

# Low-Income Jobs Lost to COVID-19

## **Presentation #6**

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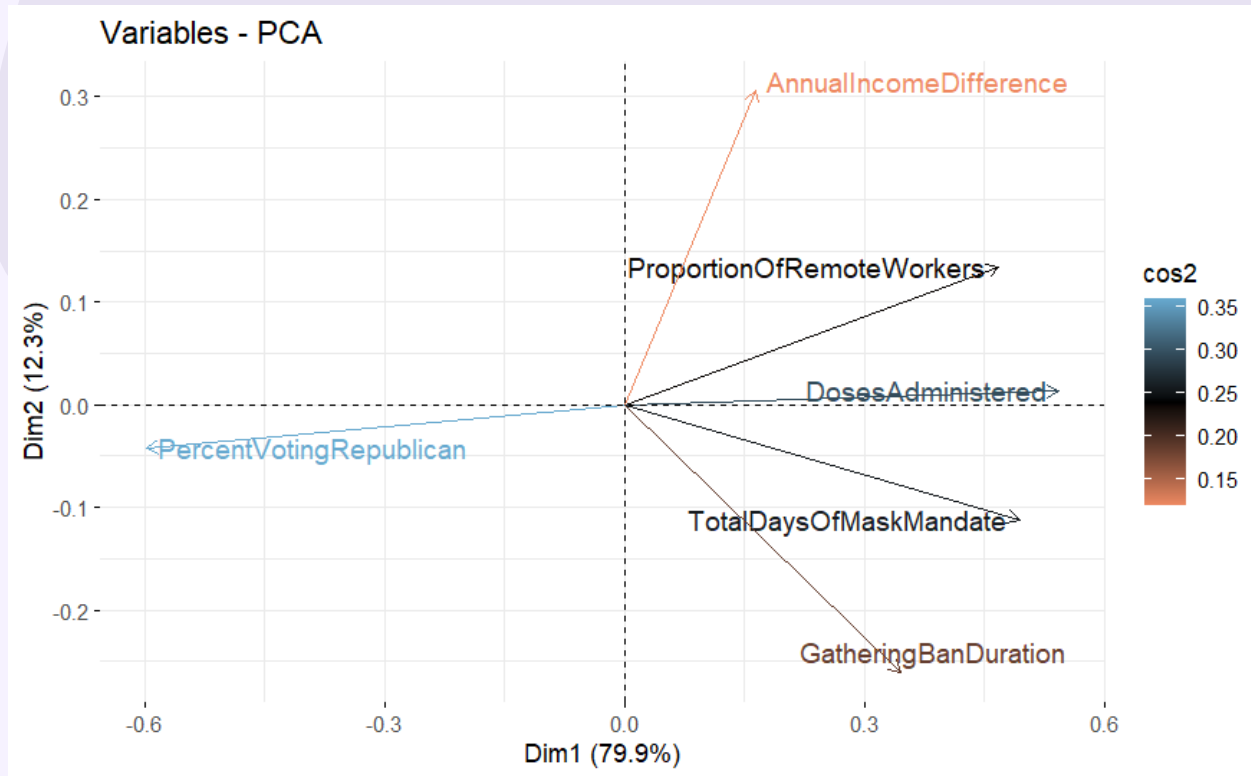
# Variables Used

Variable	P-Value	Correlation Coefficient	Relationship With PLIJs Lost
Rate of Vaccination	$1.497 \times 10^{-5}$	0.57	Moderate & Positive (PLIJs Lost ↑, Rate of Vaccination ↑)
Length of Vaccine Availability	$6.24 \times 10^{-6}$	0.60	Moderate & Positive (PLIJs Lost ↑, Length of Vaccine Availability ↑)
Length of Masking Requirement	$1.929 \times 10^{-7}$	0.70	Strong & Positive (PLIJs Lost ↑, Length of Requirements ↑)
Gathering Restrictions (Max Length)	0.0009606	0.45	Moderate & Positive (PLIJs Lost ↑, Length of Gathering Restrictions ↑)
Average Salary (per state, 2021)	0.00113	0.45	Moderate & Positive (PLIJs Lost ↑, Average Salary ↑)
Healthcare Rank (2021)	0.001125	-0.50	Moderate & Negative (PLIJs Lost ↑, Healthcare rank ↓)
Proportion of Republican Voters (2020)	$1.934 \times 10^{-10}$	-0.75	Strong & Negative (PLIJs Lost ↑, Prop. of Republican Voters ↓)
Rate of Jobs that went Remote	0.04745	0.29	Weak & Positive (PLIJs Lost ↑, Rate of Jobs that went Remote ↑)

