Interactive Dashboard
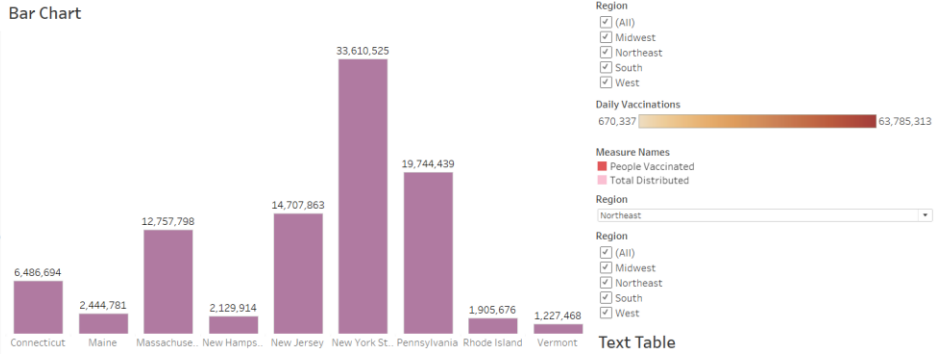
Covid-19 Vaccination : Across Regions   Bar Chart
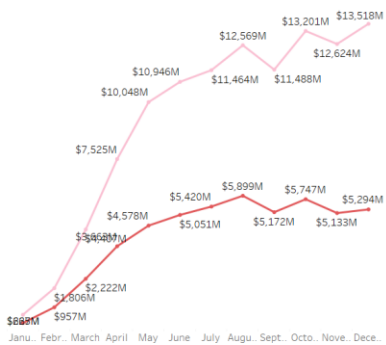
Region
- ☑ (All)
- ☑ Midwest
- ☑ Northeast
- ☑ South
- ☑ West

Daily Vaccinations
670,337 — 63,785,313

Measure Names
- People Vaccinated
- Total Distributed

Region
Northeast

Region
- ☑ (All)
- ☑ Midwest
- ☑ Northeast
- ☑ South
- ☑ West

Text Table

Region	Location	Daily Vaccinations	Daily Vaccination Per Million
Midwest	Illinois	19,396,147	1,530,6
	Indiana	8,345,453	1,239,6
	Iowa	4,513,226	1,430,4
	Kansas	3,980,813	1,366,4
		13,825,117	1,384,3
		8,947,918	1,586,6
		7,915,965	1,289,7
	Nebraska	2,778,086	1,436,3
	North Dakota	975,527	1,280,3
	Ohio	15,551,054	1,330,3
	South Dakota	1,212,786	1,370,5
	Wisconsin	8,940,654	1,535,5
Northeast	Connecticut	6,486,694	1,819,4
	Maine	2,444,781	1,818,7
	Massachusetts	12,757,798	1,850,9
	New Hampshire	2,129,914	1,566,4
	New Jersey	14,707,863	1,655,8
	New York State	33,610,525	1,727,7
	Pennsylvania	19,744,439	1,542,3
	Rhode Island	1,905,676	1,798,8
	Vermont	1,227,468	1,967,3
South	Alabama	5,545,039	1,130,9
	Arkansas	3,845,037	1,274,3
	Delaware	1,554,973	1,596,9

