Report on Capacity, Quality, Accessibility of Veteran Affairs Clinics in Southern California

For Office of Congressman Mark Takano

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Abstract

This report describes Veterans and thier needs in Southern California and how they differ from the greater united states. To analyze these questions the report utilizes many sources of data from the US Census Buerea, Veteran Affairs data, map data, and transit data from the following districts: 36, 42, 41, 31, 35, 8, 27, 45, and 39. In this over ten million hectare area (1/4 the size of california) there are approximately 280,000 veterans with ten clinics. In general this report finds that despite having the largest Veteran population of any state it does not have A.) High Quality VA Clinics and Medical Centers and B.) Clinics that are accessible by much of the population.

Contents

| National Level | 2 |
|--|----|
| Southern California Veteran Overview | 5 |
| History | 5 |
| Veteran Population in Southern California | 5 |
| Demographics | 8 |
| Need for Transportation to make clinics accessible | 8 |
| Mental Health in Riverside CA | 14 |
| Mobile Clinic Route | 14 |
| Patient to Area Ratios | 14 |
| Trends over time | 15 |
| Wait times | 16 |
| Ratings | 17 |
| Conclusion | 19 |
| Sources | 19 |
| To Do: | 19 |

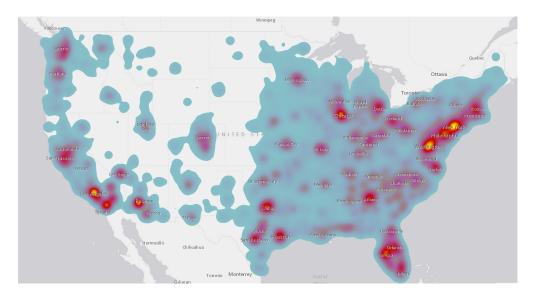


Figure 1: US Populations

National Level

A.) This figure shows veterans populations in california are some of the highest in the nation

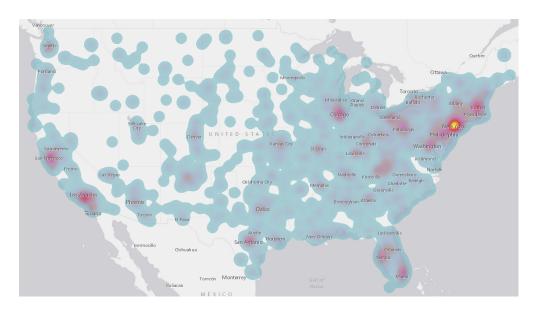
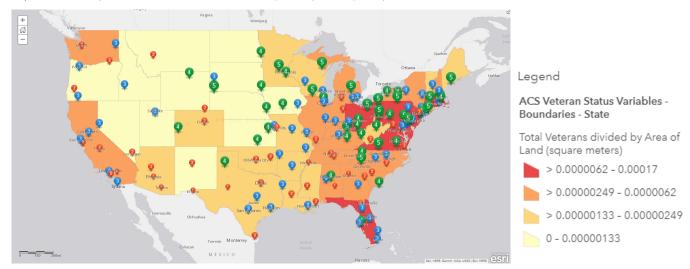


Figure 2: Clinics

 ${\bf B.}$) Blobs dot denoting locations within reach of VA Clinics show that there is a lack of clinics in high population areas like california

C.) Additionally VA data shows that clinics quantity and quality decreases in the western united states



Southern California Veteran Overview

Much of Southern California is desert and as such has very dispersed veteran populations (figure 1). In addition there are different branches due to other geographic features such as coastal access for the Navy, air force bases, training bases. Many people (approxamately 2.6 million in the last 10 years) are moving into California including veterans [Source: World population]

