

# Solano County Public Health

## Plan for Equitable Vaccine Distribution

BY: SOLANO PUBLIC HEALTH ADMINISTRATION

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# SOLANO COUNTY PLAN FOR EQUITABLE VACCINE DISTRIBUTION 2021-2022

SOLANO PUBLIC HEALTH | September 24, 2021

## Introduction and Purpose

Systemic inequities underpin disparities in COVID-19 risk and disease burden among historically marginalized populations across California. Populations of people of color have borne a disproportionate burden of the pandemic including in risk of exposure, transmission, case rates, severity of illness, and mortality, and those inequities are now extending to disparities in COVID-19 vaccination rates. People of color (POC) have approximately four times greater risk of adverse COVID-19 outcomes related to social determinants of health that may exacerbate patient comorbidities. Since the beginning of the COVID-19 pandemic, more than 43,900 Solano County residents have become infected with the virus, and more than 290 deaths have occurred as of September 2021.

Despite increased risk and disease burden, data from the Solano County dashboard reporting race and ethnicity show Black and Latinx populations have received vaccinations at lower rates compared to their shares of total COVID-19 disease burden and population.

We know inequities in social determinants of health such as access to health care, economic security, racism, housing, and education are greatly impacting our community. Equitable distribution of vaccines can help decrease disparities in vaccination rates while narrowing the disproportionate effect the pandemic has had on underserved populations. Our goal with this plan is to identify areas and populations most impacted by this crisis and to help ensure that our response is inclusive and equitable and helps protect the health and safety of all Solano County residents.

## Methods

The Solano County Plan for Equitable Vaccine Distribution promotes equitable access to the COVID-19 vaccine by focusing on those populations and areas of Solano County that have had the highest burden of adverse physical, social, and economic impacts from the pandemic.

The first group and first pillar identified is the fragile elderly. While persons aged 65 and over only make up 17% of the Solano County population, they have accounted for 39% of the hospitalizations and 77% of the deaths due to COVID-19.

The second group and pillar are Communities of Color such as the Latinx community, Black/African American community, and other racial/ethnic populations with lower vaccination rates (see Table I below). The goal, at minimum, is to have the percentage of various populations vaccinated reflect the population of Solano County. We will accomplish this through both a mass vaccination site in the County's highest need city, Vallejo, and multiple pop-up vaccination clinics throughout the County placed in other areas of high need. Additionally, we know both access to vaccines and vaccine hesitancy contribute to racial disparities in vaccination rates. Plans to address vaccine hesitancy include relationship building with local faith-based organizations, as well as identification, training, and utilization of community health educators and promotoras from within each of the underserved communities. The building and maintenance of these relationships should be persistent, sustainable, systemic and ingrained within the public health mission.

To identify the areas of high need for the pop-up clinics, the below table (see Table I) on vaccination rates in the County by race/ethnicity and maps of areas with higher proportion of People of Color and persons living below 150% poverty were analyzed. In addition, the CDC's Social Vulnerability Index (SVI), The California Healthy Places Index (HPI), and the CORD (COVID-19 Rapid Deployment) data were reviewed to best determine where to allocate resources.

Furthermore, the Epidemiology Unit along with the Solano County Employment and Eligibility Division have mapped the County's MediCal recipient population. We know the MediCal population has lower vaccination rates than other

insurers, so this will help us to understand where our MediCal population is located and target convenient vaccination pop-ups to these areas.

## Grounding Principles

Solano County's pledge to equitable vaccine delivery is rooted in a deep commitment to equity and social justice. Together with our partners we will strive to:

**Remove barriers that deter access:** For specific population groups disproportionately impacted by COVID-19, partner with communities to identify barriers (such as distrust based on past practices, language access, transportation) and assets to tailor vaccination outreach and services to meet community needs accordingly.

**Create an inclusive process:** Include people disproportionately impacted by COVID-19 early, continuously, and meaningfully. Incorporate these individuals and representatives of the trusted community-based organizations that serve targeted communities in COVID vaccine planning, implementation, and after-action review processes.

**Be intentionally anti-racist and accountable to Black, Brown, and Indigenous People of Color (BIPOC) communities:** This means promoting a respectful and culturally responsive approach to vaccine delivery where we respond to community needs and preferences, continuously learn and adjust based on what we hear from impacted communities, and publicly share data on race and ethnicity of people served in order to measure our progress toward providing meaningful access for communities hardest hit by COVID-19.

## Data Driven and Community Informed

Equitable vaccine delivery will be data driven and informed by continuous engagement to understand and respond to community preferences and needs.

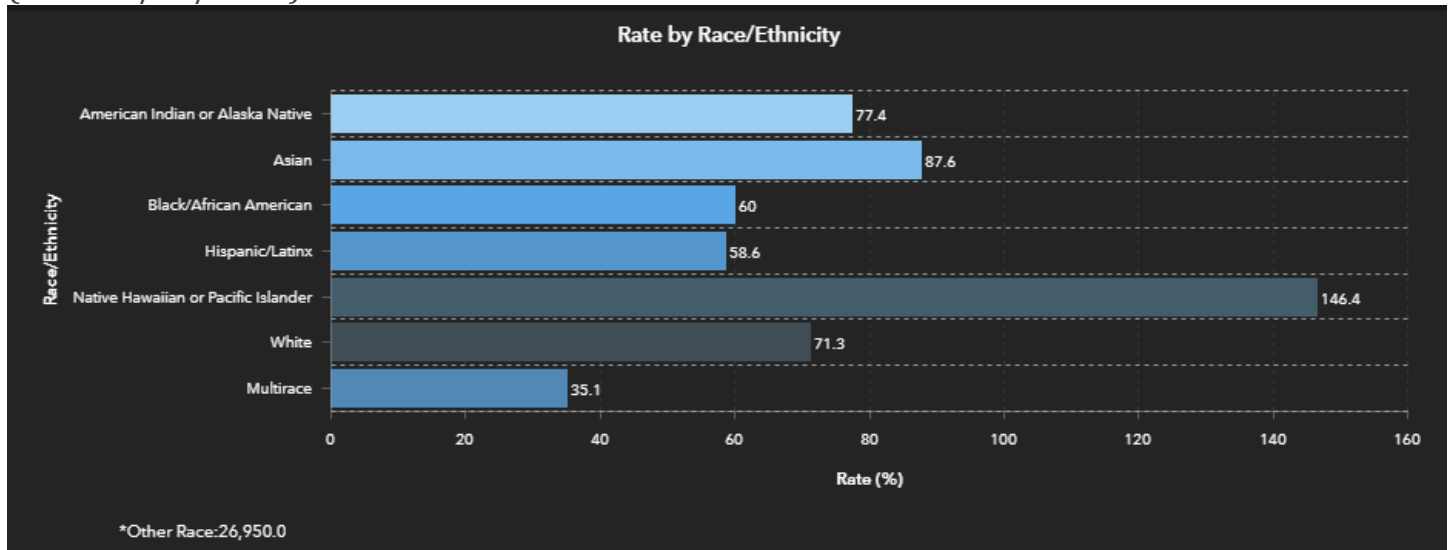
Solano County is committed to transparency and open access to data through public-facing data dashboards, including the [Solano County Public Health Dashboard](#), updated every week and posted on the Solano County web site. These data illustrate the disproportionate impact of COVID-19 based on race and ethnicity, age and geography. Monitoring these trends informs our actions.