People Vaccinatec Vs Total Distributed

Fully Vaccinated vs Total Vaccinations

Month of Date: November 2021
Total Vaccinations: $10,040M

Covid-19 Vaccination : Across Regions

Region
- ☑ (All)
- ☑ Midwest
- ☑ Northeast
- ☑ South
- ☑ West

SUM(Daily Vaccinations)
670,337 — 63,785,313

Country: United States
Location: North Dakota
Daily Vaccinations: 975,527
People Fully Vaccinated: 82,794,576
Total Boosters: 5,405,211
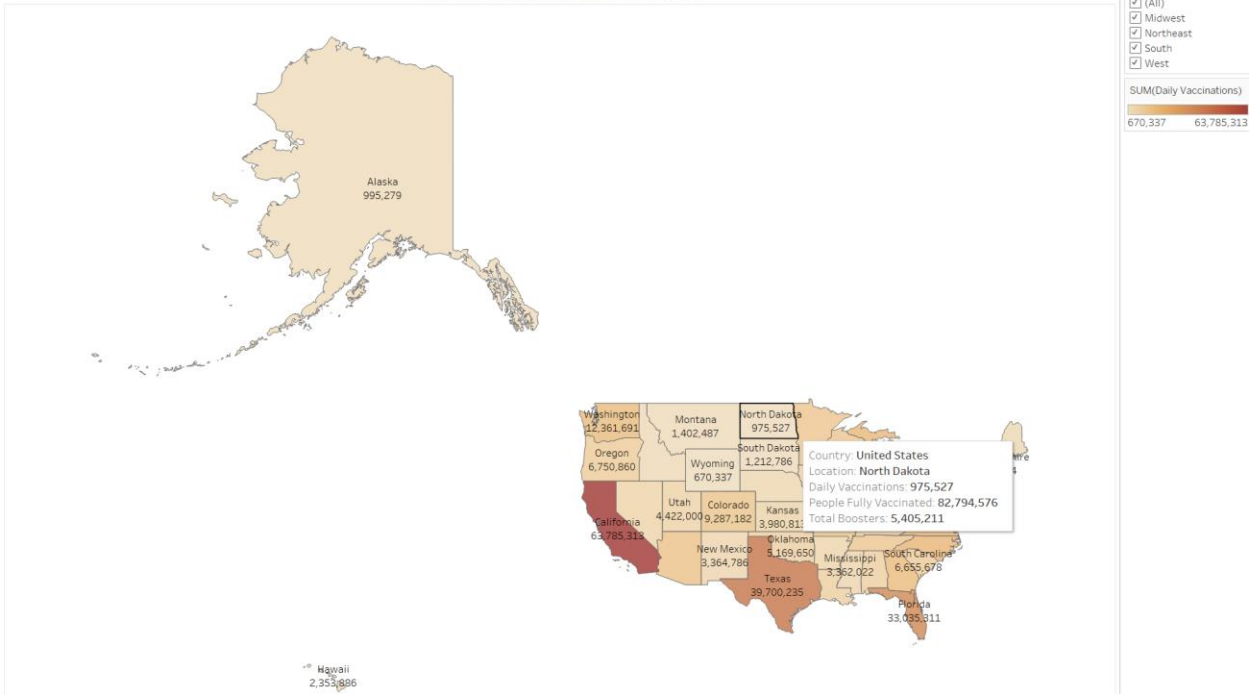
Interactive Dashboard

Regional Variation: There is a significant variation in vaccination numbers across different states. For example, California and Texas have much higher total vaccinations compared to states like Montana or South Dakota. This variation could be due to differences in population density, vaccine availability, and public health strategies.
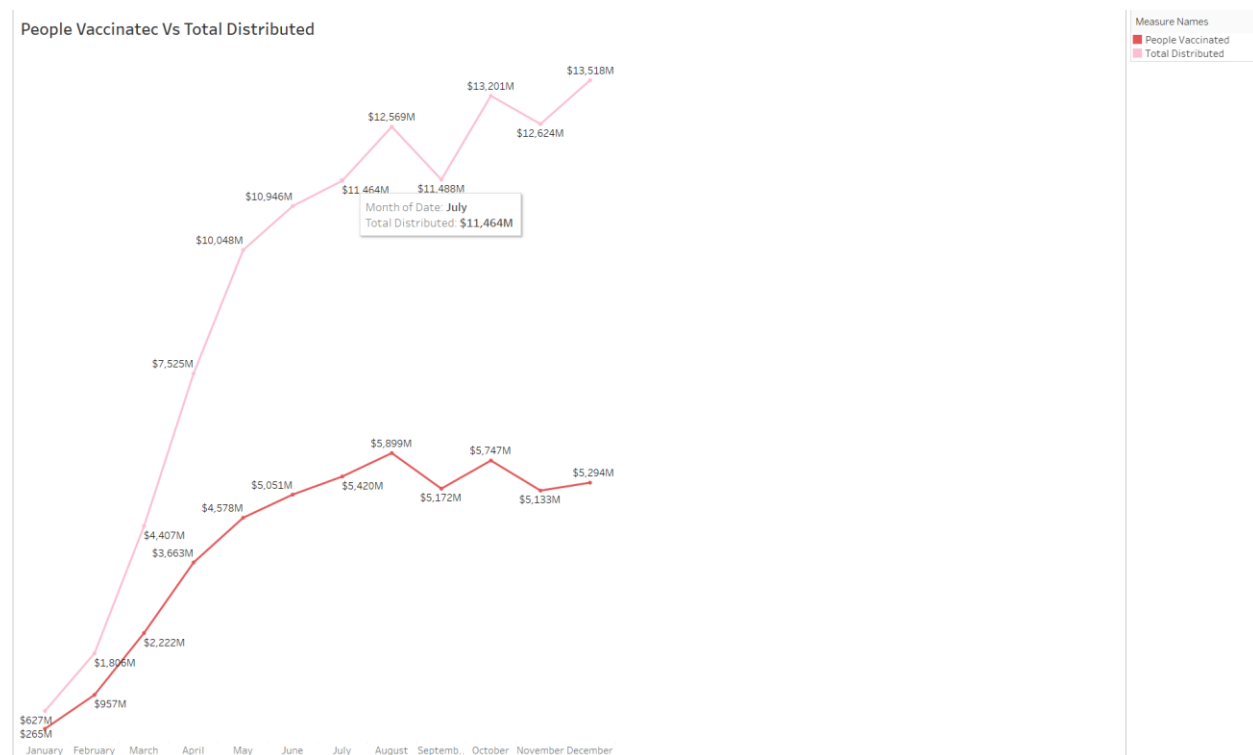
High Impact States: Certain states like California, Texas, and Florida, which have large populations, show very high numbers of total vaccinations and daily vaccinations. This suggests that efforts in these areas could be crucial in achieving overall national vaccination goals.

