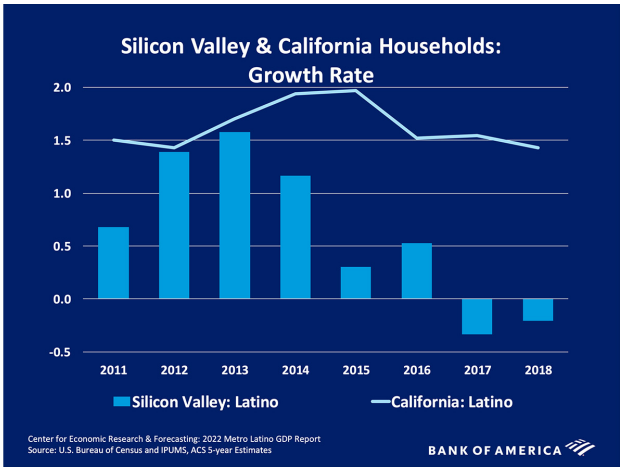
The data exhibit an apparent structural break in 2015. From 2015 to 2018, the Latino population of Silicon Valley was essentially flat while the Non-Latino population increased by 3.8 percent. From 2015 to 2018, the Latino labor force grew only 1.5 percent while the Non-Latino labor force in Silicon Valley grew 4.8 percent.





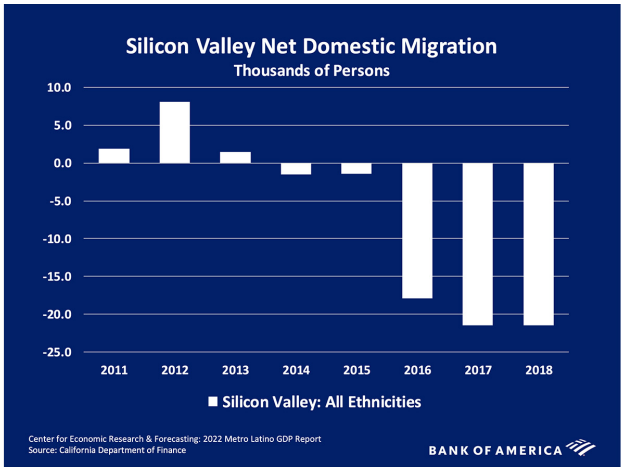
Latino household formation shows a similar pattern, slowing significantly for Latinos in 2015 while continuing to trend upward for Non-Latinos. From 2010 to 2015, the number of Latino Households in Silicon Valley grew at a rate 78 percent faster than Non-Latino Households. From 2015 to 2018, the number of Latino households in Silicon Valley was essentially unchanged. Meanwhile, the number of Non-Latino Households continued to grow, increasing by 2.3 percent.





The structural break seen in Silicon Valley Latino population, labor force and household formation data in 2015 is not evident in other Metro Areas or in the State of California at large. Directly

comparing Silicon Valley Latino and California Latino household formation is revealing. California Latino household formation was fairly steady over the entire period from 2010 to 2018, ranging from a low of 1.43 percent growth to a high of 1.97 percent. By comparison, household formation among Silicon Valley Latinos declined from a high of 1.58 percent in 2013 to a low of -0.33 percent in 2017. Silicon Valley Latino household formation continued to decline in 2018.



One other indicator of the structural break in the Silicon Valley economy is the region's net domestic migration data. Whereas the flow of people into Silicon Valley was fairly balanced by the flow of people out for a period of five years, in 2016 net migration turned strongly negative. In that year, 17,937 more people left Silicon Valley for another region in the United States than came to Silicon Valley from another region. The net exodus accelerated to more than 21,000 people per year in each of 2017 and 2018. Although net domestic migration data are not broken out by ethnicity, because Silicon Valley's Latino population growth rate turned negative in 2016 while Non-Latino population growth remained positive and steady, it is reasonable to assume that Latinos account for an outsized share of Silicon Valley's exiles.

