



# **US COVID Vaccination Forecast:**

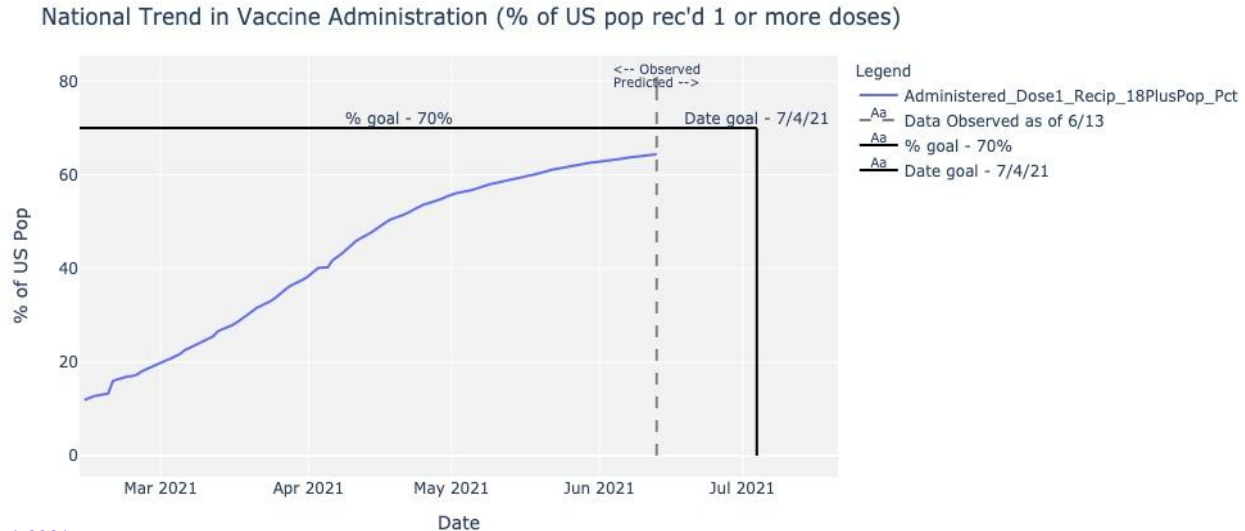
**Will the US vaccinate at least 70% of the  
adult population by July 4th, 2021?**

Kristin Cooper | June 18, 2021

# Introduction

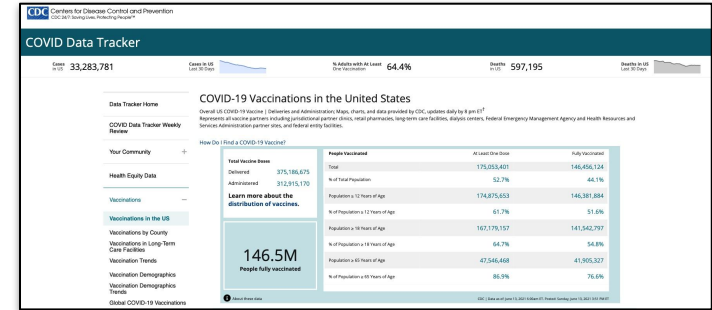
On May 4, 2021, President Biden announced a goal to administer at least one coronavirus vaccine dose to 70% of the U.S. adult population by July 4th.

**This analysis seeks to brief the Biden Administration on progress as of June 13th, and suggest where to focus campaign efforts in the remaining days leading up to the deadline.**

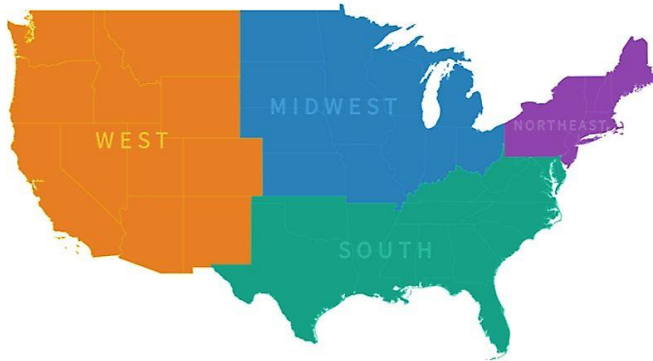


# Data

Data for this analysis was sourced from [the CDC's official COVID-19 Vaccination dataset](#) on June 13, 2021. This dataset includes vaccine delivery and administration data at the national and jurisdiction levels for all US states, territories, and federal entities across all public and private vaccine partners. Reporting began on February 13, 2021.



