County of Santa Clara

Office of the County Executive

County Government Center, East Wing Eleventh Floor – East Wing 70 West Hedding Street San Jose, California 95110



DATE: May 13, 2021

TO: Honorable Members of the Board of Supervisors

FROM: Jeffrey V. Smith, M.D., J.D., County Executive

SUBJECT: Vaccination Data within Census Tracts 5130 and 5116.08

At the May 4, 2021 meeting of the Board, Supervisor Simitian asked for an explanation of the apparently low vaccination rates in two north county census tracts. The two tracts incorporate the campus of Leland Stanford Junior University. A map of the area is attached for reference.

The "COVID-19 Data by Census Tract Maps" report on the County website includes population estimates and vaccination counts for each census tract within the county. Yesterday, the two tracts in question were reporting the following:

5116.08		5130	
Estimated Population 16 years and older (see data notes)	3,283	Estimated Population 16 years and older (see data notes)	9,175
Number of County Residents Ages 16 and Older with at least One Dose of COVID-19 Vaccine	830	Number of County Residents Ages 16 and Older with at least One Dose of COVID-19 Vaccine	4,278
Percent of County Residents Ages 16 and Older with at least One Dose of COVID-19 Vaccine	25	Percent of County Residents Ages 16 and Older with at least One Dose of COVID-19 Vaccine	47

Sources of the Resident Counts

To understand this data and its significance, it is first critical to know the sources of information that have been utilized. As with all data, there are limits to the insight that may be garnered from the facts.

The total population estimates reflect the best current information available from the Census Bureau. The "Estimated Population 16 years and older" counts come from the 2015-2019

Board of Supervisors: Mike Wasserman, Cindy Chavez, Otto Lee, Susan Ellenberg, S. Joseph Simitian County Executive: Jeffrey V. Smith

American Community Survey 5-Year Estimates (the 2020 data tables have not yet been released). ACS data is collected by the Census Bureau with "spot" surveys done monthly in between the 10-year actual Census. The numbers are estimates that are less accurate for census tracts with very mobile populations.

The number of residents who are counted as vaccinated is gleaned from the California Immunization Registry (CAIR2). The state mandates that every vaccine provider utilize CAIR2 to report identification information for individuals who are vaccinated. Vaccine recipients report their residence address and other identification information.

Nature of Residents in Relevant Census Tracts

Census tracts 5130 & 5116.08 contain only Stanford owned residences. All the residences are occupied by undergraduate and graduate students, with the minor exception of a small neighborhood of approximately 12 faculty homes (bordered by Searsville Rd., Santa Teresa Ln., Governor's Ave., and Los Arboles Ave.).

The following table lists some of the demographics of the 2 census tracts:

Census		
Tracts	5116.08	5130
Number of		
housing		
units	111	2795
Percentage		
of multi-		
units	91	91
Percentage		
of rental		
units	96	98
Median age		
of residents	20	23.6
Percentage		
who have		
moved since		
prior year	54.9	47.4

Analysis

At issue are the reported percentages of vaccinate residents living in these two census tracts. Many factors put the reliability of those percentages at risk. In this case, the numerator and denominator of

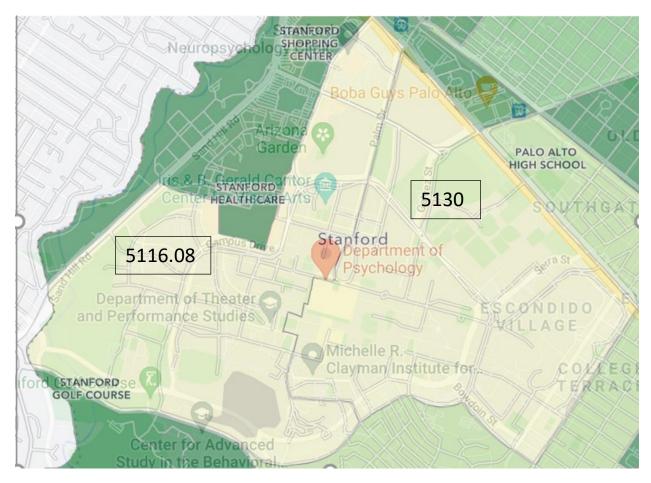
the percentage calculation have built in inaccuracies that would imply an artificially lower total percentage than if one could determine residency and vaccination status contemporaneously.

Student housing is, by its very nature, reflective of a transient lifestyle as individuals move frequently, have breaks in the academic year, and utilize multiple addresses at the same time (i.e., home, school, P.O. boxes, etc.). In the last year, that lifestyle has been disrupted even more by distance learning and closed student housing. The ACS Census data estimates cannot reliably account for these factors because of the way in which the estimates are developed. It is also important to note that the estimates were developed for a period ending in 2019. So, the denominator of the vaccination percentage is likely to be an overcount of actual student residents during 2020.

At the same time, it is likely that the numerator in the calculation reflects an undercount of vaccinated student residents. Since the CAIR2 address allocation data relies upon the address chosen by the vaccinated student in 2020 when school was closed for long periods of time, it is likely that many students did not list their dormitory or on-campus location as their address for medical purposes.

With a lower numerator and a higher denominator, the percentage of vaccinated residents is quite likely to be reported as lower than it would be if we had access to concurrent, real time data.

cc: Chief Board Aides
Miguel Marquez, Chief Operating Officer
James R. Williams, County Counsel
Megan Doyle, Clerk of the Board of Supervisors



This is an overlay of a census tract map, color coded for vaccination rates, and a Google map of the Stanford campus. The yellow area demarcates census tracts 5116.08 on the left and 5130 on the right of the grey line through the middle of campus.