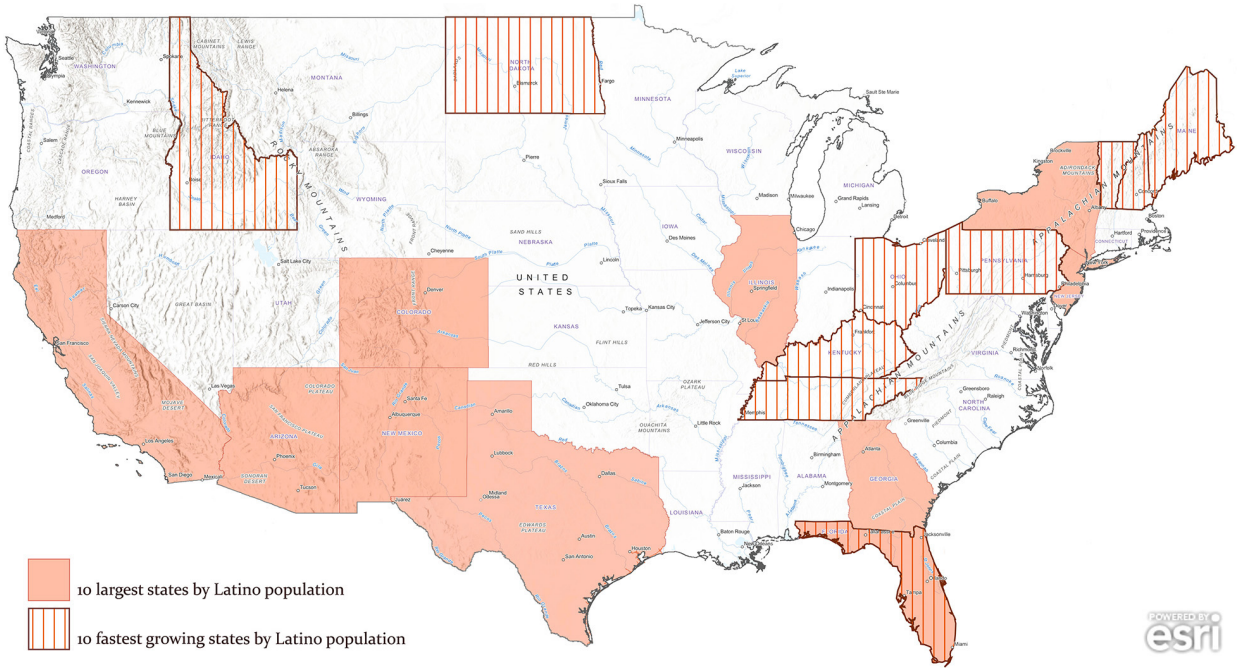
The structural break in 2015 and the decline in the growth of Silicon Valley's Latino population and labor force has important implications. In every geography that we have examined, Latinos are drivers of economic growth and an important source of resilience for the broader economy. In Silicon Valley from 2010 to 2018, Latino educational attainment and labor force participation data bear the very same hallmarks exhibited in comparable geographies. Silicon Valley Latino population, labor force, and household formation data reinforce this story for the period 2010 to 2015. The structural break which appears to have begun between 2015 and 2016 implies that, while Latino gains in educational attainment and Latino work ethic still contribute mightily to the Silicon Valley economy, the region is foregoing the additional demographic force multiplier provided by strong and consistent contributions of Latinos to the region's population and labor force. In this way, Silicon Valley is losing out on the even greater economic contribution that Latinos are making in comparable (and in some cases, nearby) geographies.

The Geography of the Latino GDP

Seeing the dramatic economic impact of Latinos living in Silicon Valley and the state of California more broadly, one might be misled to think that this extraordinary impact must be concentrated within a narrow geographic region. In fact, the dramatic economic contributions of Latinos documented in this report are merely examples of a nationwide phenomenon.

As we have noted for years, the story of the dramatic economic contribution of Latinos in the U.S. is foremost a story of extraordinary growth. The largest states by Latino population, in many instances, are adding the largest numbers of Latinos on an annual basis. In terms of people added, the fastest growing Latino populations are Texas, California and Florida. Texas added 852 thousand Latinos from 2015 to 2019. Florida added 700 thousand, and California added 390 thousand[5]. But ranked by percentage growth, we see that the fastest growing state Latino populations are spread far and wide across the United States. Comparing all 50 states, the three fastest growing states by Latino population are New Hampshire, Vermont and North Dakota. These three, along with Tennessee and Kentucky have Latino populations which grew 15 percent or more between 2015 and 2019. Of the ten fastest growing states by Latino population, only Florida (the ninth fastest growing) is among the 10 largest states by Latino population.