Data Visibility and Accessibility: The use of color gradients in the map provides a quick way to identify areas with higher and lower vaccination rates. This kind of visualization can be very effective for public health officials and policymakers to identify regions needing more resources or targeted interventions.
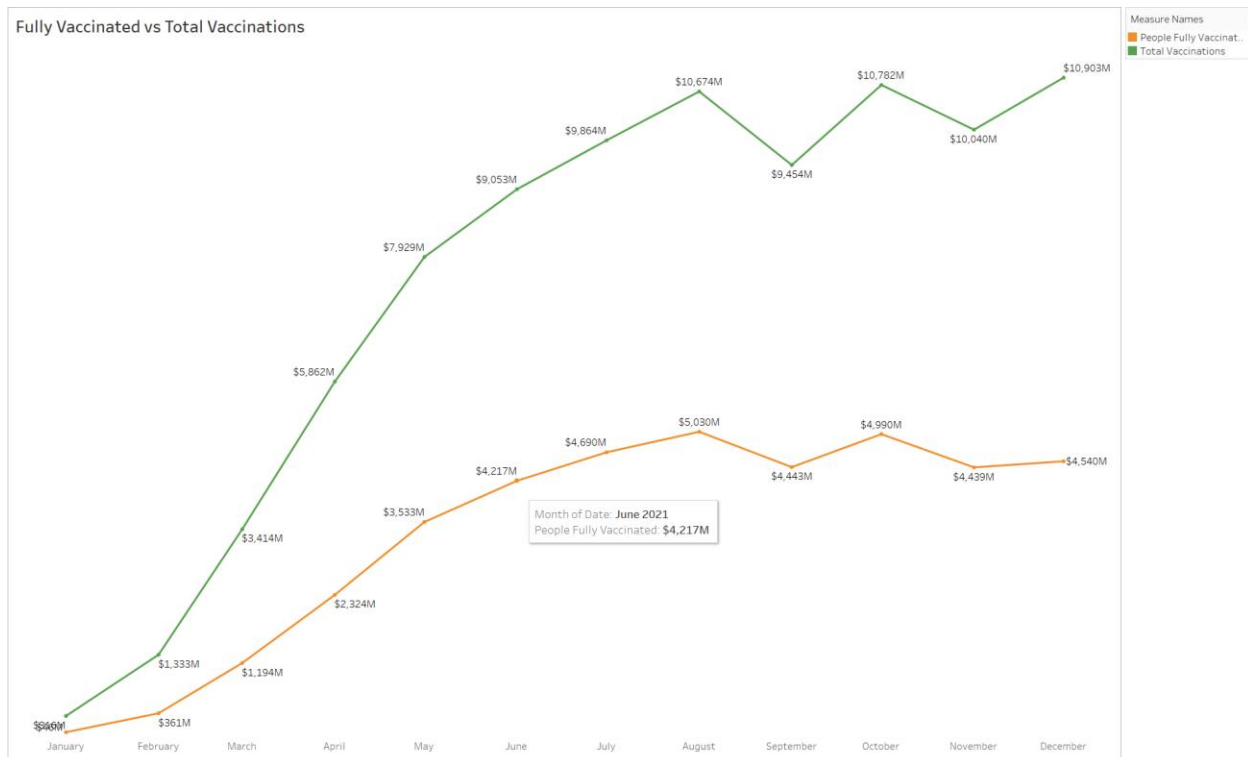
Alaska's Unique Position: Despite its vast geographic area, the total number of daily vaccinations in Alaska is considerably less compared to more populous states, yet it's significant for the region. This points out the challenges and efforts in rolling out vaccinations in more remote and less populated areas.

These insights could help guide resource allocation, public health messaging, and policy decisions to enhance vaccination efforts, especially focusing on underperforming regions to improve overall coverage.

==Time Series Plot==

Interactive Dashboard

Fully Vaccinated vs Total Vaccinations

Legend (Measure Names): People Fully Vaccinat.., Total Vaccinations

Total Vaccinations (green line) values: $946M (January), $1,333M (February), $3,414M (March), $5,862M (April), $7,929M (May), $9,053M (June), $9,864M (July), $10,674M (August), $9,454M (September), $10,782M (October), $10,040M (November), $10,903M (December)

People Fully Vaccinated (orange line) values: $361M (February), $1,194M (March), $2,324M (April), $3,533M (May), $4,217M (June), $4,690M (July), $5,030M (August), $4,443M (September), $4,990M (October), $4,439M (November), $4,540M (December)

Tooltip: Month of Date: **June 2021** / People Fully Vaccinated: **$4,217M**

Time Series – I

==This chart tracks the total vaccines distributed and the number of people vaccinated monthly.==

Rapid Increase in Vaccinations: The number of people vaccinated (pink line) shows a rapid increase from January to December, indicating successful expansion of vaccination efforts over time.