Maximizing equitable vaccine delivery and improving the indicators will require strong adherence to the principles outlined in this document, and ongoing active engagement with community. This engagement is critical to continuous learning to unearth and address barriers, to informing prioritization for early outreach and appointing, and to designing effective outreach and support.

Listening to community and monitoring the data will enable partners across Solano County to effectively calibrate among the modes of delivery to support maximum uptake among highest risk population groups and in geographies that have been hardest hit with COVID-19 cases, hospitalizations and deaths

**Table I**

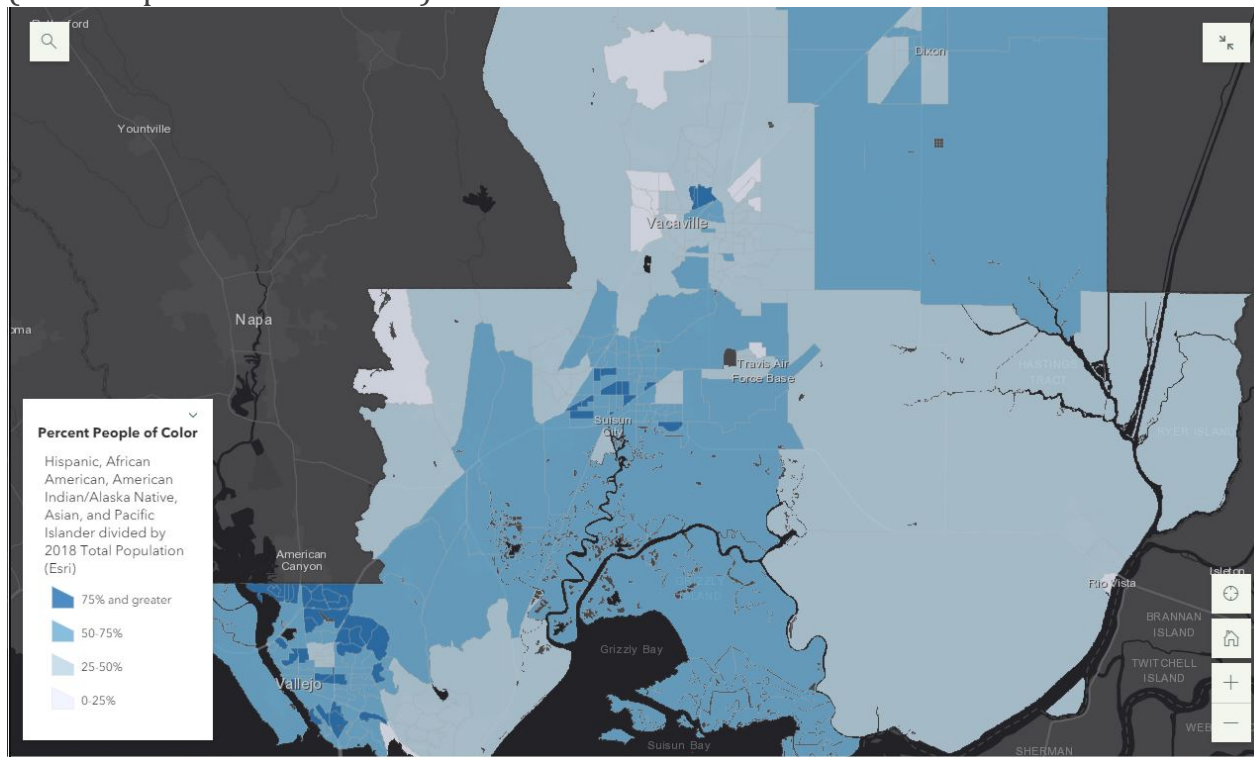
Vaccine Demographics: Vaccination Rate Among Solano County Residents by Race/Ethnicity (As of 09/29/2021)\*



\*Obtained from [Solano County Public Health Dashboard](#)

