



Community-Based Organizations Working Group

Item: **7**

July 16, 2020

Action: **Discussion**

What We Are Learning from COVID-19 and How It Could Impact Transportation Planning in the San Diego Region

Overview

On April 26, 2019, staff introduced the 5 Big Moves as key strategies for developing a transportation system that is equitable and safe, provides convenient and accessible travel choices, and meets state and federal requirements for social equity, climate and air quality, and the environment. Since then, staff has been developing a data-driven vision for the 2021 Regional Plan under the 5 Big Moves framework.

In March 2020, an unprecedented global pandemic forced governments to put in place stay home orders to protect the public and reduce the spread of disease. The abrupt closure of communities has had widespread impacts on the economy and public well-being. SANDAG staff will share research and data on regional economic and transportation impacts of COVID-19. This presentation aims to inform policymakers on key findings for consideration as we move forward with the development of the 2021 Regional Plan.

Key Considerations

Socio-Economic Impacts of COVID-19

Impacts of COVID-19 were felt throughout the San Diego region. Tourism, general retail, and food and beverage were among the industries most affected. Taxable retail sales were down approximately 35% in May. With recent analyses by SANDAG staff, COVID-19 has revealed immense disparities across the region with low-income, Black, and Hispanic communities hit the hardest by both the health and economic impacts of the pandemic. Nearly half of Black (45%) and Hispanic (42%) residents live in ZIP codes that have higher than average COVID-19 cases and higher than average unemployment rates. Black and Hispanic workers also account for a larger portion of essential front-line workers (Attachment 1).

Public Transit and Traffic Impacts of COVID-19

COVID-19 drastically changed travel behavior. Public transit ridership dropped sharply reaching its lowest level in April with a 70% reduction in ridership compared to the same period in 2019. Ridership started to recover as stay home orders eased, by the end of May, ridership across all regional bus and rail services was up by 12% from April.

Many low-income and minority commuters continued to depend on public transit as their primary mode of transportation. Twenty percent of those taking public transit to work do not have access to a personal vehicle, they also experience longer commute times. The median travel time to work via transit is 51 minutes, which is roughly double the commute time of those driving to work.



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Of the 3,783 residents in the region that responded to a regional travel survey conducted in June 2020, 42% took transit prior to COVID-19 and reported that they will return to transit in the future. Another 18% did not use transit before the pandemic but stated they would be likely to use transit in the future¹.

Freeway traffic levels also fell as a result of the stay home orders. Traffic volumes and vehicle miles traveled (VMT) were at their lowest in April with 50% fewer vehicles on the road than during that same period in 2019. As restrictions started easing, traffic rebounded. By early July, traffic volumes were down by just 18% and VMT down by 22% from the same period in 2019. While personal travel decreased, 78% of residents participating in the regional travel survey indicated that online shopping and home delivery increased.

The reduction in driving led to a marked reduction in emissions from cars and trucks between mid-March and mid-April. According to the California Air Resources Board this translated to improved air quality (reduced ozone or smog, and to a lesser extent particulates). With the reopening of the economy, air pollution has returned to within the levels observed over the last five years.

Telework Trends

Telework and distance learning are reasons for the reduction in travel. Of the residents that responded to the regional travel survey and reported teleworking during the health crisis, 48% expect to continue teleworking at some level in the future.

A survey of 137 employers in the San Diego region was also conducted from March 30, 2020, through June 19, 2020. Just over half of the surveyed employers offered telework (55%), of these employers, 26% stated that they will continue offering telework. When asked what percent of their workforce would be eligible to telework, 7% said their entire workforce. Of those companies who said they would offer telecommuting in the future only 9% said they would offer it full-time.

While telework has the potential to relieve some peak period congestion, roughly 61% of all occupations in the San Diego region are not conducive to working from home. In the region, 64% of occupations are considered essential jobs, and of those essential jobs fewer than 42% are conducive to working from home. Low-income and minority workers are less likely to have the option to work from home. Higher paying jobs in industries like financial and professional services, are most likely to telework.

Telework, distance learning, and virtual healthcare services rely on broadband connectivity and home internet access. COVID-19 shed light on the digital divide in our region with 23% of low-income households not benefitting from a broadband subscription and 20 to 40% of students in many local districts lacking home internet access. Closing the digital divide will be an important aspect of transportation planning to ensure that everyone in the region benefits from improvements to transportation technology and app enabled transportation services.

Active Transportation Trends

Biking and walking increased as a result of the stay home order. Bicycling trips increased on all eight corridors where SANDAG collects bike volume data. Bicycle volumes were at their highest in May with 91% more bikes being counted on these corridors in 2020 than 2019. The regional travel survey also showed an increase in walking and biking; 50% reported walking more and 14% biking more for both recreation, travel to work, and shopping and errands. Of those who walked and biked more during the health crisis, more than four out

¹ The Regional Travel Survey was sent to nearly 17,000 households that participated in the 2017 San Diego Regional Transportation Survey and agreed to be contacted again. This was not a random sample and the responses shared may not generalize to the population overall. However, the data provides a glimpse into travel choices being made by residents in the region which is important insight as we move forward with our planning for the 2021 Regional Plan.



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of five stated they will continue walking (82%) and biking (85%) in the future. To support jurisdictions with providing safe space for walking and biking during the health crisis, SANDAG provided funding and support for 11 jurisdictions to implement Shared Street pilots.

Next Steps

Staff will continue to monitor and report on the social, economic, and transportation impacts associated with COVID-19. These findings are informing the 2021 Regional Plan vision which seeks to meet regulatory requirements and create equal access to jobs, education, healthcare, and other community resources. The 2021 Regional Plan vision is expected to be presented to the Transportation, Regional Planning, and Borders Committees on August 7, 2020, and to the Board of Directors on August 14, 2020.