History

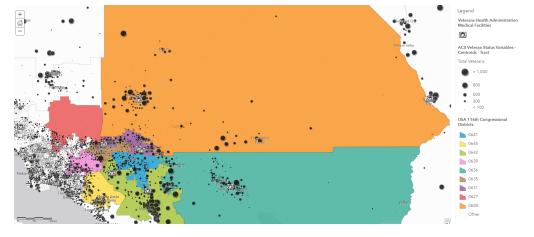
In 1888 the LA West Campus was gifted to the Federal Government. It was under scruteny for corruption and mismangement with lead to the creation of the "Master Plan" [Everything You Need To Know About The Massive, Decaying West LA VA Campus — And The Plan To Fix It.] bringing in more housing for Veterans and reducing the Veteran Homeless Population in LA [LA's Veteran Homelessness down 18 Percent]. The plan also revitalizes the medical facilities however cuts the PTSD clinic [The VA Wants to Move a PTSD Clinic. The Vets Are Fighting Back].

In the 1970's the current VA's were established around Riverside. Jerry Lewis, Rep for Redlands, was on the appropriations committee. Now as desert community populations are growing there is a need for clinics further east.

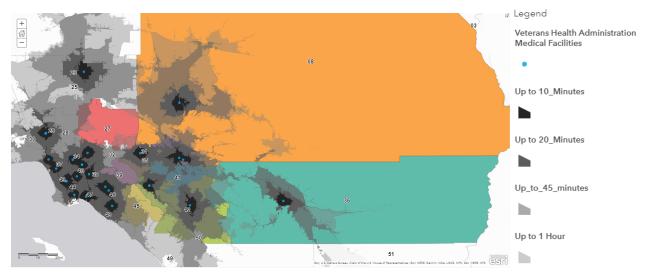
Veteran Population in Southern California

Analyzed districts include 36, 42, 41, 31, 35, 8, 27, 45, and 39 chosen based on a 10 mile distance of the perimeter of District 41. There are nearly 30,000 veterans making up about 5% of the population in District 41 alone. Currently there is no VA clinic in Riverside and the nearest one, in Corona, is about a two hour bus ride.

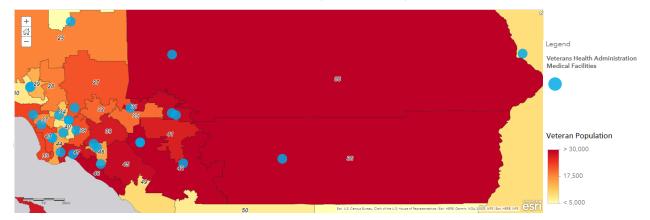
This analysis assigned census tracks (neighborhoods) a value of veterans and then output a circle corresponding to the number of veterans in that area.



The next analysis used VA facilities in southern california as reference points, then using traffic data (monday 8:00) mapped out the furthest a driver could go in the given time constraints, 10min, 20min, 45min, and 1hr. The darker the area the shorter the drive to a VA clinic.



Each veteran assessed from track data was assigned to the district in which they belong. These values were summed up and are presented as high to low values (Red to Yellow)



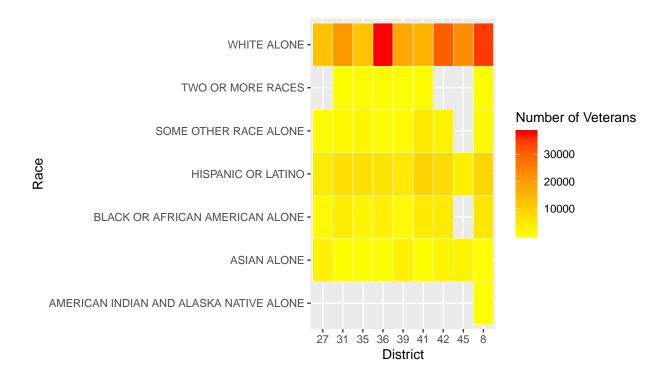


Figure 3: this figure shows the population of Veterans in District 41 and surrounding districts

Demographics

This data is the US census data from 2013 to 2017 showing current breakdown of Veteran Population by Race, War Participation, and Education.

Race

This heatmap shows various races claimed by veterans in census data, this data is overlayed onto District data. Composition of each district can be analyzed based on heat (red is high populations yellow is low)

War Participation

This analysis shows the various campaigns in which the veterans in southern california have been involved.