Gap Between Distribution and Vaccination: There is a noticeable gap between the total vaccines distributed (grey line) and the number of people actually vaccinated. This gap might suggest logistical challenges in administering the vaccines or issues with vaccine uptake among the population.

End of Year Surge: Both lines peak towards the end of the year, possibly due to increased vaccine availability and possibly an intensified push to vaccinate during colder months when viral transmission could increase.

Interactive Dashboard

Time Series - II

==This chart compares the total number of vaccinations given with the number of people fully vaccinated.==

Steady Growth in Full Vaccinations: The green line represents the cumulative number of people fully vaccinated, showing a steady climb. This indicates ongoing progress in ensuring that the population receives complete vaccination doses.

Total Vaccinations vs. Full Vaccinations: The gap between total vaccinations (orange line) and fully vaccinated individuals narrows over time, suggesting that more people are completing their vaccination series as time progresses.

These charts are essential for tracking vaccination progress and planning future public health strategies. These visualizations provide crucial data for health authorities and policymakers to evaluate the effectiveness of vaccination drives and plan for future health emergencies more effectively.

Bar Chart
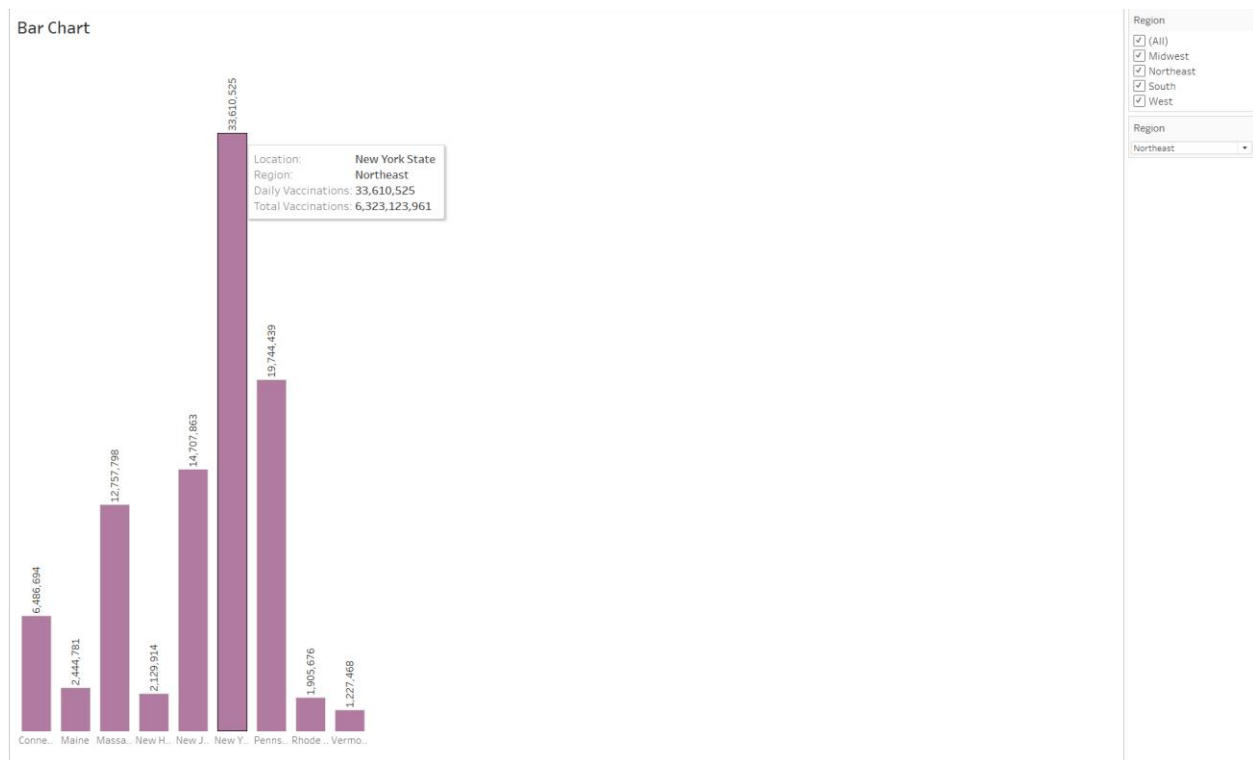
==The bar chart visualization visualizes various states in the Northeast region. Here are some key findings and messages derived from this data:==

State Differences: There is a clear difference in the number of daily vaccinations among the states. New York leads with the highest number, which is to be expected given its large population and urban density. Massachusetts and Pennsylvania follow, indicating strong vaccination efforts in these populous states as well.