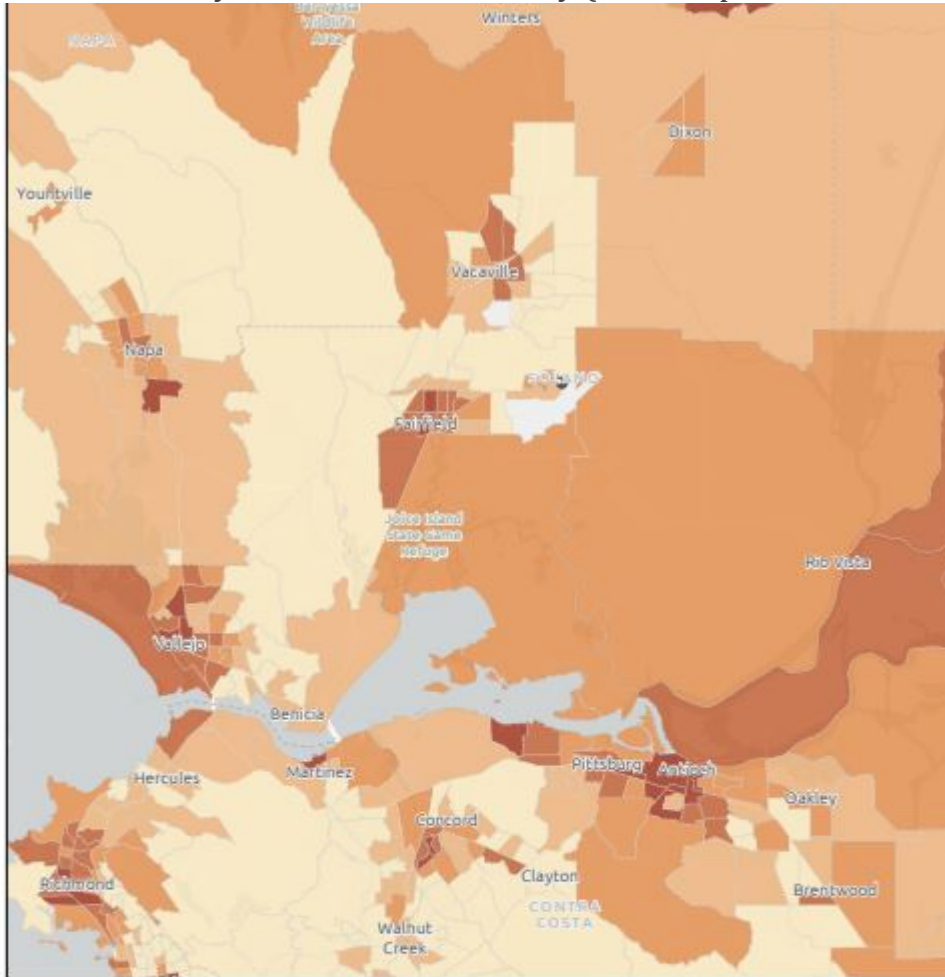
**Table II**

Population Distribution: Areas with Highest Proportion of People of Color in Solano County (2018 Population Estimates)



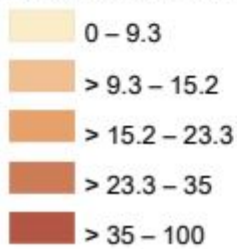
**Table III**

**Population Distribution: Areas with Highest Proportion of Persons Living Below 150% of the Federal Poverty Level in Solano County (2020 Population Estimates)**



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Population at 150% or Less of Poverty Level



# Results and Plan

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## I. Vaccine Distribution Order

Solano County Public Health is in the planning phase of rolling out booster shots to eligible community members. Our goal is to distribute the vaccine in a tiered approach, following the recommendations set out by the Centers for Disease Control and Prevention (CDC). We will collaborate with CVS, Walgreens, Kaiser Permanente, NorthBay Medical Center, Medic Ambulance, and Touro University to distribute the first, second, and third booster shots within the community.

### Pillar 1:

The first step of our plan is to vaccinate eligible, high-risk populations in the following order, with the intention that we reach the fragile elderly at highest risk of severe outcomes first:

1. Skilled Nursing Facilities (SNFs)
2. Memory Care Centers
3. Intermediate Care Facilities
4. Congregate Living Facilities (Shelters, Group Homes)
5. Board and Care Homes
6. Assisted Living Facilities
7. Independent Living
8. Low Income Apartment Complexes

### Pillar 2:

We will open a standing, mass vaccination clinic at the Solano County Fairgrounds located in the high need City of Vallejo. We will provide booster shots and covid-19 testing starting Wednesday, October 13th, and running through Saturday, December 18th. This mass vaccination clinic will be open Wednesday through Saturday, from 9am until 4pm. Our plan is to vaccinate up to 4,000 eligible community members a day. We will promote these vaccination events on various social media platforms and will start by being by appointment only via Eventbrite. As more tiers open, we plan to be open on a walk-in basis. On days the mass vaccination clinic in Vallejo is not running, our team plans to host pop-up vaccination clinics at various schools, religious institutions, community centers, and senior centers in other parts of the county (Fairfield, Vacaville, Dixon, Suisun, Benicia, and Rio Vista) identified as prioritized locations of high need.

## II. Principles in Action

Across all vaccine delivery modes, Solano County and joining partners will align with the following practices:

1. **Focus on Highest Risk and Most Impacted:** By prioritizing high-volume sites, neighborhood vaccination hubs, and community vaccination events in areas with highest incidence of disease and working closely with safety net providers who specialize in serving high risk and vulnerable populations.
2. **Work with Community:** Coordinate with community-based leaders and organizations with connection to high risk communities and with particular focus on POC communities. Coordinate with community clinics to provide on the ground information dissemination and vaccination information. Our communities should shape planning efforts for vaccination delivery from the outset.

3. **Make Registration Easy:** Ensure that appointment finding, and registration systems are simple to use and easy to understand, available in multiple languages (especially for those languages spoken by populations most impacted) and accessible for people with disabilities. Recognizing that any technology dependent system will create a digital barrier to access for many, where possible, guarantee personal assistance by phone. Registration systems should allow for purposeful early or special access for highest risk and disadvantaged groups to ensure appointment slots are not all filled via online registration methods.
4. **Make Vaccine Available When and Where People are Available:** Ensure appointment availability outside of regular business hours, including weekends and evenings. Work closely with community organizations to inform siting of high-volume sites and pop-up clinics and to identify other points of delivery and providers that are known and trusted by community.
5. **Address Transportation and Mobility:** Locate vaccination sites near public transportation and work with partners to secure ride service for older adults, people with disabilities or others for whom transportation to the site is a barrier. Ensure that high volume vaccination sites are fully ADA compliant, have plain language and accessible signage, and are easy to navigate and comfortable for people of all abilities, with access to restrooms and drinking water. Deploy mobile vaccine teams for individuals who are homebound or otherwise unable to easily travel to a health clinic, pharmacy or site.
6. **Ensure Language Access:** From early planning, language access should be prioritized, including the availability of in-person and phone interpreters. Consider the languages most spoken in the target geography and prioritize translation and interpretation for those languages.
7. **Provide Vaccination Regardless of Immigration Status:** Ensure that immigration status is not a barrier to receiving a vaccine.