Education

This analysis shows the degree attainment of veterans as reported to US Census bureau

Need for Transportation to make clinics accessible

There are approximately 60,000 disabled vets in District 41 and surrounding Districts. Here is a specific break down of veterans with disabilities, senior status, and those living below the poverty line that might inhibit them from being able to drive a car.

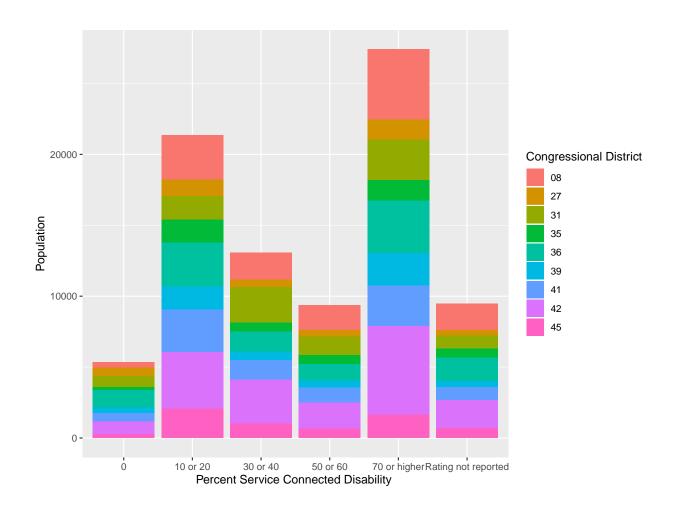


Figure 4: This figure shows veterans with disablilities

Disablities

This figure shows the distribution of the 60,000 disabled vets by their percent Service connected disablity

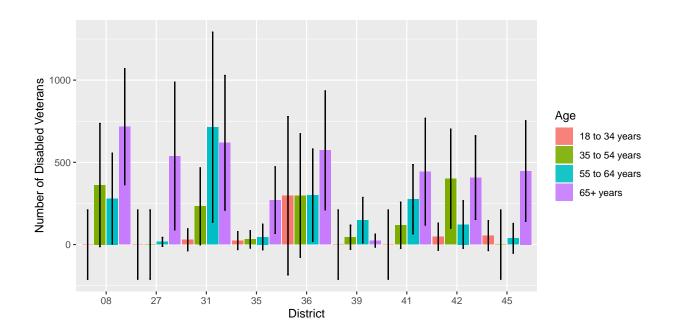


Figure 5: This figure shows disabled veterans living below the poverty line

This figure was analyzed using census data on veterans that indicated that their wages were below the poverty level

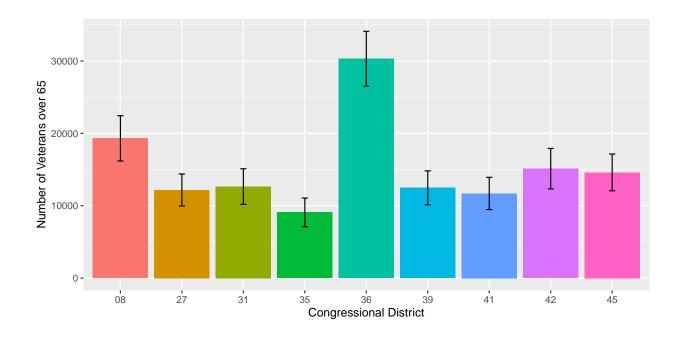


Figure 6: This figure shows senior veterans (65+ years old) living below the poverty line

Senior Status

This figure uses Census data and reports veterans 65 year and older.