CDC COVID Data Tracker - Vaccinations in the US webpage



US Regions, per Census Bureau

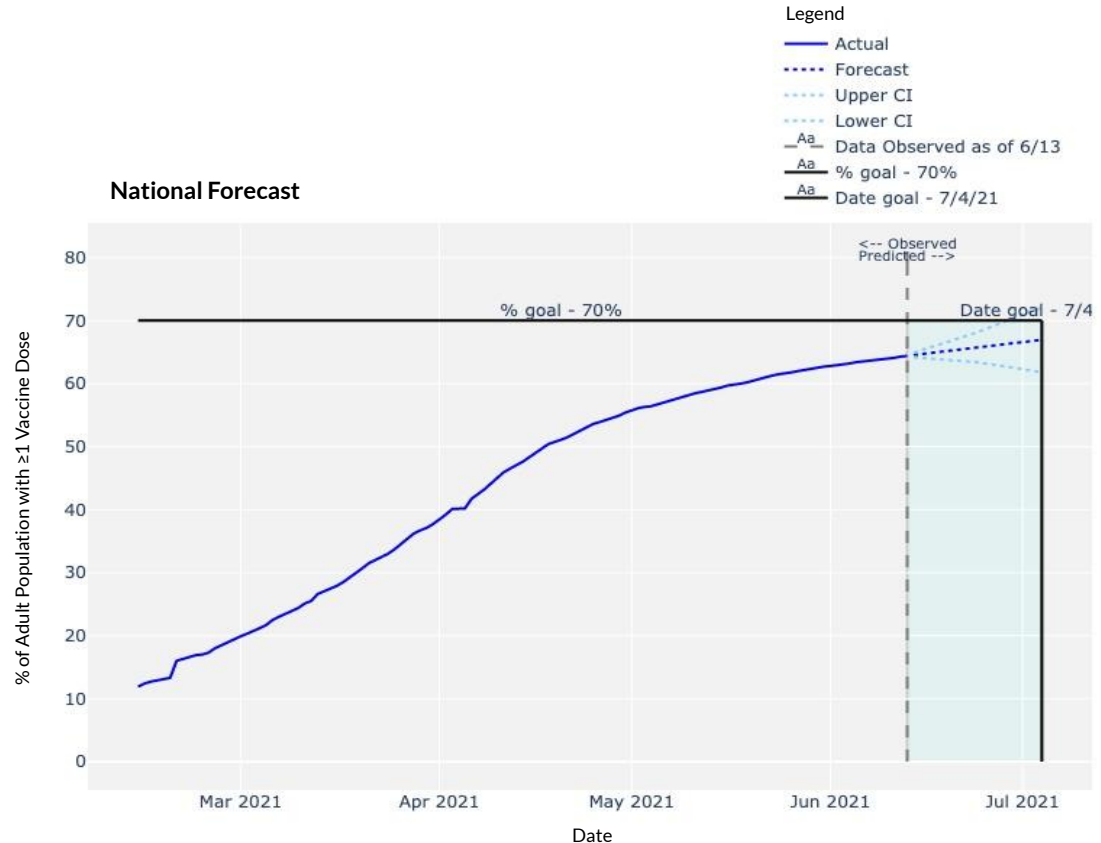
For purposes of this exercise, the dataset was narrowed to include adults 18+ in the 50 states + District of Columbia + Puerto Rico.