Ray Traynor, Chief of Planning and Innovation

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Attachment: 1. COVID-19 Impact on the San Diego Regional Economy, June 16, 2020, update

COVID-19 Impact on the San Diego Region: Black and Hispanic Communities Hardest Hit

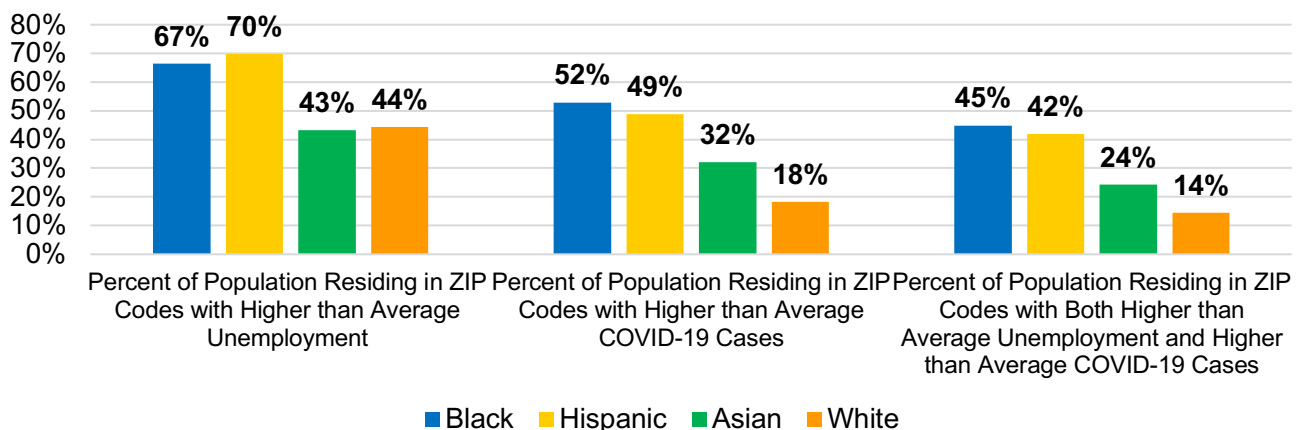
Analysis completed by the SANDAG Data Science and Analytics team finds that as the COVID-19 pandemic shattered the San Diego regional labor market overall, the region’s Black and Hispanic communities were most impacted. Blacks and Hispanics account for a significant portion of essential workers who continued to go to work, and they account for a significant portion of those who became unemployed due to the pandemic. This report aims to inform policymakers about the disproportionate impact to Black and Hispanic communities in the labor market and to help decision makers develop equity-focused relief and recovery strategies.

The San Diego region is suffering from a devastating health and economic crisis due to the pandemic. During the past three months, mobility has been restricted (including our international land border crossings that normally register over 150,000 people entering from Mexico), and businesses and schools have shut down. The ensuing economic crisis will have long-lasting effects as businesses struggle to regain customers and as many businesses and consumers experience significant financial uncertainty. As of June 7, 2020, over 8,600 San Diegans have been infected with COVID-19 and 430,000 have lost their jobs.

All communities have been severely impacted by the pandemic and subsequent economic crisis. It is the Black and Hispanic communities that have been disproportionately impacted by COVID-19 and have been the hardest hit as explained in the bullets below. This is in sharp contrast to White and Asian communities where respectively only 14% and 24% live in the high unemployment and COVID-19 case areas.

- More than two-thirds of Black (67%) and Hispanic (70%) residents live in ZIP codes with higher than average unemployment rates
- Approximately half of Black (52%) and Hispanic (49%) residents live in ZIP codes with higher than average COVID-19 cases
- Nearly half of Black (45%) and Hispanic (42%) residents live in ZIP codes that have higher than average COVID-19 cases and higher than average unemployment rates
- When compared to the White population, Black and Hispanic populations are four times as likely to live in areas that have been impacted by COVID-19 and unemployment. When compared to the Asian population, they are twice as likely to reside in areas with high COVID-19 cases, and high unemployment

Figure 1: Impacts by Ethnicity and ZIP Code



Source: SANDAG Annual Estimates 2019; Applied Geographic Solutions, Inc., Thousand Oaks, California; County of San Diego, Health and Human Services Agency

In the weeks since the stay home order was issued on March 19, the number of unemployed residents in the San Diego region is estimated to have reached about 430,000 workers for an unemployment rate of 28.5%. As the region slowly reopens, the data available continues to fluctuate.

The crisis has affected various sectors of the economy differently. Businesses in high-contact industries, such as restaurants, retail, transportation, and tourism, were impacted first while those working in frontline essential activities have been physically present at work during the stay home order amid public health risks.

In San Diego County, according to Census data, 33% of the population is Hispanic, 5% is Black, 12% is Asian, and 46% is White. Each ethnic group has been impacted differently by the crisis, depending on their respective share in the high-contact and essential sectors.

For instance:

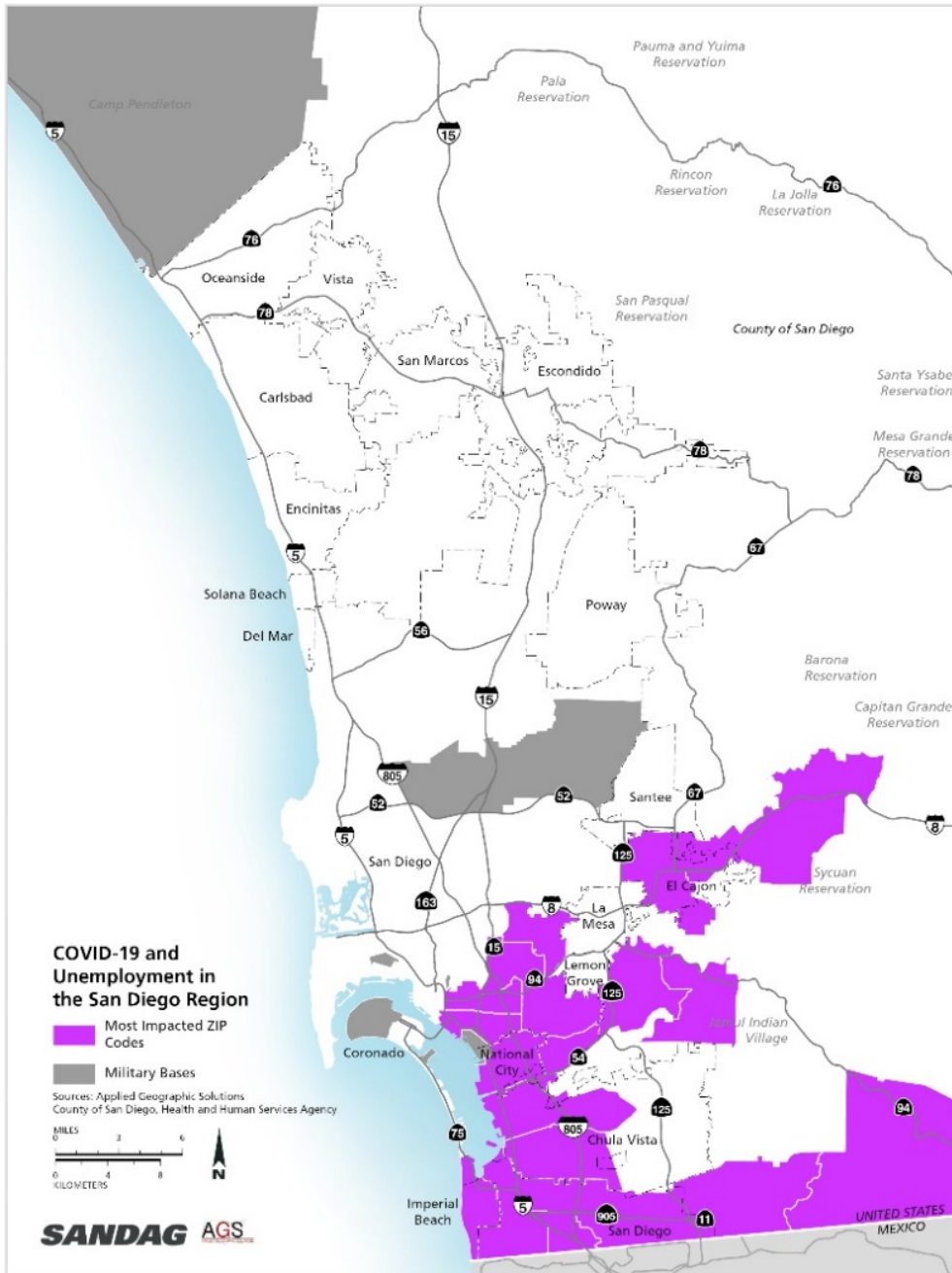
- Hispanic employees account for 32% of the overall workforce in the region but represent 46% of those working in the food service industry, and 37% of those working in the retail sector (excluding grocery and drugstore).¹ They are therefore overrepresented in these two sectors.
- Hispanic employees also make up the largest percentage of the essential workforce in building cleaning services (65%), grocery and drug stores (44%), and childcare and social services (39%).
- Black employees account for nearly 5% of the overall workforce in the region but represent a larger percentage of the essential workforce--more than 7% of the childcare and social services, 9% in trucking, warehouse, and postal service, and nearly 20% of public transit workers.
- Asian employees account for about 12% of the overall workforce in the region but represent 22% of those working in the health care sector.
- White employees, which account for 48% of the region's workforce, account for only 40% of the pool of workers in high-contact and essential occupations.

Young workers have also been disproportionately affected by the crisis. While only 14% of workers in the region are age 16 to 24, 38% of the workers in the food service industry belong to that age group, and 22% are from retail.

Before the pandemic began, many of the ZIP Codes highlighted in Figure 2 on the next page reported household incomes of less than \$45,000 annually and had a relatively large share of families with children.

¹ SANDAG estimates based on Census Bureau ACS PUMS 5 Year 2014-2018 and the methodology by Hye Jin Rho, Hayley Brown, and Shawn Fremstad (2020) approach. See cepr.net/a-basic-demographic-profile-of-workers-in-frontline-industries/.

Figure 2: Hardest Hit ZIP Codes - Unemployment and COVID-19 Cases



As displayed in Figure 2, SANDAG analysis shows the pandemic has mostly affected residents in the southern part of the county.

This map shows the areas most affected, with both the highest unemployment rates *and* highest percentage of COVID-19 cases in the region.

ZIP codes most affected:

- 91910 (Chula Vista N)
- 91911 (Chula Vista S)
- 91917 (Dulzura)
- 91932 (Imperial Beach)
- 91950 (National City)
- 91977 (Spring Valley)
- 91978 (Rancho San Diego)
- 92020 (El Cajon)
- 92021 (El Cajon)
- 92102 (Golden Hill)
- 92105 (City Heights)
- 92113 (Logan Heights)
- 92114 (Encanto)
- 92115 (College)
- 92139 (Paradise Hills)
- 92154 (Nestor)
- 92173 (San Ysidro)

Source: Applied Geographic Solutions, Inc., Thousand Oaks, California, Weekly Release June 1, 2020; County of San Diego, Health and Human Services Agency.

Figure 3 helps to further break down this information.

The red lines represent the average percent of cases in the county (vertical line) and the average unemployment rates in the region (horizontal line). Each bubble represents an individual ZIP Code and the size of the bubble represents the relative size of the populations in each ZIP Code.