Largest & Fastest Growing States by Latino Population



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With the exception of Florida, the major hotspots for the growth of Latino population and thus the growth of the Latino GDP are *outside* of the 10 states highlighted in this report. Thus, Latinos will continue to drive economic growth and be a source of economic resilience in places like California, Arizona and Texas. But the biggest impact of Latinos in the years ahead is likely to be seen in places less obvious, places like Idaho, North Dakota, Ohio and Tennessee.

[5] U.S. Bureau of Census, ACS 1-year Estimates

Methodology

The starting point for the MSA-specific Latino GDP estimates in this report is the U.S. Latino GDP calculations undertaken by Hamilton, Fienup, Hayes-Bautista, and Hsu in the *LDC U.S. Latino GDP Report* (Hamilton et al. 2019, 2020, 2021b) and the State Latino GDP calculations undertaken by the same authors in the *Bank of America State Latino GDP Report* (Hamilton et al. 2021a). The U.S. calculations are based on publicly available national income and product accounts (NIPA) data as well as a wide set of nation-wide measures of Latino-specific demographic, housing, labor market, and other economic activities. The state-specific Latino GDP calculations start with the U.S. Latino GDP estimates and add state-level income and product account data, along with a wide set of state-specific measures of Latino demographics, housing, and labor market activity. Likewise, the MSA-specific Latino calculations start with the corresponding State Latino GDP estimates and utilize MSA-level income and product account data along with Latino specific measures of demographics, and housing market and labor market activities.

For national, state and MSA Latino GDP, we compute Latino versions of seven major expenditure components across many commodity definitions of economic activity. The level of detail includes 71 categories of commodities for the U.S. analysis. Those categories are aggregated into 21 broader commodity categories for the state- and aggregated into 15 categories for the MSA-level analyses.[6] Our analysis requires detailed data from the U.S. Bureau of Economic analysis on GDP, income, expenditure, employment, and prices across all of the states and the nation. We also utilize the U.S. Input-Output (I-O) table, the foundation for the national income accounting system that produces GDP breakouts by expenditure type, income type, and industry sector. This effort also requires data on economic and demographic activity broken out by ethnicity, so that we can compute Latino shares of expenditures at a detailed industrial sector level. The Latino-specific data are sourced from the American Community Survey (BOC-ACS), integrated public use microdata series (BOC-UMN-IPUMS), the American Housing Survey (BOC-AHS), the Current Population Survey (BOC-CPS), the Population Estimates program (BOC-POPEST), the Housing Vacancy Survey (BOC-HVS), and the Consumer Expenditure Survey (BLS-CEX). The Latino GDP is calculated as the sum of Latino-specific measures of the seven major expenditure categories.

To compute the industry breakdowns of Latino GDP, for the MSAs, states and nation, we utilize BEA measures of income by type for all ethnicities, along with IPUMS data on Latino income by type. These data provide a way to calculate Latino-specific versions of three major income categories across 21 industries. The sum of these major income categories provides the industry breakdown of Latino GDP.

As with standard GDP estimates by the BEA, our Latino GDP estimates are based on a detailed bottom-up calculation. The Metro Latino measures can be decomposed to seven major expenditure components, and they can be split out into 15 separate industrial sectors. The seven expenditure categories are: Personal Consumption, Residential Investment, Nonresidential Investment, Change

[6] Commodities and industries both follow the NAICS classification scheme, but are conceptually different in that industries are the outputs of the production processes by sector, and commodities are the inputs to the production process by sector.

in Inventories, Exports, Imports, and Government Consumption and Investment. The 15 industrial sectors are provided in the following table:

Table 1: Latino GDP Industry Categories

Agriculture/Natural Resources
Mining/Quarrying
Construction
Durables Manufacturing
Non-Durables Manufacturing
Wholesale Trade
Retail Trade
Transportation/Warehousing/Utilities
Information/Technology
Finance/Insurance/Real Estate
Professional/Business Services
Education/Healthcare/Social Assistance
Leisure/Hospitality
Personal/Repair/Maintenance Services
Government Services

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