The four regions were defined according to the [US Census Bureau's definitions](#).

# National Analysis

The model forecasts that 66.96% of the adult population will have received at least one COVID-19 vaccine dose by July 4th, **falling just short of the 70% goal**. However, the goal is within the 95% confidence interval.

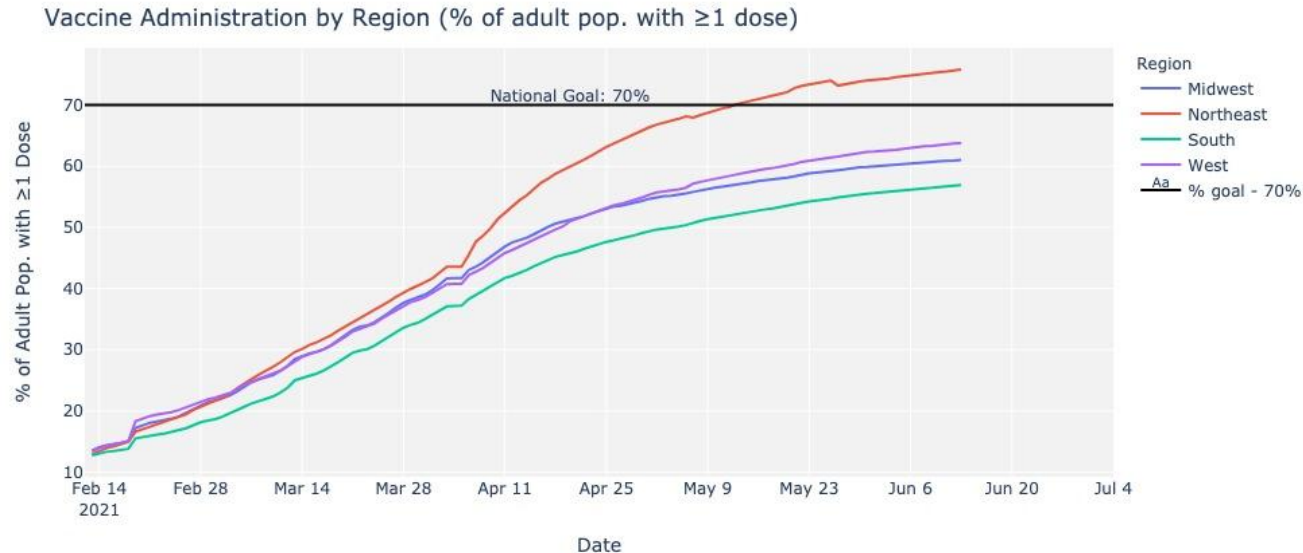
Upper Confidence Interval	72.93%
Forecast	66.96%
Lower Confidence Interval	61.78%



# Regional Analysis

The northeast is leading the nation, meeting the 70% goal in mid-May and reporting nearly 80% of the adult population having received at least one vaccine dose as of June 13.