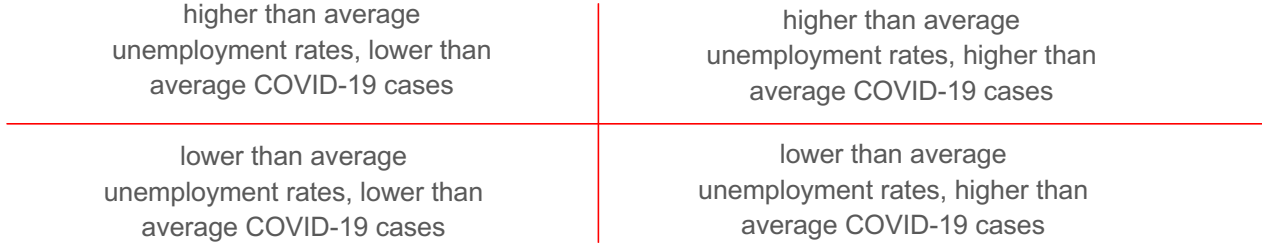
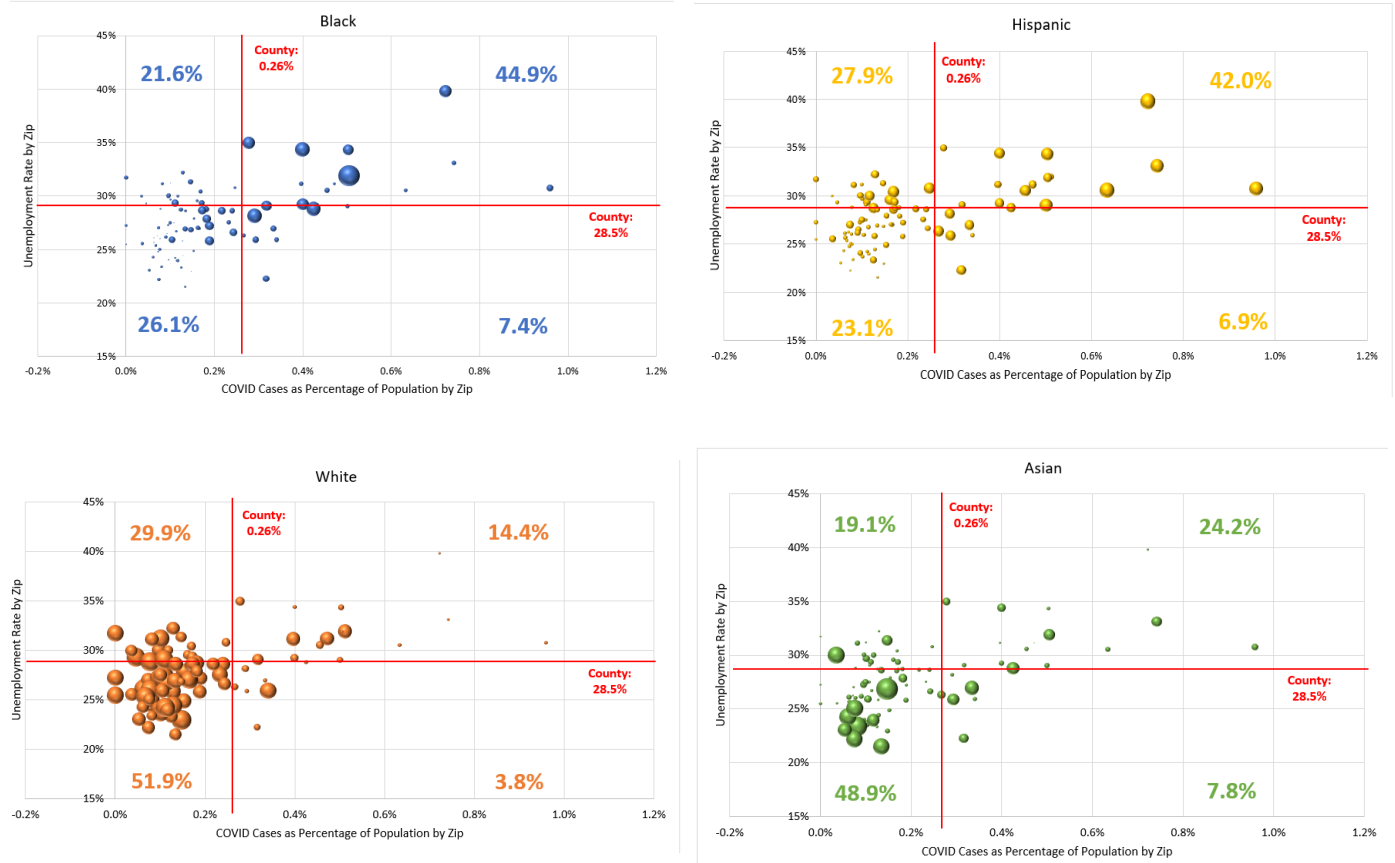