This is a break down of the senior veterans that live below the poverty level in each district

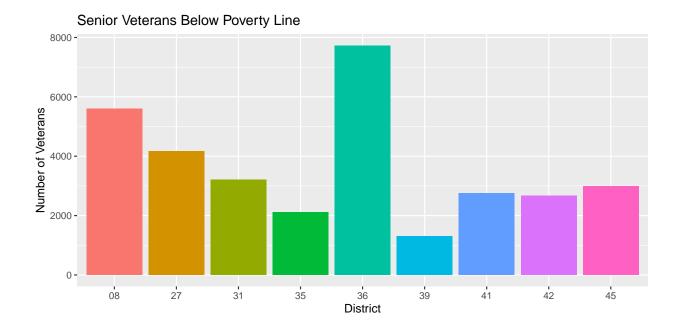


Figure 7: This figure shows senior veterans (65+ years old) living below the poverty line

Income

In district 41 and surrounding districts thousands live below the poverty line, and as a result they may rely on public transporation to get them to VA clinics.

This result shows employed and unemployed veterans living below the poverty level

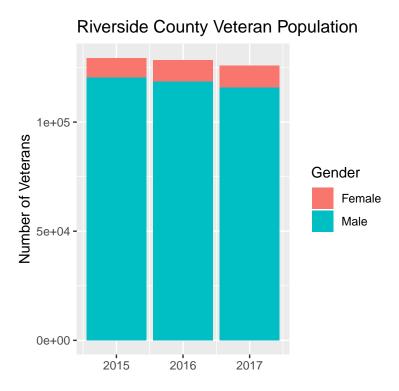


Figure 8: this figure shows the population of Veterans in Riverside county over the course of three years, although we see a decrease year after years, homeless veteran populations are increasing

| Gender | Year | Population | SE |
|--------|------|------------|------|
| Male | 2017 | 116021 | 2204 |
| Male | 2016 | 118714 | 2044 |
| Female | 2017 | 9855 | 734 |
| Female | 2016 | 9629 | 658 |
| Male | 2015 | 120432 | 2295 |
| Female | 2015 | 8932 | 689 |

Mental Health in Riverside CA

I'd like to include some data on veteran mental health here. it would demonstrate the need for a loca facility but also help define what might be key roles for a new clinic.

Mobile Clinic Route

Potential figure here showing routes that would benfit many veterans isolated by distance to a clinic –A trend that it may be increasing. Show a figure of vet population over time.

Patient to Area Ratios

```
#"'{r echo=FALSE, message=FALSE, include=FALSE} library(readxl) library(ggplot2) library(reshape2) data <- read_excel("Data.xlsx", sheet = "VA sqft v Patients", range = "A1:C6") data.long <- melt(data, id = c("Location", "Patients", "Space"))

p6 <- ggplot(data.long, aes(Space, Patients)) + geom_point(aes(color=factor(data.long$Location)), size = 5) + labs(color = "Facility") + theme(legend.title = element_text("Facility")) + scale_size_area(max_size = 6)

pdf("Loma_Linda_Rating.pdf") p6 dev.off()

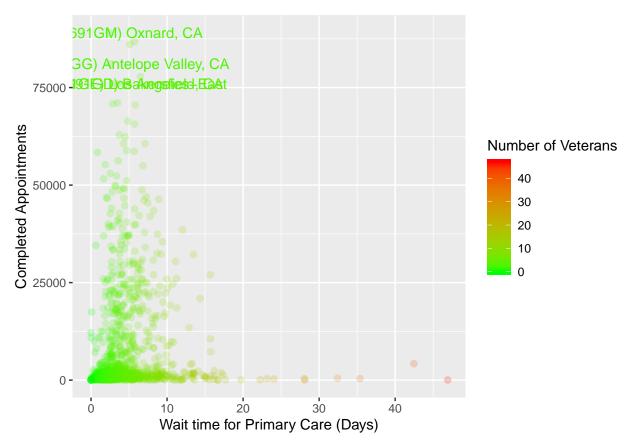
#Include age over time of each of these facilites.
```

#```{r echo=FALSE, fig.width=8,fig.height=4,fig.cap="Loma Linda facilities capacity/size", fig.pos = "H
p6