#### IV. Solano County Vaccination Site Locations

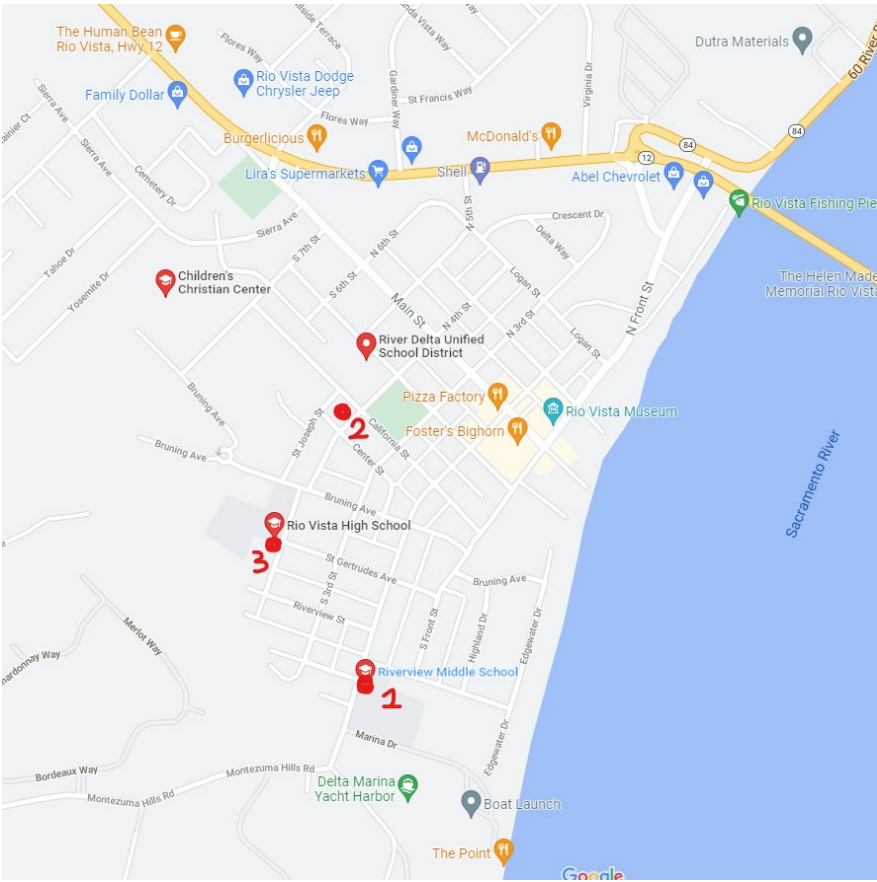
**Below are the recommended regions to hold pop-up vaccination clinics. Please be advised that these are not specific site recommendations but instead general areas of focus that should be considered throughout the cities of Solano.**

##### Rio Vista

Reasoning for locations chosen: Each of the four locations below have high SVI scores and low HPI scores which indicates that these locations would be the most effective in vaccination events.

Name of Location	SVI Score	HPI Score	Population at 150% or Less of Poverty Level	Address
Riverview Middle School (1)	0.5277	49.5	22.50	525 S 2nd St, Rio Vista, CA 94571
St. Joseph Catholic Church (2)	0.5277	49.5	22.50	220 S 4th St, Rio Vista, CA 94571
Rio Vista High School (3)	0.5277	49.5	22.50	4104th St, Rio Vista, CA 94571



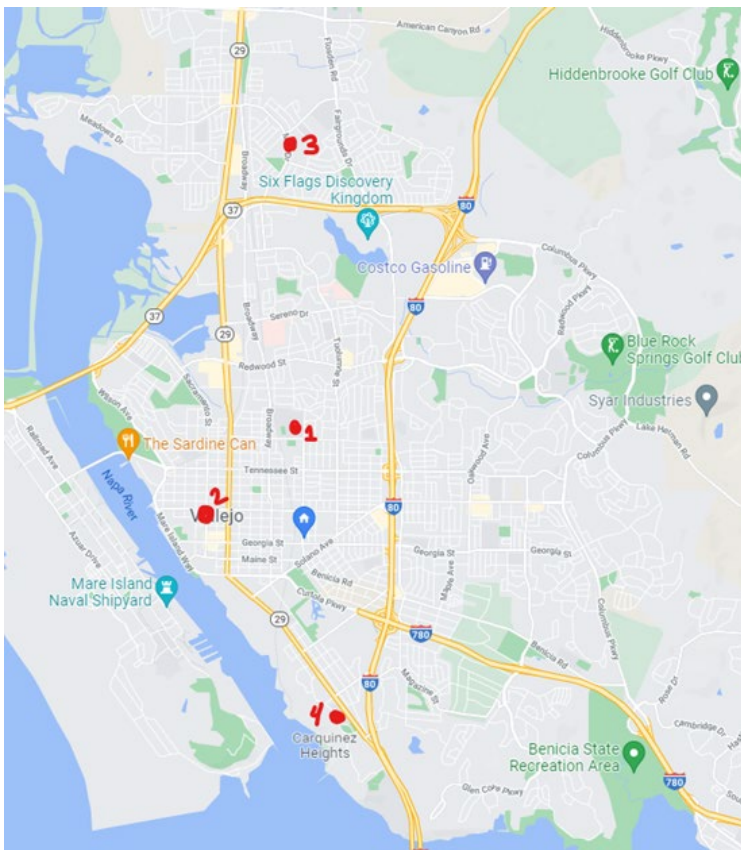


## Vallejo (Touro University)

Reasoning for locations chosen: Each of the four locations below were chosen because they are in areas representing medium to high Social Vulnerability Index (above .5) and Low California Healthy Place Index (Below 50) scores. These scores represent significant racial and economic disparities that are exacerbated by COVID-19 infection rates. Though Vallejo High School possess both low SVI and High HPI, it is centrally located (on all sides) between areas of high need and a high percentage of students attending are low income.

Furthermore, Solano County has partnered with Touro University and Touro will be managing the vaccine events in Vallejo. Touro has already had multiple continuous events in Vallejo with locations such as Faith Food Fridays and Bethel High School. These new locations will provide a deeper level of outreach as it targets areas that have not yet had mass vaccination clinics. In addition, the four locations are dispersed throughout the city of Vallejo to further emphasize the level of outreach desired for an equitable vaccine distribution.