Figure 3: COVID-19 Cases and Estimated Unemployment by ZIP Code

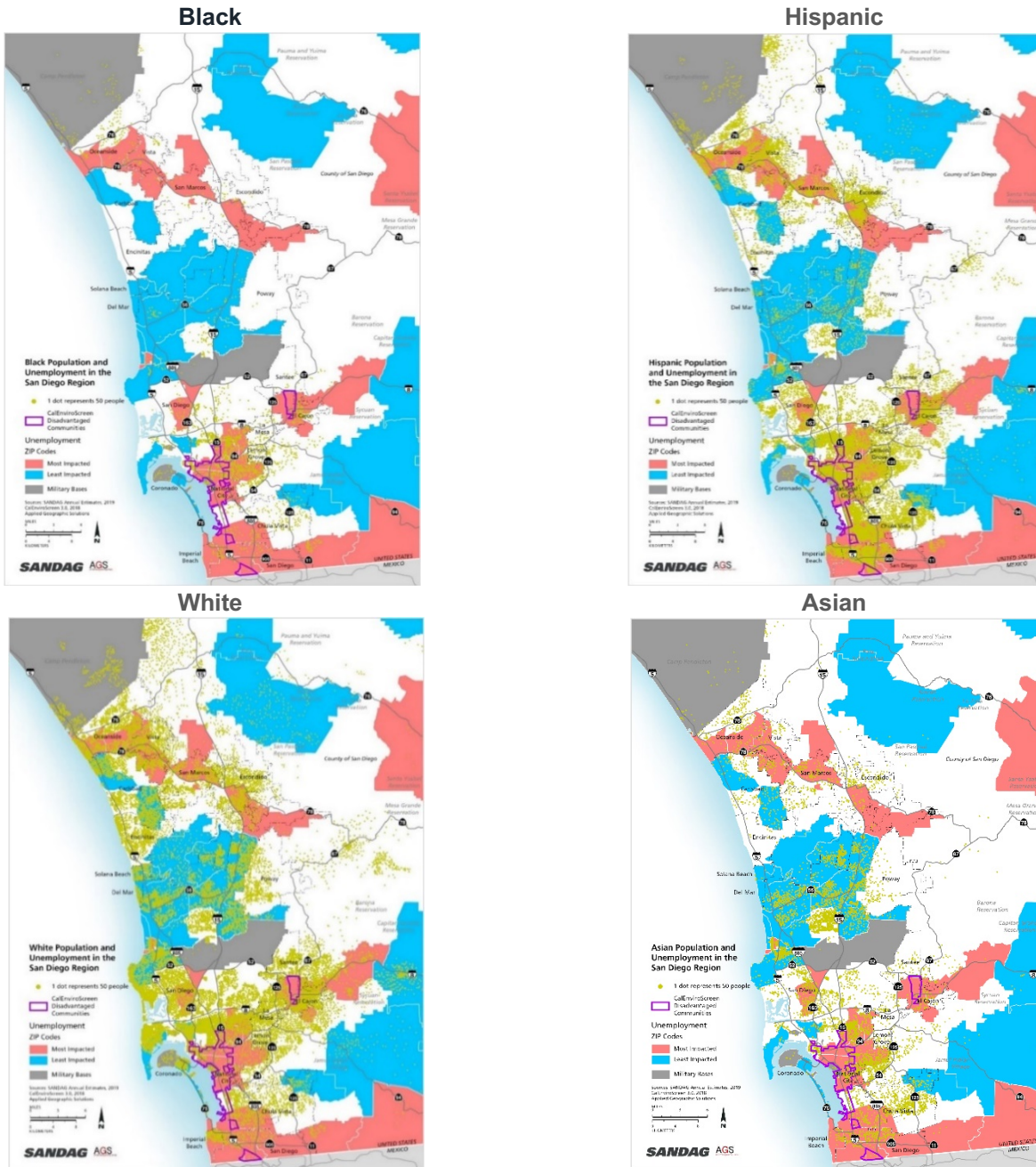


Source: SANDAG Annual Estimates 2019; Applied Geographic Solutions, Inc., Thousand Oaks, California, Weekly Release June 8, 2020; County of San Diego, Health and Human Services Agency, Public Health Services, Epidemiology and Immunization Services Branch, San Diego County COVID-19 Statistics by ZIP Code. See Appendix A.

Demographic Analysis: Where People Live

Like all large population centers, the San Diego region has areas where ethnic groups tend to live. Figure 4 illustrates the areas in the San Diego region that are the most and least affected by unemployment. The red areas on the maps represent the ZIP Codes (top 25%) with the highest unemployment rates in the region; the blue areas represent the ZIP Codes (bottom 25%) with the lowest unemployment rates; the purple boundaries represent census tracts that have been designated as disadvantaged communities by the California CalEnviroScreen tool. Each green dot represents 50 people.

Figure 4: Population and Unemployment in San Diego Region



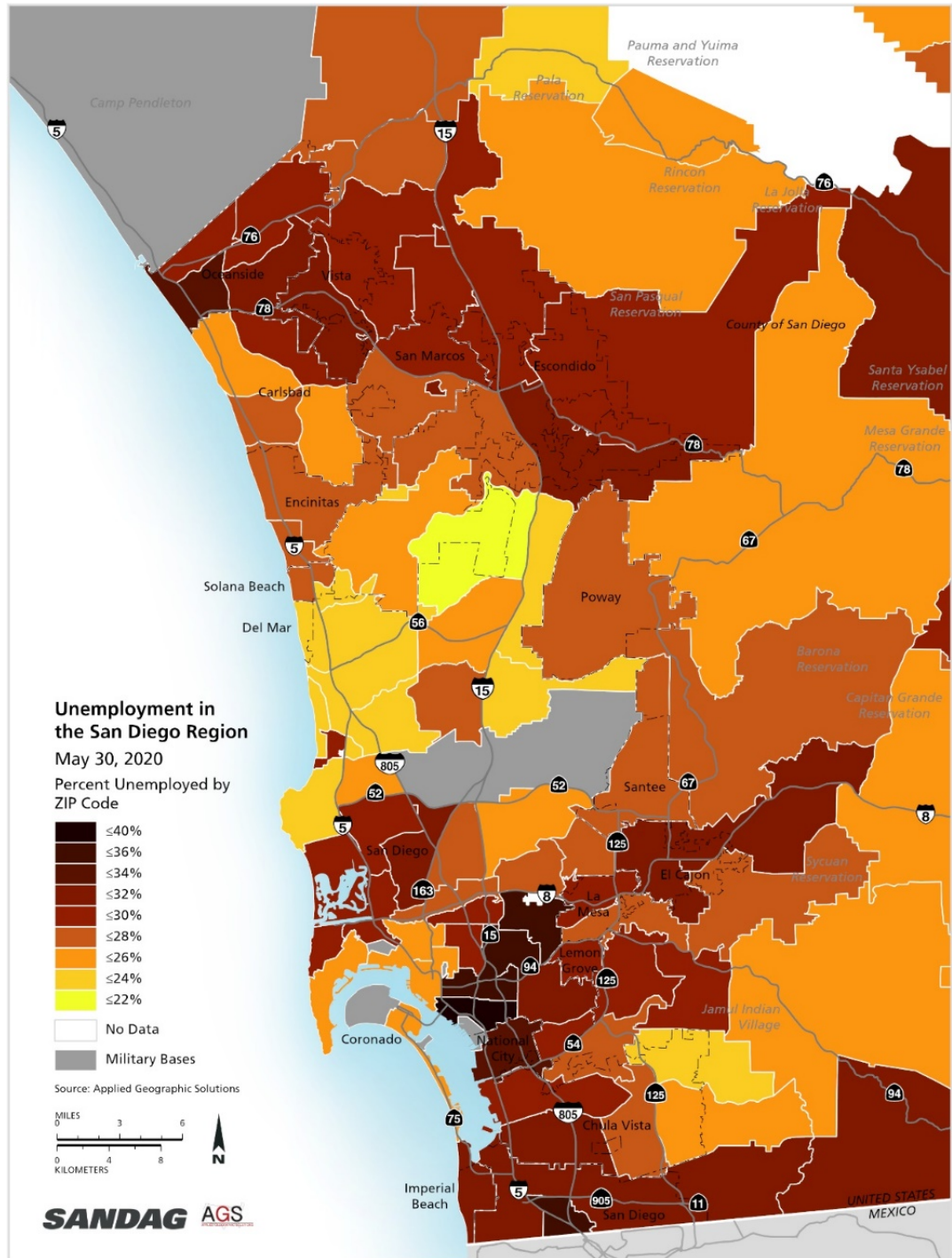
As the economy starts to reopen and people go back to work, unemployment rates will begin to improve. This should be reflected in the data released in the next few weeks.