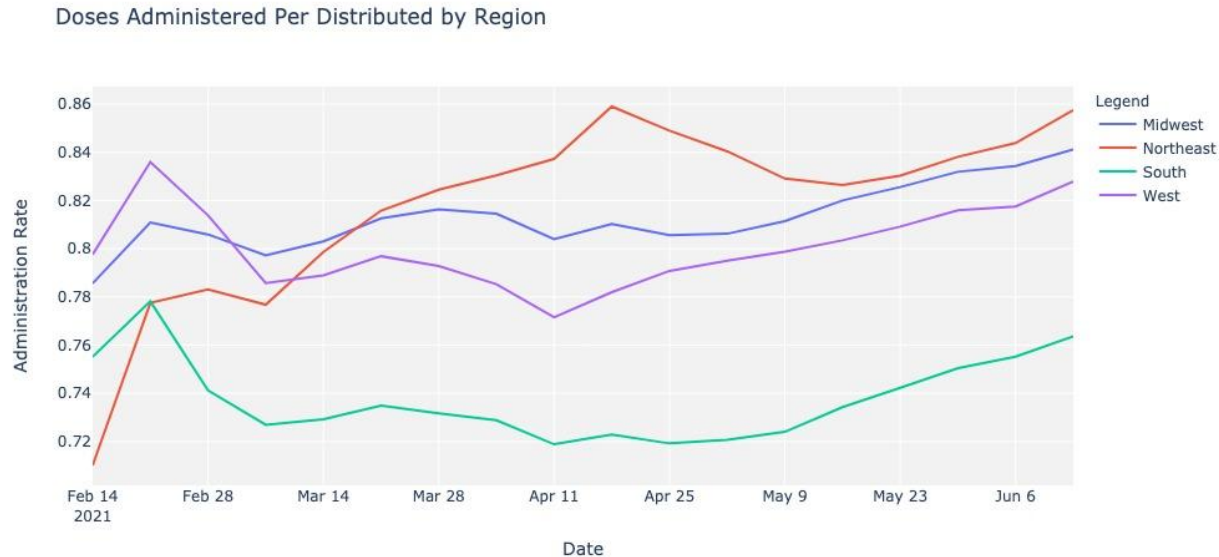
As of June 13, the west (63.8%), midwest (61.1%), and south (57.0%) trail quite significantly, though it appears the west is on the strongest upward trajectory of the three regions.



# Administration Rate

The Administration Rate - or ratio of vaccines administered to vaccines distributed - is a reflection of how effectively the region is delivering vaccines to their population.

The South lags significantly behind other regions, suggesting their challenge is not in vaccine availability but in the population's interest in getting vaccinated.





# Summary & Recommendations

In summary, while current forecasts show the US falling short of the Biden Administration's goal of administering at least 1 vaccine dose to 70% of the adult population, additional campaigning may be able to shift the trend upward toward the goal.

In the remaining weeks leading up to July 4th, the Biden administration should take the following actions to increase the chances of meeting their goal:

→ **Continue community-based vaccine education and local outreach efforts**

Prioritize this aspect of the campaign over increasing vaccine distribution

→ **Launch a nation-wide educational campaign via multiple channels**

Explain the benefits and risks of COVID-19 vaccination and debunk common misconceptions that may be discouraging people from getting vaccinated