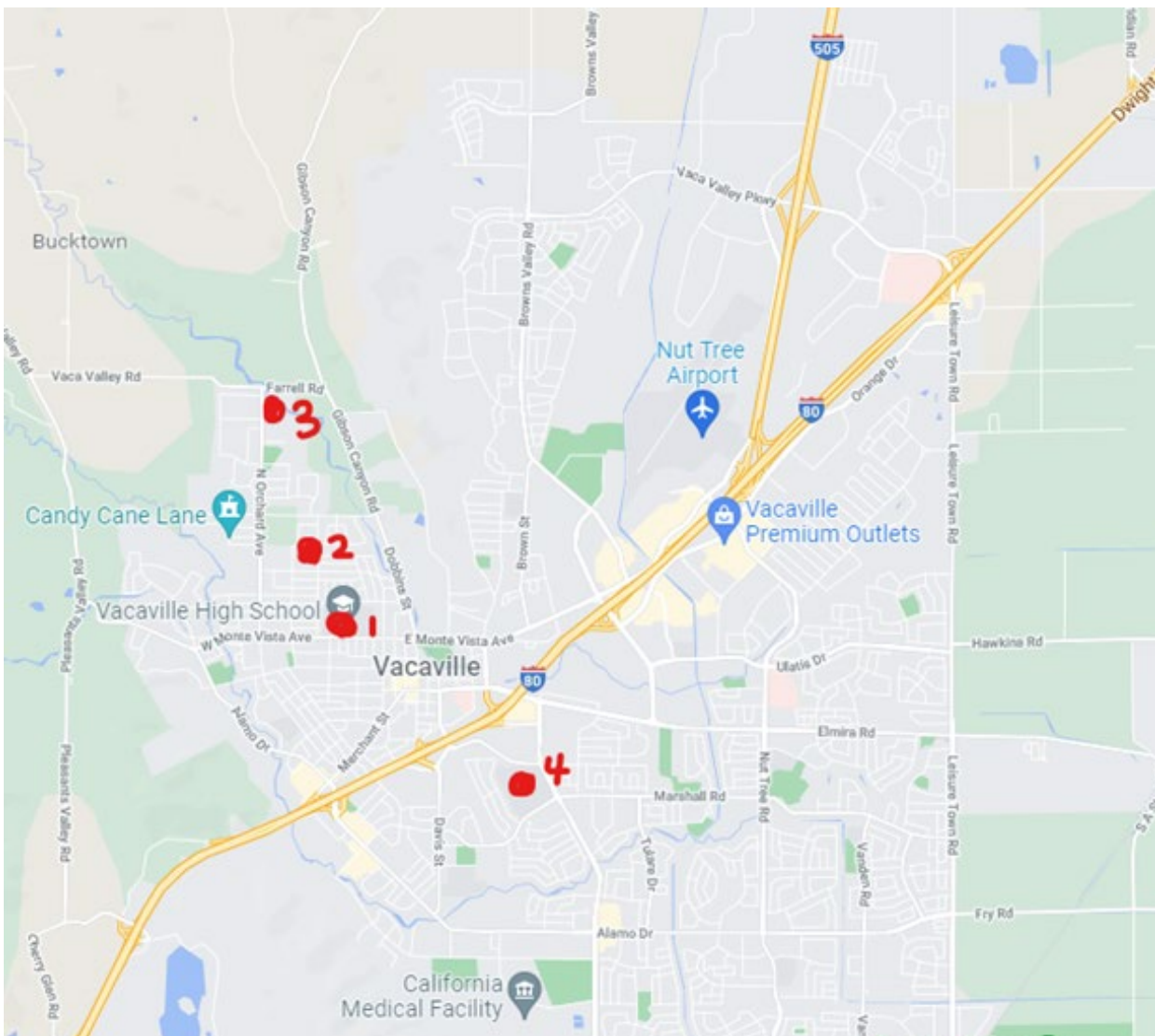
Name of Location	SVI Score	HPI Score	Population at 150% or Less of Poverty Level	Address
Vallejo High School (1)	.2382	58	13.70 (surrounding 45.10)	840 Nebraska St, Vallejo CA 94590
St. Vincent Church/School (2)	.9506	22.7	37.90	925 Sacramento St, Vallejo CA 94590
Mare Island Charter School (3)	.9248	27.2	25.10	2 Positive Place, Vallejo CA 94589
Patterson Elementary (4)	.6869	43.9	25.20	1080 Porter Street, Vallejo CA 94590



## Vacaville

Reasoning for locations chosen: Locations were selected based on a combination of SVI and HPI scores as well as geographic distribution around the city and poverty levels. Locations such as Vacaville High School have already hosted several successful vaccination clinics.