As of May 30, the data does not yet reflect people returning to work in large numbers. The unemployment rate in the region remains high and is estimated to be 28.5%.

Though more businesses are allowed to reopen, it is still too soon to assess the magnitude of the economic impacts from this crisis. (see Appendix B)

Currently, there is still an average of 20,000 residents filing for unemployment every week. As of May 30, the region has an estimated 480,000 unemployed residents. Of the unemployed, nearly 430,000 lost their jobs after March 7, when the pandemic began.

Figure 5: Estimated Unemployment Rate by ZIP Code



Source: Applied Geographic Solutions, Inc., Thousand Oaks, California, Weekly Release June 8, 2020
 * These estimates were revised by AGS from the May 18, 2020 weekly release. See Appendix B.

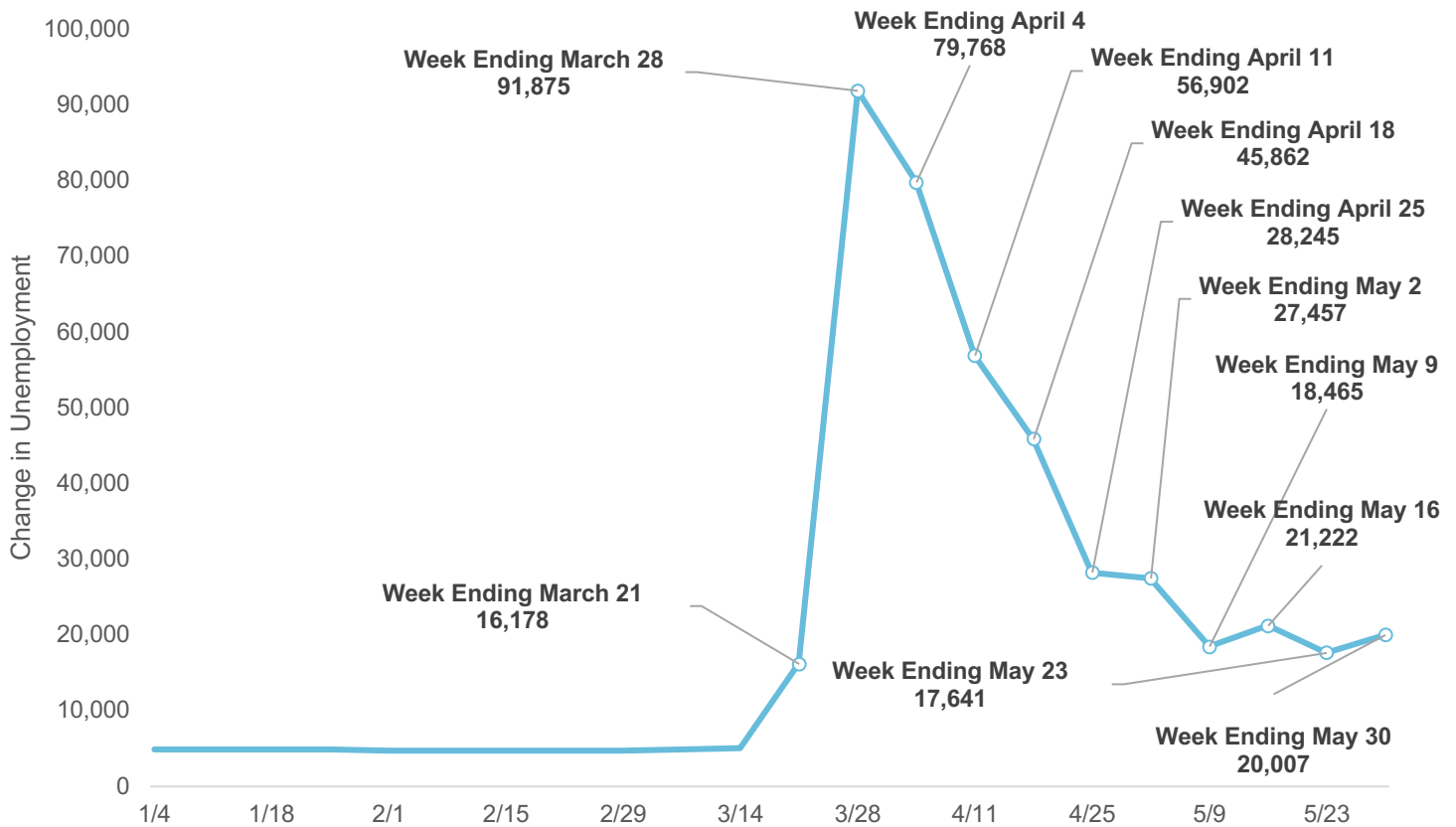
Measuring Unemployment During the Pandemic

The analysis in this report is based on unemployment estimates that continue to fluctuate during the COVID-19 pandemic. These estimates are essential for policy purposes but extremely challenging to produce in real-time due to lags in the official data publication.