→ **Focus investment in the South**

Compared to other regions, the greatest opportunity lies in the south

# Thank You!

**Full Report:**

<https://github.com/kcoop610/time-series-analysis-us-vaccine-goal>

**Email:**

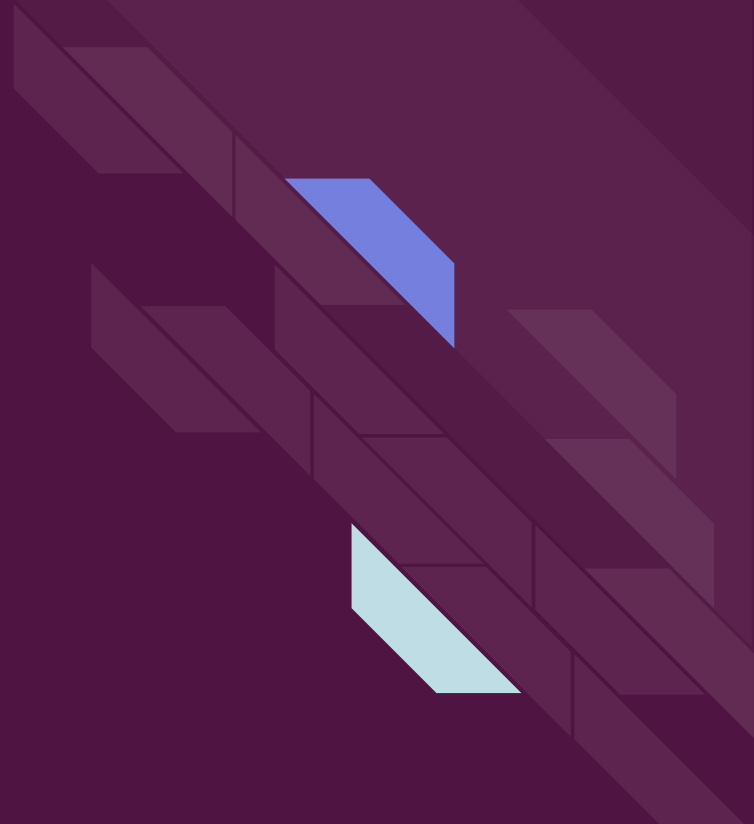
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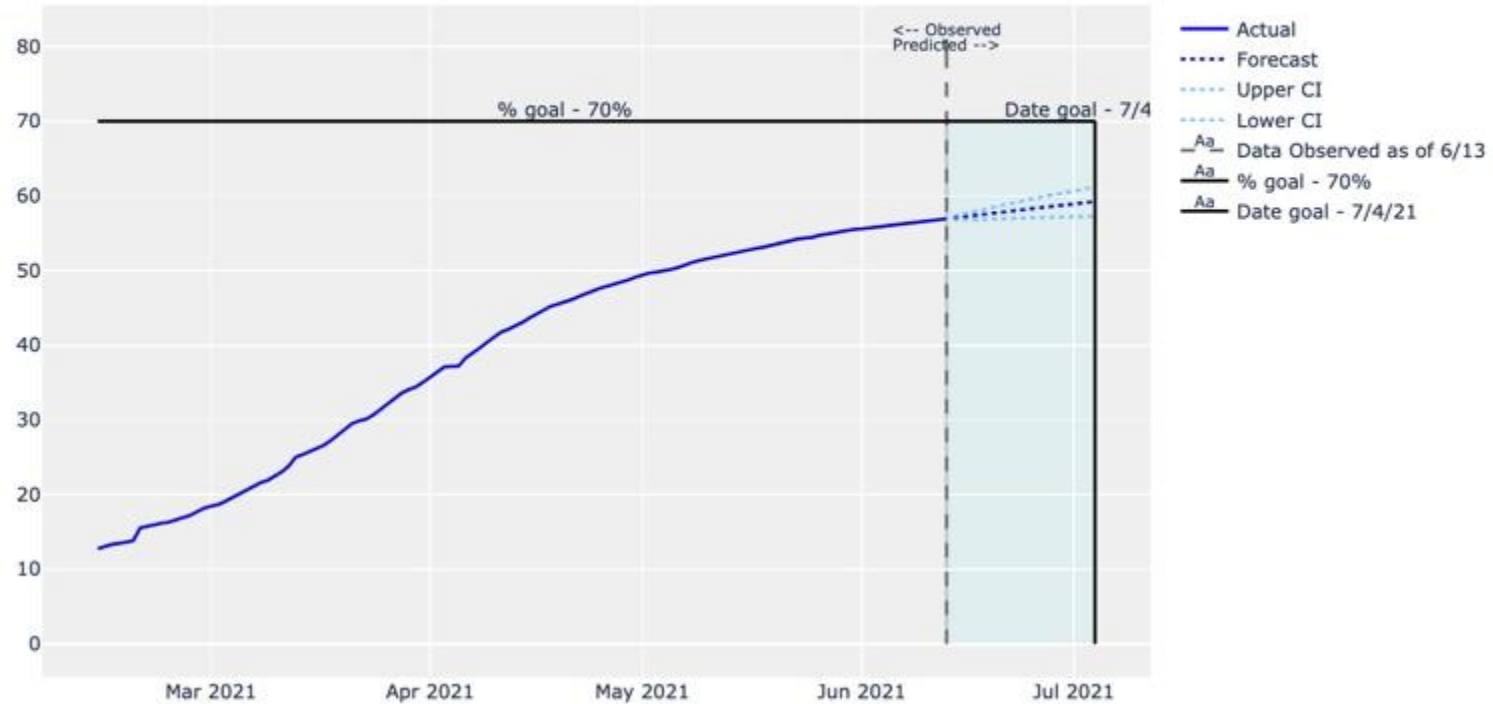