Trends over time

Wait times

This is VA wait time data for each VA clinic in California



```
## Warning: Unknown or uninitialised column: 'PC Avg Wait Time in Days 13'.
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```

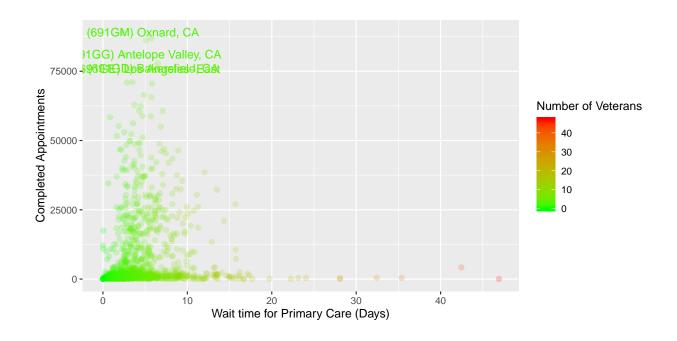
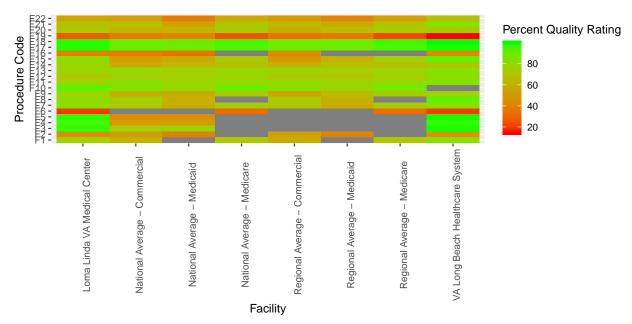


Figure 9: Average wait times at clinics around California

Ratings

This VA data focuses on quality rating of Medical Centers in California.



As a reference for these data points:

| Codes | Condition |
|-------|--|
| F1 | Colorectal Cancer Screening |
| F2 | Flu Vaccinations for Adults Ages 18-64 |
| F3 | Medical Assistance with Smoking and Tobacco Use Cessation - Advising Smokers To Quit |
| F4 | Medical Assistance with Smoking and Tobacco Use Cessation - Discussing Cessation Medications |
| F5 | Medical Assistance with Smoking and Tobacco Use Cessation - Discussing Cessation Strategies |
| F6 | Non-Recommended PSA-Based Screening in Older Men |
| F7 | Breast Cancer Screening |
| F8 | Cervical Cancer Screening |
| F9 | Controlling High Blood Pressure |
| F10 | Persistence of Beta-Blocker Treatment after a Heart Attack |
| F11 | Statin Therapy for Patients With Cardiovascular Disease Received Statin Therapy - 21-75 years (Male) |
| F12 | Statin Therapy for Patients With Cardiovascular Disease Received Statin Therapy - 40-75 years (Female) |
| F13 | Statin Therapy for Patients With Cardiovascular Disease Received Statin Therapy - Total |
| F14 | Comprehensive Diabetes Care - Blood Pressure Control (<140/90) |
| F15 | Comprehensive Diabetes Care - Eye Exams |
| F16 | Comprehensive Diabetes Care - HbA1c Control (<7% for a selected population) |
| F17 | Comprehensive Diabetes Care - HbA1c Testing |
| F18 | Comprehensive Diabetes Care - Medical Attention for Nephropathy |
| F19 | Comprehensive Diabetes Care - Poor HbA1c Control |
| F20 | Statin Therapy for Patients With Diabetes Received Statin Therapy |
| F21 | Antidepressant Medication Management - Effective Acute Phase Treatment |
| F22 | Antidepressant Medication Management - Effective Continuation Phase Treatment |

Conclusion

Students here for UCR for veterans. Major bus route, 91, 215.

Ideal outcome: Winning contract for 5 CBOCs, over building one here. RFP Hybrid, community owned, Va owned. CBOCs are lucrative

Sources

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To Do:

Learn more about Arcadia location that just opened- Nepalitono, june, shift, their case for clinic - provides access to those without a car.

Email Ignacio about getting VA rank and branch info for va clinics so we can look at the needs of each branch and what will be needed here as far as services go.

Get bus route data from Lorelle, 9517877141