Under normal circumstances, there is nearly a two-month lag in the publication of official statistics. This is typically not a problem, as historically, unemployment has not changed much from month to month. As reference, the largest previous unemployment increase in a single month for the San Diego Metropolitan Statistical Area (MSA) since 1990 was 1.4 percentage points in January 2000.

During the pandemic, the unemployment rate has changed drastically from week to week. The stay home order and business shutdowns pushed the unemployment rate to a historic high not seen since the Great Depression. Figure 6 represents the estimated unemployed workers in the region by week. By March 28, the estimated unemployed residents reached about 20 times pre-COVID-19 rates. From week to week, there was a gradual decline in the number of newly unemployed, and by the end of May, it remained four times higher than the annual average.

Figure 6: Estimated New Unemployed Workers in San Diego County



Source: Applied Geographic Solutions, Inc., Thousand Oaks, California, Weekly Release June 8, 2020*; California Employment Development Department (EDD), Claimants by County, January-March 2020

* These estimates were revised by AGS from the May 18, 2020 weekly release. See Appendix B.

Appendix A

The following information is intended to provide the methodology behind calculating ZIP Codes and associated demographics within the most and least impacted areas of the region. SANDAG utilized three sources for race/ethnicity analysis in the San Diego region.

Data sources:

1. SANDAG retrieved the San Diego County COVID-19 statistics by ZIP Code data from the County of San Diego Health and Human Services Agency, Public Health Services, Epidemiology and Immunization Services Branch. The number of COVID-19 cases are cumulative totals since the start of the stay home order to June 7, 2020. SANDAG calculated the rate of COVID-19 cases per person per ZIP Code and displayed this information on the x-axis. For example, in the ZIP Code 91911 (Chula Vista S), 0.63% of the population has a confirmed COVID-19 case.
2. Unemployment data by ZIP Code for the San Diego region come from the Applied Geographic Solutions, Inc. June 8, 2020 weekly release. More information on this dataset can be found in Appendix B. SANDAG used the May 30, 2020 unemployment rate by ZIP Code data on the y-axis.
3. The SANDAG 2019 Estimates are produced annually and include population and housing characteristics for small geographic areas. These estimates are controlled to the California Department of Finance January 1, 2019, jurisdiction-level estimates. The 2019 estimates were used to determine the percentage of each of the four race/ethnicities provided in the analyses (Asian, Black, Hispanic, White) of the total population by ZIP Code, which was graphed on the z-axis.

Using these datasets in combination, SANDAG created four “bubble” charts to determine which race/ethnicity was most and least impacted by the global pandemic and the current economic turbulence. The number of COVID-19 cases for the County of San Diego is 0.26% and is displayed as a red vertical line. The average unemployment rate for the region is 28.5% which is displayed as a red horizontal line. These lines create four quadrants on the chart.

The upper right quadrant reflects ZIP Codes that have higher rates of COVID-19 as a percentage of the population and have higher unemployment rates than the region. These ZIP Codes are considered the most impacted by the COVID-19 and unemployment crisis. The bottom left quadrant includes ZIP Codes that have both lower rates of COVID-19 as a percentage of the population and have lower unemployment rates than San Diego County, classifying these ZIP Codes as the least affected by the current crisis. The axis is the same for each race/ethnicity, while the size of the “bubbles,” representing the size of the population for each race/ethnicity, is the variable factor.

SANDAG used the SANDAG 2019 Estimates to determine the percentage of the total population each race/ethnicity within each of the four quadrants in the chart to compare which race/ethnicity was the most and least affected.

The 91 San Diego ZIP Codes that represent the urbanized areas of San Diego (the western one-third of the County) are taken into account in the analysis.

The table below ranks the most affected 34 ZIP Codes by the level of unemployment rate (highest is ranked 1) and the percent of COVID-19 cases (highest is ranked 1). The ZIP Codes displayed in red denote both above average unemployment rate and above average percentage of COVID-19 cases as identified in Figures 2 and 3.

ZIP Codes		Rank Unemployment rate (highest to lowest)	Rank COVID cases (highest % of the population to lowest)
92113	Logan Heights	1	4
92115	College	2	22
92105	City Heights	3	14
92102	Golden Hill	4	8
92173	San Ysidro	5	1
91950	National City	6	3
92054	Oceanside S	7	48
92020	El Cajon	8	6
92114	Encanto	9	7
92096	CSUSM	10	89
92111	Linda Vista	11	44
92070	Santa Ysabel	12	64
91917	Dulzura	13	10
92021	El Cajon	14	15
92081	Vista S	15	71
92025	Escondido S	16	24
92154	Nestor	17	2
91911	Chula Vista S	18	5
91932	Imperial Beach	19	11
92083	Vista W	20	35
92056	Oceanside E	21	67
92069	San Marcos N	22	53
92093	UCSD	23	88
92010	Carlsbad NE	24	62
92027	Escondido E	25	39
92057	Oceanside N	26	58
92058	Oceanside (Central)	27	34
92036	Julian	28	86
91977	Spring Valley	29	13
92109	Pacific/Mission Beach	30	59
91978	Rancho San Diego	31	18
91910	Chula Vista N	32	9
92107	Ocean Beach	33	74
92139	Paradise Hills	34	12