Interactive Dashboard

Focus on Urban Centers: The states with larger urban centers (New York, Massachusetts, Pennsylvania) are showing higher vaccination numbers, suggesting effective distribution and accessibility in urban areas compared to smaller states or those with more rural populations.

Resource Allocation: This chart can help in assessing the efficiency of vaccine distribution and identifying states that might be lagging behind in their vaccination efforts, potentially requiring more resources or targeted campaigns to increase vaccination rates.

Comparative Analysis: By comparing these states, stakeholders can evaluate the effectiveness of different public health strategies and potentially apply successful tactics from higher-performing states to those with fewer vaccinations.

These insights are crucial for understanding regional performance and ensuring equitable distribution of healthcare resources across different states, particularly in response to public health emergencies.

Data/Text Table

Text Table

Region	Location	Daily Vaccinations	Daily Vaccinations Per Million	Daily Vaccinations Raw	Distributed Per Hundred	People Fully Vaccinated	People Fully Vaccinated Per Hundred	People Vaccinated	People Vaccinated Per Hundred	Share Doses Used	Total Boosters	Total Boosters Per Hundred	Tot
Midwest	Illinois	19,396,147	1,530,629	15,846,461	22,985	1,035,655,324	8,173	1,406,031,884	11,096	200	59,308,989	468	
	Indiana	8,345,453	1,239,631	8,082,197	31,042	765,501,176	11,371	888,226,055	13,194	263	43,622,407	648	
	Iowa	4,513,226	1,430,470	4,404,869	33,861	409,343,661	12,974	473,759,860	15,016	272	29,921,938	948	
	Kansas	3,980,813	1,366,420	3,876,153	33,637	349,814,927	12,007	438,527,938	15,053	252	19,932,547	684	
	Michigan	13,825,117	1,384,328	13,085,968	33,817	1,217,619,480	12,192	1,427,500,114	14,294	253	85,928,384	860	
	Minnesota	8,947,918	1,586,616	8,643,264	35,162	785,622,822	13,930	922,112,642	16,351	281	61,680,552	1,094	
	Missouri	7,915,965	1,289,779	7,622,416	31,644	680,450,323	11,087	835,813,000	13,618	257	40,331,626	657	
	Nebraska	2,778,086	1,436,138	2,681,443	33,548	250,084,849	12,928	291,643,924	15,077	271	16,658,753	861	
	North Dakota	975,527	1,280,111	919,077	29,738	82,794,576	10,865	100,817,888	13,230	279	5,405,211	709	
	Ohio	15,551,054	1,330,397	14,884,654	32,080	1,386,663,785	11,863	1,605,721,550	13,737	260	91,021,658	779	
	South Dakota	1,212,786	1,370,905	1,156,242	33,000	106,702,070	12,061	130,096,909	14,706	259	6,506,521	735	
	Wisconsin	8,940,654	1,535,559	8,597,493	32,773	785,561,366	13,492	912,117,860	15,666	295	57,511,770	988	
Northeast	Connecticut	6,486,694	1,819,410	6,011,412	40,119	576,114,166	16,159	692,023,428	19,410	287	34,835,742	977	
	Maine	2,444,781	1,818,745	2,294,394	40,639	218,142,649	16,228	254,507,359	18,934	274	15,253,318	1,135	
	Massachusetts	12,757,798	1,850,965	12,096,487	40,779	1,102,000,049	15,988	1,366,716,596	19,829	283	64,630,860	938	
	New Hampshire	2,129,914	1,566,431	1,731,471	29,896	152,497,410	11,215	190,053,069	13,977	213	885,145	65	
	New Jersey	14,707,863	1,655,884	13,770,918	36,853	1,256,429,860	14,145	1,536,565,122	17,299	258	71,907,748	810	
	New York State	33,610,525	1,727,729	32,123,982	37,631	2,872,818,313	14,768	3,426,877,113	17,616	278	128,784,324	662	