# PRINCIPAL COMPONENT ANALYSIS (PCA) RESULTS



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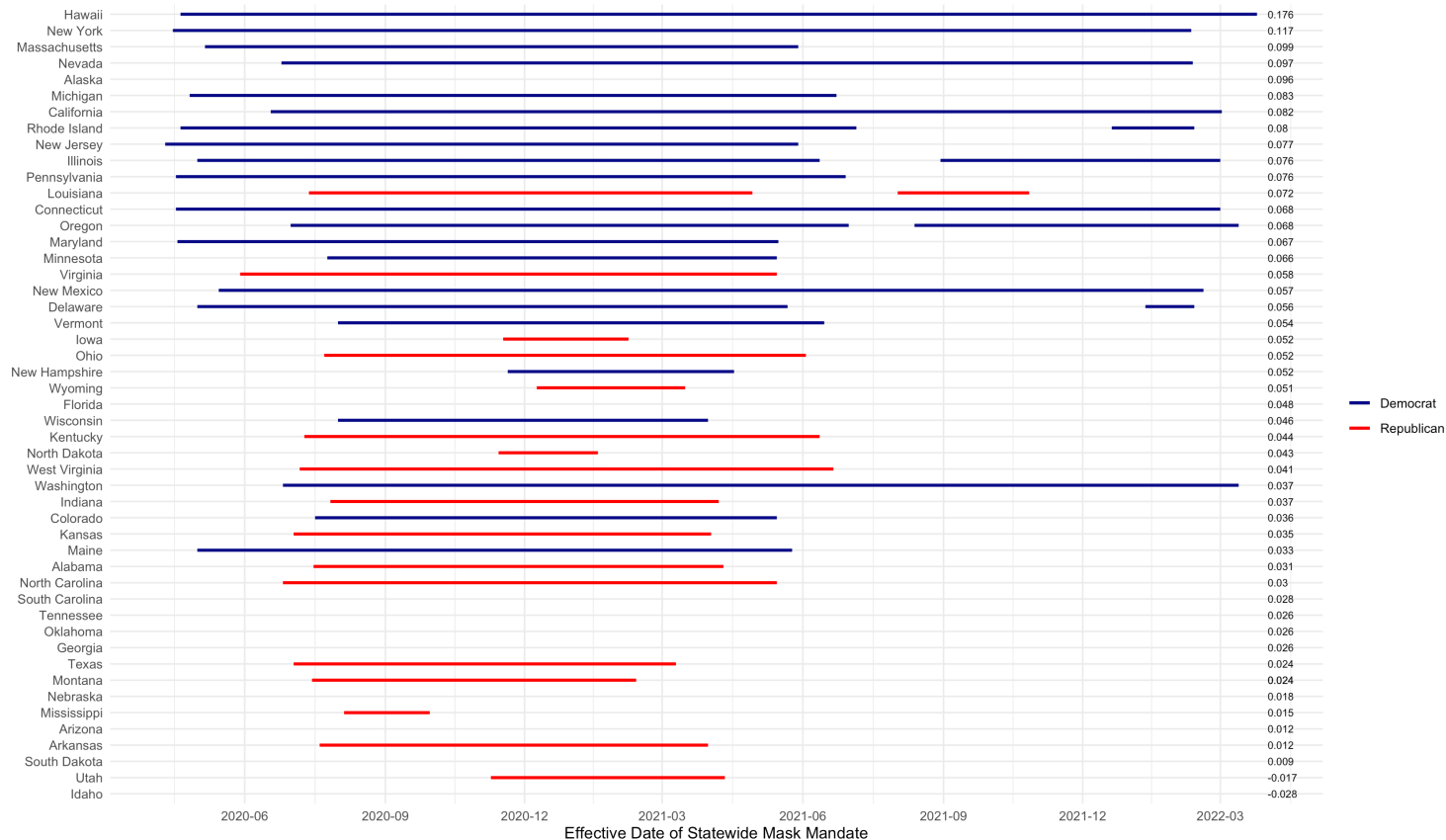
# PRINCIPAL COMPONENT ANALYSIS (PCA) INTERPRETATIONS