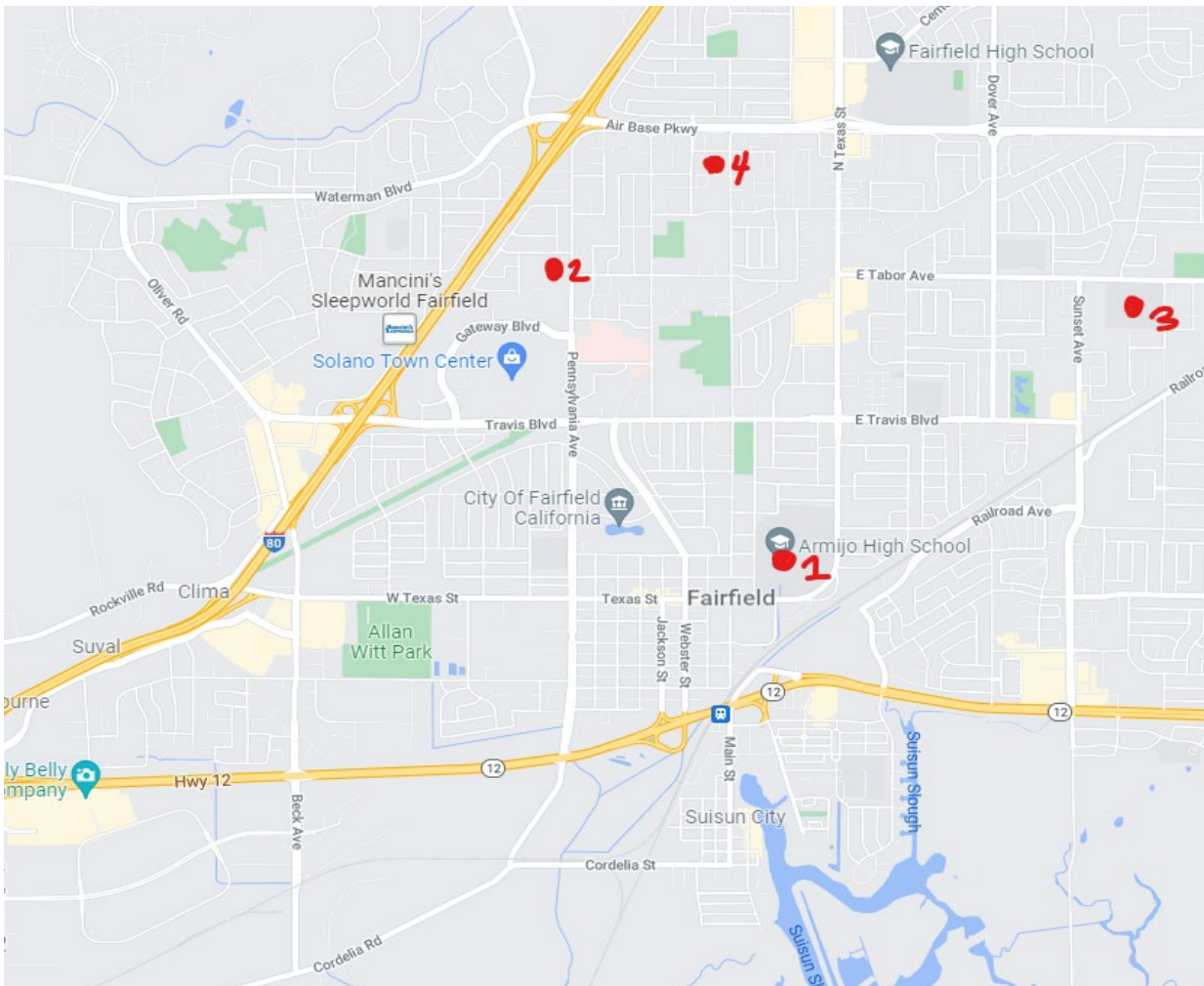
Name of Location	SVI Score	HPI Score	Population at 150% or Less of Poverty Level	Address
Vacaville High School (1)	.6373	44.5	16.20	100 W Monte Vista Ave, Vacaville CA, 95688
St. Mary's Church (2)	.6373	44.5	16.20	350 Stinson Ave, Vacaville CA, 95688
Edwin Markham Elementary (3)	.7181	45.4	24.90	Markham Ave, Vacaville CA, 95688
Will C. Wood (4)	.7029	51	27.70	998 Marshall Rd, Vacaville CA, 95687



## Fairfield

Reasoning for locations chosen: Each of the four locations below have high SVI scores and low HPI scores which indicates that these locations would be the most effective in vaccination events. In addition, locations such as St. Stephen and Grange Middle School have hosted successful vaccination clinics.

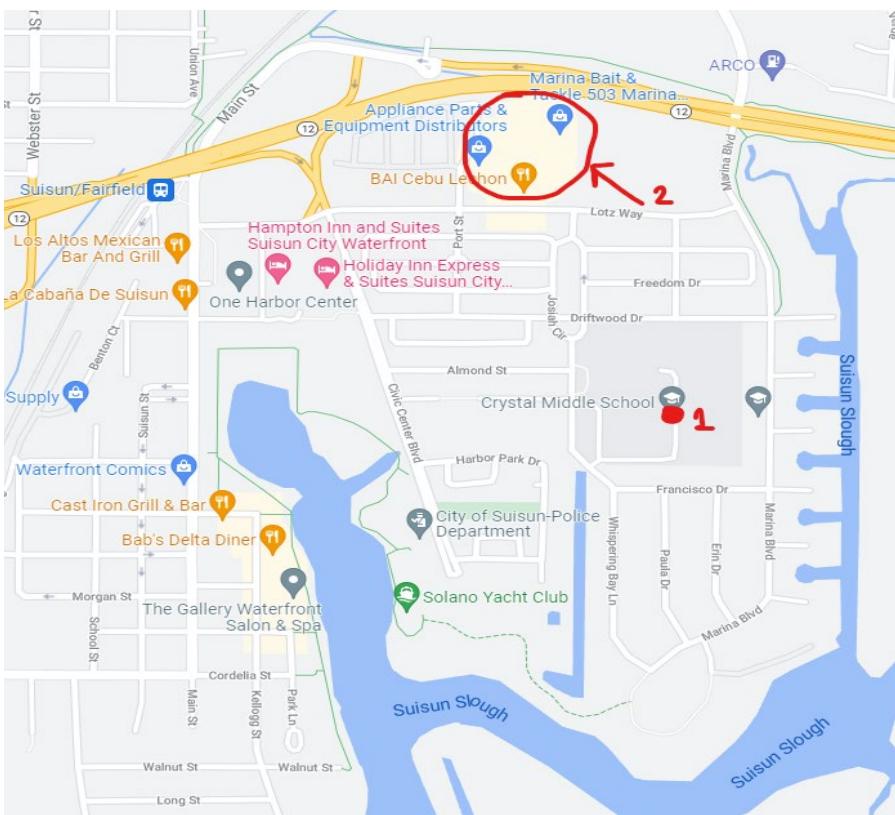
Name of Location	SVI Score	HPI Score	Population at 150% or Less of Poverty Level	Address
Armijo High School (1)	0.9848	22.7	36.60	824 Washington St, Fairfield, CA 94533
David Weir K-8 School (2)	0.9594	15.6	23.90	1975 Pennsylvania Ave, Fairfield, CA 94533
Grange Middle School (3)	0.949	27.6	28.40	1975 Blossom Ave, Fairfield, CA 94533
St. Stephen Church (4)	0.9919	20.7	42.00	2301 Union Ave, Fairfield, CA 94533



## Suisun

Reasoning for locations chosen: Suisun possess both an above average SVI and below average HPI. Because of the small nature of the town, the two sites located near the Marina area hotspot would be most effective (Maybe have a site either on Sunset or Walters). In addition, the Marina Center is a large area with multiple organizations that could help bring in individuals wishing to get vaccinated.