	Pennsylvania	19,744,439	1,542,309	17,020,962	28,677	1,341,386,862	10,478	1,817,125,261	14,194	228	19,867,869	155	
	Rhode Island	1,905,676	1,798,991	1,811,936	41,138	168,566,034	15,912	199,286,513	18,812	271	11,157,066	1,053	
	Vermont	1,227,468	1,967,144	1,115,260	37,131	86,964,445	13,937	106,390,099	17,050	242	8,762,211	1,404	
South	Alabama	5,545,039	1,130,905	5,322,879	32,210	470,288,500	9,591	612,485,871	12,492	218	24,127,315	492	
	Arkansas	3,845,037	1,274,126	3,587,807	32,272	312,145,342	10,343	408,185,667	13,526	243	17,873,308	592	
	Delaware	1,554,973	1,596,862	1,499,297	37,922	126,507,004	12,992	157,682,877	16,193	249	6,493,464	667	
	District of Columbia	1,260,850	1,786,544	1,129,560	43,526	96,335,291	13,650	122,338,046	17,334	242	4,362,074	618	
	Florida	33,035,311	1,538,132	31,335,482	36,798	2,780,348,506	12,945	3,463,450,580	16,126	260	154,332,450	719	
	Georgia	13,109,024	1,234,676	11,911,463	32,006	1,058,098,967	9,966	1,347,194,616	12,689	227	46,882,367	442	
	Kentucky	5,770,356	1,291,557			413,037,667	9,245	514,269,676	11,511	226	30,759,480	688	
	Louisiana	5,515,408	1,186,402	Region: South		485,209,630	10,437	581,013,193	12,498	257	26,322,808	566	
	Maryland	10,287,500	1,701,637	Location: Georgia		876,235,690	14,493	1,040,473,803	17,210	251	53,737,976	889	
	Mississippi	3,362,022	1,129,652	Daily Vaccinations Raw: 11,911,463		288,349,547	9,689	356,731,616	11,986	231	14,433,441	485	
	North Carolina	14,746,419	1,406,014			1,223,162,084	11,662	1,557,815,177	14,853	251	44,057,494	420	
	Oklahoma	5,169,650	1,306,464	4,927,471	32,576	444,604,095	11,236	563,079,804	14,230	261	23,764,795	601	
	South Carolina	6,655,678	1,292,687	6,283,796	32,750	565,716,811	10,988	699,400,310	13,584	252	32,404,778	629	
	Tennessee	8,664,340	1,268,723	8,347,064	30,658	714,197,096	10,458	878,351,893	12,862	255	45,935,233	673	
	Texas	39,700,235	1,369,172	37,299,384	33,500	3,275,273,395	11,296	4,081,486,335	14,076	248	168,678,775	582	
	Virginia	14,270,200	1,671,849	13,409,465	36,758	1,194,080,883	13,990	1,455,368,689	17,051	276	73,945,701	866	
	Washington	12,361,691	1,623,358	11,873,251	33,087	960,969,193	12,620	1,151,161,480	15,117	250	67,303,400	884	
	West Virginia	2,401,626	1,340,076	1,547,317	33,021	170,452,071	9,511	211,862,694	11,822	216	3,623,826	202	
West	Alaska	995,279	1,360,524	930,600	37,081	90,459,593	12,365	108,784,678	14,871	242	5,893,076	806	
	Arizona	10,353,490	1,422,435	9,725,404	34,027	860,000,774	11,815	1,079,611,508	14,832	261	44,528,683	612	
	California	63,785,313	1,614,331	57,689,931	33,683	4,874,456,913	12,337	6,433,217,968	16,282	253	153,436,571	388	
	Colorado	9,287,182	1,612,705	8,806,104	36,309	805,095,809	13,980	956,883,879	16,616	278	56,522,706	982	
	Hawaii	2,353,886	1,662,504	2,011,451	37,265	180,718,283	12,764	250,153,640	17,668	245	5,108,555	361	
	Idaho	1,990,969	1,114,108	1,883,974	30,301	179,142,263	10,024	211,989,623	11,862	242	12,341,152	691	
	Montana	1,402,487	1,312,234	1,366,395	32,424	126,577,873	11,843	151,940,695	14,216	268	9,009,200	843	
	Nevada	4,245,333	1,378,282	4,050,240	31,716	362,916,332	11,782	460,822,077	14,961	276	17,724,511	575	
	New Mexico	3,364,786	1,604,698	3,150,581	27,350	235,261,023	11,220	294,628,858	14,051	244	19,738,041	941	