# Appendix



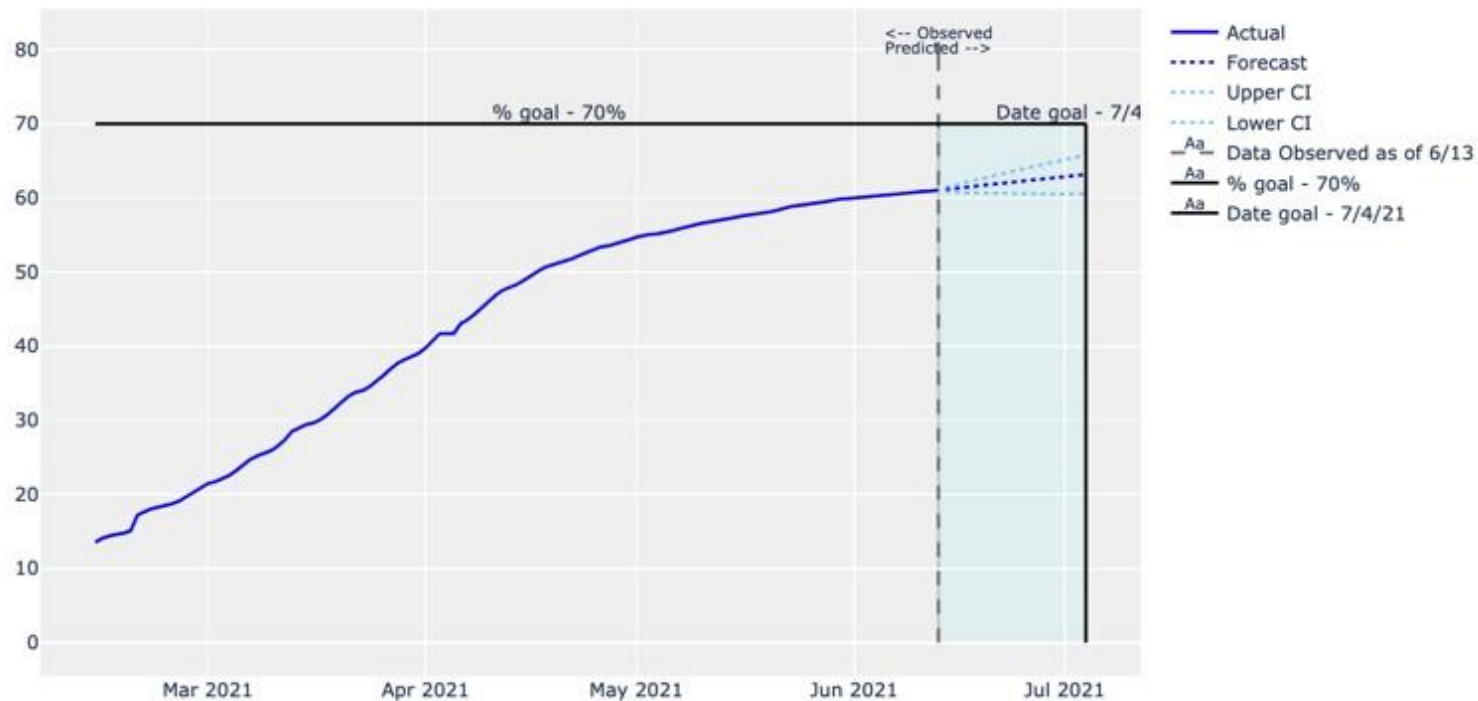
Forecast for 7/4/21: 59.244956235004196

### South Forecast to July 4th



Forecast for 7/4/21: 63.152182404186235

## Midwest Forecast to July 4th



Forecast for 7/4/21: 65.85890405105232

## West Forecast to July 4th