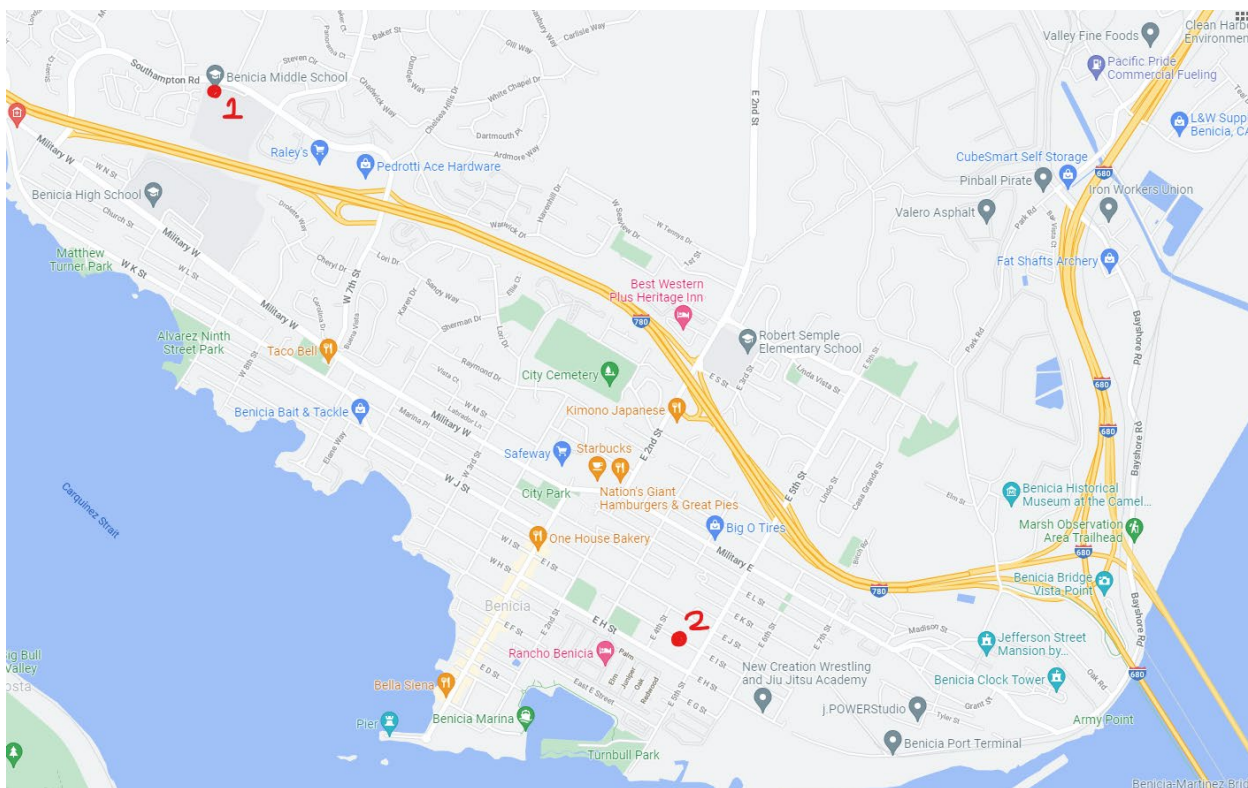
Name of Location	SVI Score	HPI Score	Population at 150% or Less of Poverty Level	Address
Crystal Middle School (1)	0.6119	48.2	17.90	400 Whispering Bay Ln, Suisun City, CA 94585
Jesus House Church of Christ (2)	0.6119	48.2	17.90	116 Alder St, Suisun City, CA 94585
West Wind Church (2)	0.6119	48.2	17.90	207 Marina Center, Suisun City, CA 94585
Suisun Church of Christ (2)	0.6119	48.2	17.90	80 Marina Center, Suisun City, CA 94585
New Life Christian Community Church (2)	0.6119	48.2	17.90	83 Marina Center, Suisun City, CA 94585
The Building Christian Fellowship (2)	0.6119	48.2	17.90	207 Marina Center, Suisun City, CA 94585



## Benicia

Reasoning for locations chosen: Although though the SVI scores in both locations below are relatively low and the HPI scores are relatively high, these locations are key to an equitable vaccine distribution because both locations serve broad areas of the city of Benicia. In addition, the geographic distribution of the locations creates a broader scope of reach.

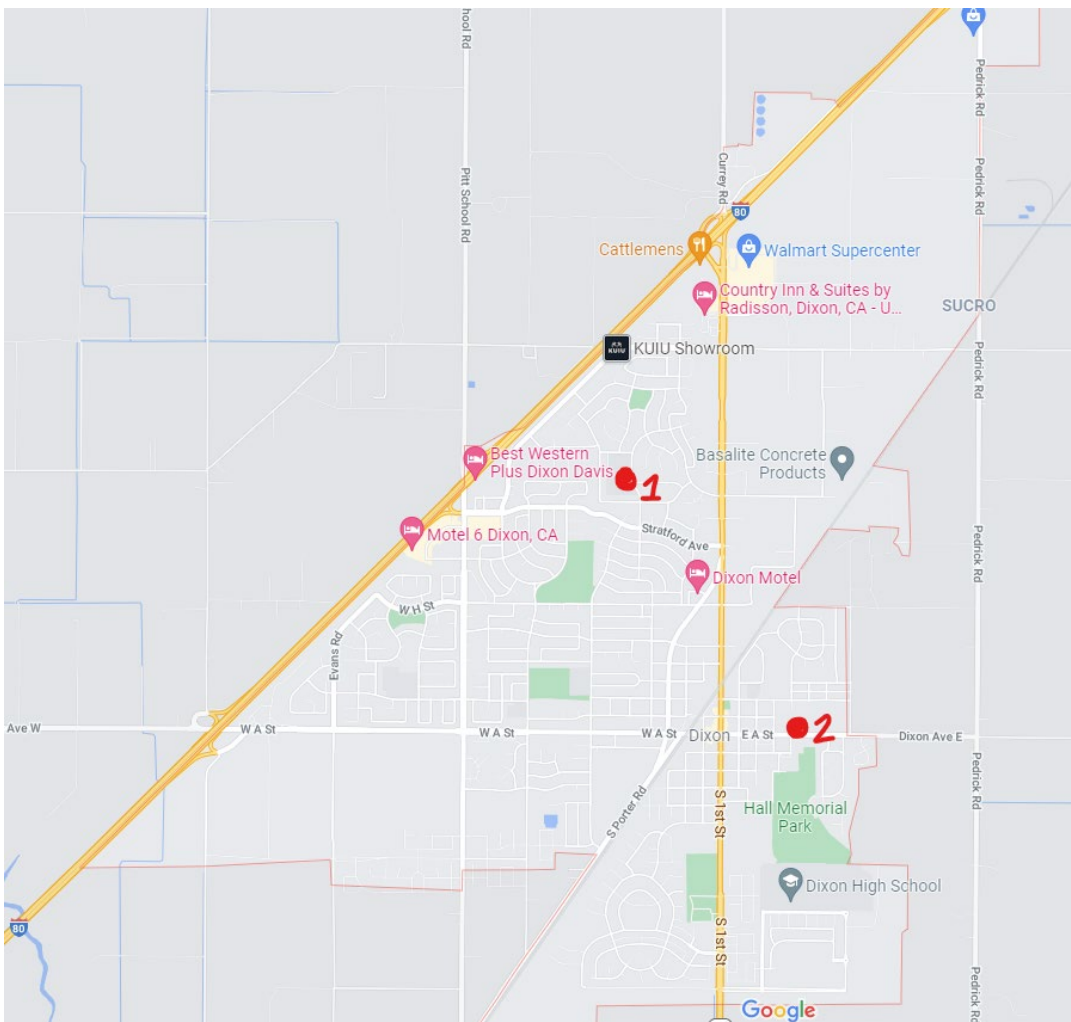
Name of Location	SVI Score	HPI Score	Population at 150% or Less of Poverty Level	Address
Benicia Middle School (1)	0.2239	78.1	10.20	1100 Southampton Rd, Benicia, CA 94510
St. Dominic's Catholic Church (2)	0.4473	65.6	14.20	475 E I St, Benicia, CA 94510