Appendix B

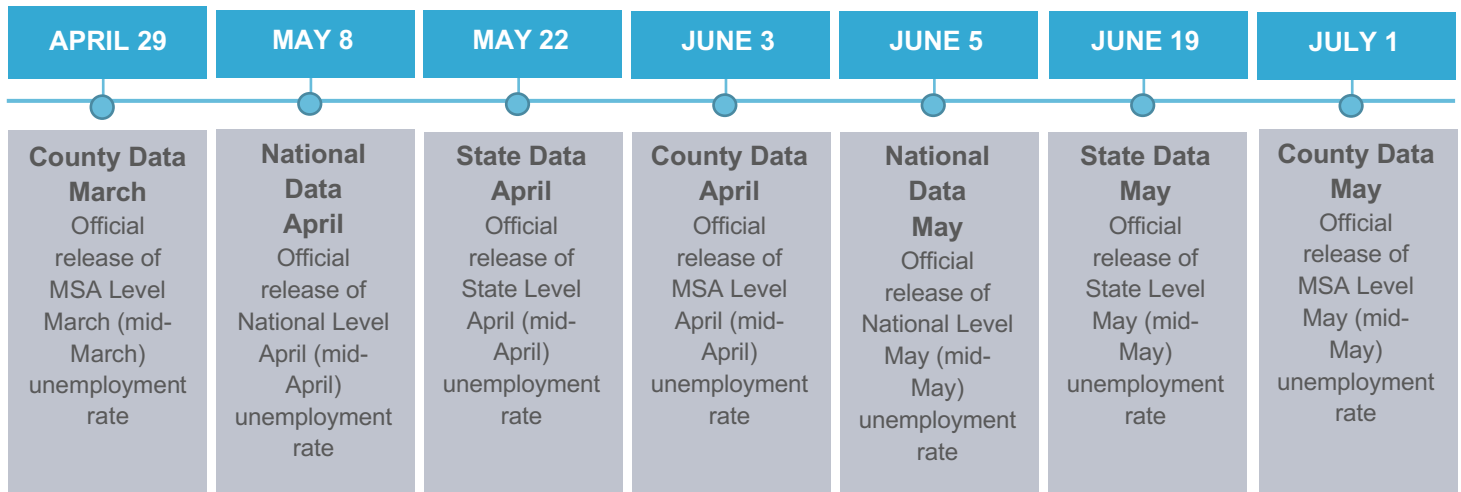
The following is intended to provide detailed information about unemployment data and how SANDAG utilized various sources for employment analyses of the San Diego region.

Unemployment Rate

- Measures percentage of those in the labor force who are not working but are actively looking for, and available to work.
- Data comes from monthly current population survey conducted by the Census and Bureau of Labor Statistics (BLS) in the second week of the month.
- Usually a two-month lag in publication of San Diego region data. The U.S. unemployment rate for May measured between May 10-16 was released on June 5. State unemployment data for May will be released on June 19. San Diego County data will be released on July 1. The BLS will apply seasonal adjustments to the San Diego County series in the weeks that follow.
- An additional challenge during the pandemic was presented with non-eligible share of workers (about 3% in May) recorded as employed but absent from work instead of being classified as furloughed.

As shown in Figure 7, the pre-COVID-19 unemployment rate for March (reflecting the situation just before mid-March and not adjusted for seasonality) was released on April 29. As of June 3, the latest official unemployment rate available for the county was 4.1%. On June 3, it was revised to 4.2% with the April unemployment rate of 15%. Overall unemployment increased by an unprecedented 10 percentage points in just one month.

Figure 7: Timeline of Unemployment Rate Data



Unemployment Insurance Claims

Weekly Claims for National and State Level

It is possible to get a weekly pulse on the U.S. and California labor markets using the weekly unemployment claims. Weekly unemployment claims consist of two series:

- Initial Claims - claims filed right after separation from an employer to request determination of basic eligibility for the unemployment insurance (UI) program. Initial claims are used as a leading economic indicator of labor market conditions in the country. UI Claims are released every Thursday for the week ending on the preceding Saturday. Initial claims for the U.S. and California for the week ending on May 30 were released on Thursday 28.
- Continued Claims/Insured Employment - a person who has already filed an initial claim and who has experienced a week of unemployment then files a continued claim to receive benefits for that week of unemployment. Continued claims measure the current number of insured unemployed workers filing for UI benefits. They are released on Thursday for the week ending on the Saturday before the preceding Saturday. Continued claims for the US and California for the week ending on May 30 were released on Thursday June 4.

Claims differ from the BLS unemployment data in several ways. The number of unemployed is usually higher than the number of people receiving unemployment insurance. Some do not apply, because they are not eligible. For instance, in January and February 2020, the BLS unemployment for California was 3.9%, while only 2.1% of the labor force received unemployment insurance. During the pandemic, unemployment insurance services were unable to quickly process claims, and some people were not even able to submit their claims due to the extraordinary load on unemployment claims centers throughout the country.

However, sometimes the number of insured workers can exceed the number of unemployed, as one can be eligible for unemployment insurance benefits while working on reduced hours and hence not be counted as unemployed. The CARES act has broadened eligibility conditions to receive unemployment benefits affecting the number of people receiving UI benefits by more than the number of people that the BLS usually counts as unemployed.

The divergence between the June 5 employment report (which showed a decline in the US unemployment rate from April to May) and the new weekly UI claims published the day before (which are still very high) show a fluctuation in underlying trends. Economists believe it will likely take a few months to get a clear idea of the magnitude of the overall hit to employment during the COVID-19 crisis.

AGS Estimates

In order to track the fast-moving unemployment data over the last two months at the county and ZIP Code levels, the SANDAG Data Science and Analytics team has relied on the unemployment estimates produced by AGS. AGS uses weekly claims to assess the level of unemployment at national and state levels and redistribute to the ZIP Codes based on the occupations, residence, and how the various sectors have been affected by the crisis. Estimates are revised with official unemployment rates for the Metropolitan Statistical Areas, and when national and state rates are published. For instance, the unemployment in the San Diego region has been revised down twice in recent weeks to ensure consistency with the official April unemployment data for San Diego and with the May national data.