<mark>The detailed data/text table provides comprehensive vaccination statistics across various U.S. states, segmented into regions.</mark>

Overall Vaccination Effort

➢ High Numbers in Populous States: States with large populations, like California, Texas, and New York, have administered the highest total numbers of vaccinations, which is consistent with their larger population bases.

Interactive Dashboard

➢ Vaccinations per Million: This metric provides an adjusted view that accounts for population differences. Smaller states or those with efficient healthcare systems may show higher figures here, indicating effective vaccination campaigns relative to their population sizes.

Detailed Metrics Provided

➢ Daily Vaccinations (Raw and Per Million): Offers insights into the daily operational capacity and efficiency of vaccine distribution in each state.
➢ Distributed Per Hundred: Reflects how many doses have been made available for every 100 people in the state, highlighting the distribution efficiency.
➢ People Fully Vaccinated Per Hundred: This is critical as it shows the percentage of the population that has completed the vaccination regimen, providing a direct measure of community immunity levels.
➢ Total Boosters and Boosters Per Hundred: These figures are essential for understanding the uptake of booster vaccinations, which are crucial for maintaining immunity against emerging variants.

Regional Comparisons

➢ Midwest and South: These regions show robust vaccination figures but vary significantly in their booster shot uptake.
➢ Northeast: Generally, higher rates of full vaccination per hundred, possibly due to higher urban density and better healthcare infrastructure.
➢ West: Mixed results, with states like California showing high total vaccinations but varying rates of fully vaccinated individuals.

**Strategic Implications**

➢ Targeted Interventions: States with lower per capita vaccination rates might need targeted public health campaigns to increase vaccine uptake.
➢ Resource Allocation: The data can guide where additional resources (vaccines, healthcare workers) are most needed to increase vaccination rates.
➢ Policy Adjustments: States lagging in booster uptake might require policy adjustments or campaigns to increase awareness and accessibility.

This table is a powerful tool for policymakers and public health officials to monitor progress, identify gaps, and adjust strategies accordingly to ensure the health and safety of the population.

Interactive Dashboard
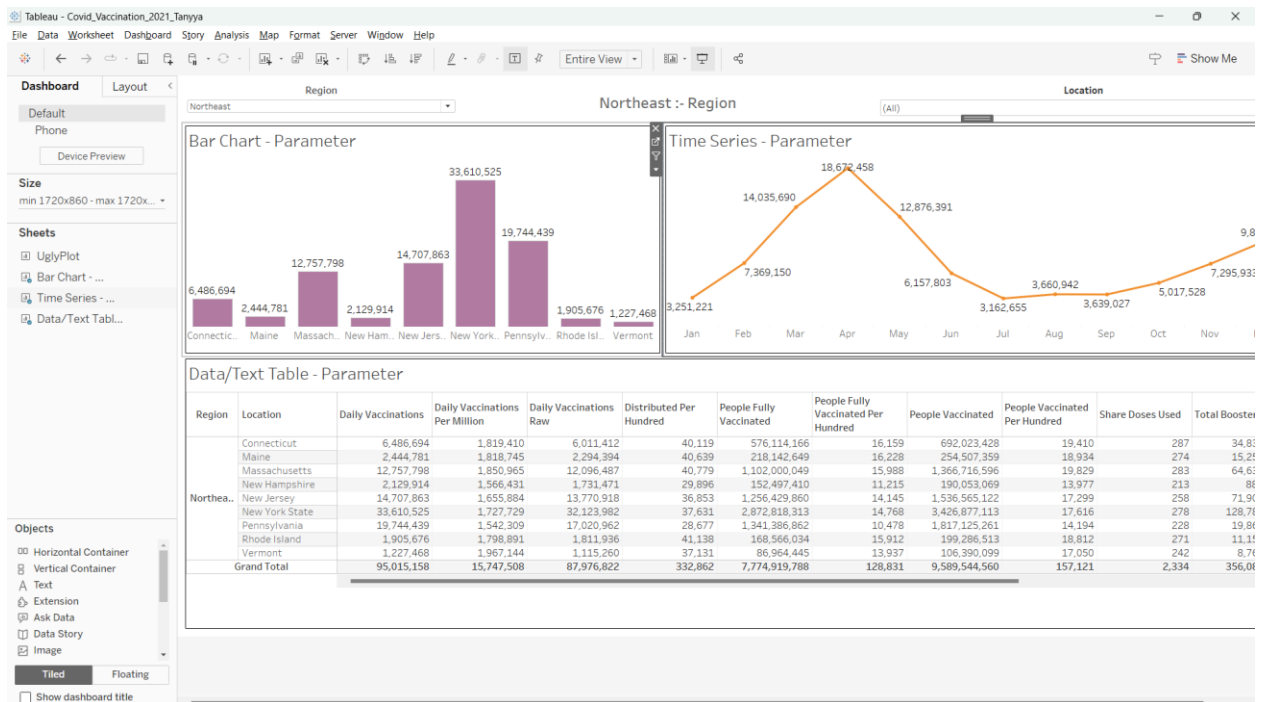
Using "Region parameter." This parameter allows users to dynamically switch between different regions to view tailored data and analytics. Here's a breakdown of how this feature enhances the dashboard and its utility:

Region Parameter - Functionality and Benefits

➢ **Interactivity:** The Region parameter lets users interact with the dashboard by selecting different regions (e.g., Midwest, Northeast, South, West). This functionality enables tailored viewing of data, making the dashboard versatile and user-friendly.

➢ **Customization**: By using this parameter, stakeholders can focus on specific areas of interest. This is particularly useful for regional health authorities or policymakers who need to concentrate efforts or resources in specific areas.

➢ **Comparison:** Users can easily compare and contrast vaccination efforts and outcomes between different regions. This helps in identifying best practices and areas needing improvement.

How the Region Parameter Influences Data Display

• **Bar Chart** - Parameter: When a region is selected via the Region parameter, the bar chart updates to show the daily vaccinations for each state within that region. This allows for a quick comparison of state-level efforts within the selected region.