## Dixon

Reasoning for locations chosen: Each of the four locations below have high SVI scores and low HPI scores which indicates that these locations would be the most effective in vaccination events.

Name of Location	SVI Score	HPI Score	Population at 150% or Less of Poverty Level	Address
Gretchen Higgins Elementary (1)	0.6748	53.7	16.40	1525 Pembroke Way, Dixon, CA 95620
Dixon High School (2)	0.8491	50.4	23.40	455 E A St, Dixon, CA 95620



## Definitions

- **Disparities:** a particular type of health difference that is closely linked with social, economic, and/or environmental disadvantage. Health disparities adversely affect groups of people who have systematically experienced greater obstacles to health based on their racial or ethnic group; religion; socioeconomic status; gender; age; mental health; cognitive, sensory, or physical disability; sexual orientation or gender identity; geographic location; or other characteristics historically linked to discrimination or exclusion.
- **Healthy Places Index (HPI):** highlights the community conditions shaping health outcomes in neighborhoods across California. The final HPI scores are then assigned a percentile rank, with ranks closer to 100 indicating healthier community conditions, and ranks closer to 0 indicating less healthy community conditions.
- **Minorities:** refers to a group of people whose practices, race, religion, ethnicity, or other characteristics are fewer in numbers than the main groups of those classifications.
- **Social Determinants of Health:** the conditions in the environments where people are born, live, learn, work, play, worship, and age that affect a wide range of health, functioning, and quality-of-life outcomes and risks.
- **Social Vulnerability:** the potential negative effects on communities caused by external stresses on human health
- **Social Vulnerability Index (SVI):** SVI uses U.S. Census data to determine the social vulnerability of every census tract. Census tracts are subdivisions of counties for which the Census collects statistical data. The CDC/ATSDR SVI ranks each tract on 15 social factors, including poverty, lack of vehicle access, and crowded housing, and groups them into four related themes. A percentile ranking represents the proportion of tracts (or counties) that are equal to or lower than a tract (or county) of interest in terms of social vulnerability. For example, a CDC/ATSDR SVI ranking of 0.85 signifies that 85% of tracts (or counties) in the state or nation are less vulnerable than the tract (or county) of interest and that 15% of tracts (or counties) in the state or nation are more vulnerable.



## References

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- CDC/ATSDR SVI fact sheet. (2021, August 30). Retrieved September 24, 2021, from [https://www.atsdr.cdc.gov/placeandhealth/svi/fact\\_sheet/fact\\_sheet.html](https://www.atsdr.cdc.gov/placeandhealth/svi/fact_sheet/fact_sheet.html)
- Centers for Disease Control and Prevention. (n.d.). *Risk for Covid-19 infection, hospitalization, and death by race/ethnicity*. Centers for Disease Control and Prevention. Retrieved September 24, from <https://www.cdc.gov/coronavirus/2019-ncov/covid-data/investigations-discovery/hospitalization-death-by-race-ethnicity.html>.
- Disparities. (n.d.). Retrieved September 24, 2021, from <https://www.healthypeople.gov/2020/about/foundation-health-measures/Disparities>
- Equity in Vaccination: A Plan to Work with Communities of Color Toward COVID-19 Recovery and Beyond. (2021, February). Retrieved September 24, 2021, from [https://www.centerforhealthsecurity.org/our-work/pubs\\_archive/pubs-pdfs/2021/20210209-CommuniVax-national-report.pdf](https://www.centerforhealthsecurity.org/our-work/pubs_archive/pubs-pdfs/2021/20210209-CommuniVax-national-report.pdf)
- Hardeman, A. (2021, July 02). Evaluation of Health Equity in Covid-19 Vaccine Distribution Plans in the US. Retrieved September 24, 2021, from <https://jamanetwork.com/journals/jamanetworkopen/fullarticle/2781618>
- Seattle & King County Public Health . (2021, April 26). Principles for Equitable Vaccine Delivery - King County. Retrieved September 29, 2021, from <https://kingcounty.gov/depts/health/covid-19/~media/depts/health/communicable-diseases/documents/C19/king-county-principles-vaccine-delivery.ashx>.
- Thoumi, A., & Tewarson, H. (2021, March). PRIORITIZING EQUITY IN COVID-19 VACCINATIONS. Retrieved September 24, 2021, from <https://healthpolicy.duke.edu/sites/default/files/2021-03/Duke-NGA%20Equity-in-Covid-19-Vaccination.pdf>