• **Time Series** - Parameter: The time series graph adapts to show the trend of vaccinations over time for the selected region. This helps in understanding the progress and identifying any seasonal trends or impacts of policy changes over time.

Interactive Dashboard

- **Data/Text Table** - Parameter: The table updates to reflect detailed metrics like daily vaccinations, fully vaccinated per hundred, and total boosters for the states in the chosen region. This detailed data aids in granular analysis and decision-making.

In essence, the Region parameter significantly enhances the dashboard's functionality by allowing users to customize the data display according to specific regional needs, thereby supporting more informed decision-making and efficient public health management.

Ugly Plot
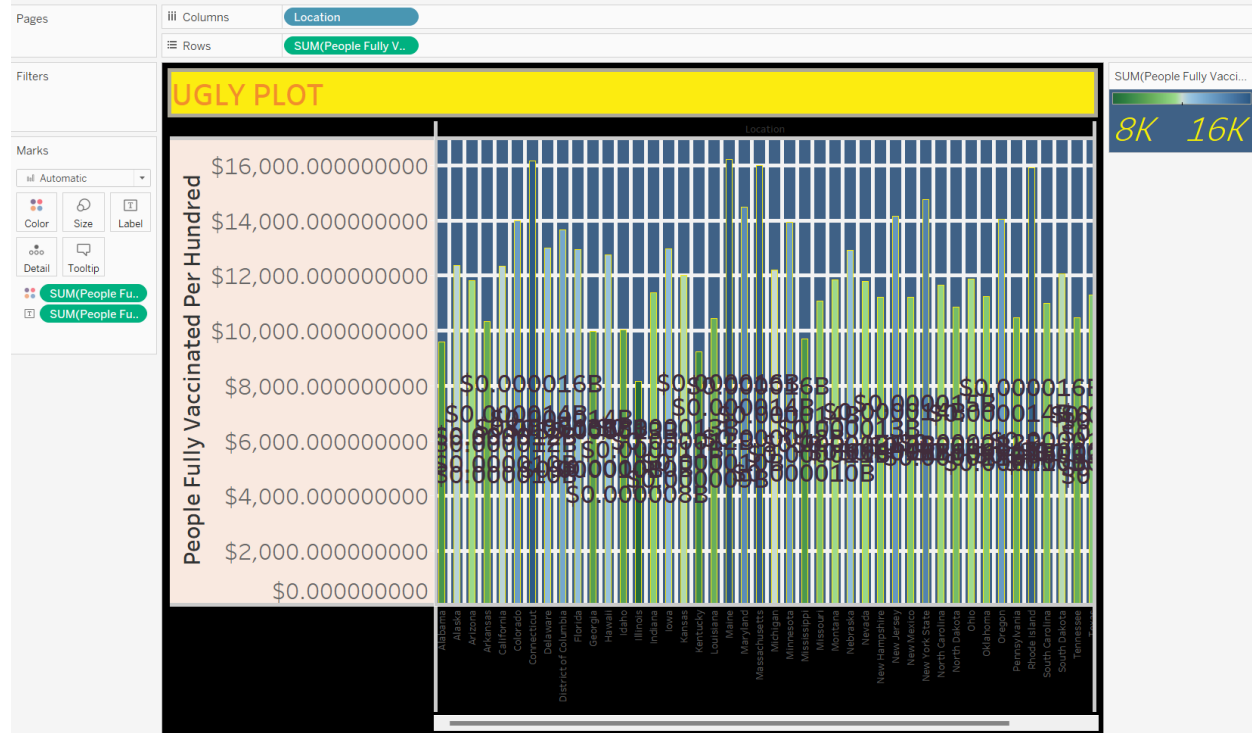
The visualization titled "UGLY PLOT" represents number of people fully vaccinated per hundred across various locations, it's somewhat challenging to interpret due to its complex design.

Data Range and Scale: The y-axis represents the number of people fully vaccinated per hundred, spans from 0 to over $16,000Normally, this kind of metric should not exceed 100 if it truly represents a percentage of the population.

Color Coding and Pattern: The chart uses multiple colors and dense overlapping patterns, which make it difficult to discern specific data points or trends. Each bar might represent a location with varying vaccination rates, but the clarity is compromised by visual complexity.

Overlapping Labels: The location labels at the bottom are overlapping and unreadable, which severely limits the utility of the visualization.

Interactive Dashboard

Clarity and Simplicity: Effective visualizations typically simplify complexity to enhance understanding. This plot, with its excessive granularity and color variation, does the opposite, making it hard to extract actionable insights.

Accessibility: This plot is not easily accessible for individuals with visual impairments or those not familiar with complex data representations.

Despite its deliberate design to complicate interpretation, the plot still manages to convey essential insights into vaccination distribution disparities and the sheer scale of data management in public health initiatives.