	Component 1	Component 2
Doses Administered	0.4837168	0.03099494
Proportion of Remote Workers	0.4164269	0.30434245
Total Days of Mask Mandate	0.4395590	-0.25413694
Annual Income Difference between 2018 and 2021	0.1463136	0.69423316
Percentage voting Republican	-0.5323566	-0.09499034
Gathering Ban Duration	0.3075441	-0.59232302

# VISUAL 1: Length of Masking Requirement

Mask Requirement Timelines in States with Statewide Requirements

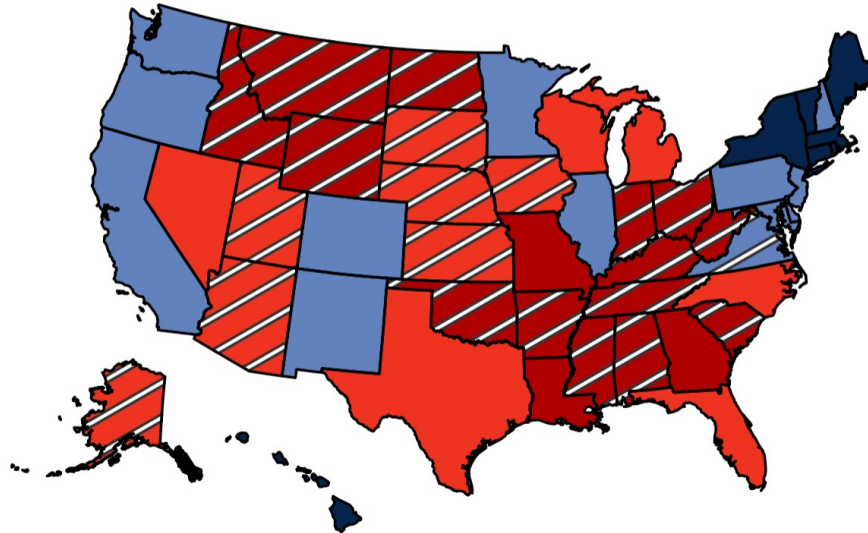
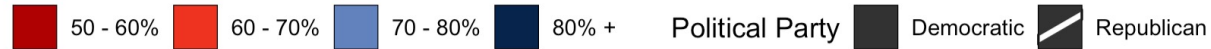
Sorted by: Low Income Jobs Lost in 2021\*. Colored by: Party Leaning in 2020 Elections



\*Low-income jobs lost is by proportion relative to the population of the state. Sorted from high to low.

## VISUAL 2: Vaccine Data (by state)

Percent Total Population with Completed Series reported to the CDC by State/Territory and for Select Federal Entities



# OUR CHALLENGES



## Dataset Findings

- Creating our visualizations to show patterns/relationships & some struggles with data wrangling for our variables



## Metrics

- Struggles with conducting the principal component analysis with the metrics we have & combining them into one measure



## Our Goal

- Figuring out how to use all these variables & combining them into one measure

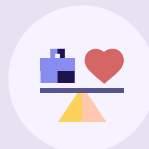


# OUR NEXT STEPS



## Final Report

Start putting together our final report & perfecting the GitHub repository.



## More External Research

Use external sources to figure out the 'why' behind the patterns and relationships we're seeing.

# UPDATED LIST OF REFERENCES (data)

Variable	Dataset
Length of masking requirement	<a href="https://ballotpedia.org/State-level_mask_requirements_in_response_to_the_coronavirus_(COVID-19)_pandemic,_2020-2022">https://ballotpedia.org/State-level mask requirements in response to the coronavirus (COVID-19) pandemic, 2020-2022</a>
Healthcare rank (2021)	<a href="https://www.usnews.com/news/best-states/rankings/health-care">https://www.usnews.com/news/best-states/rankings/health-care</a>
Gathering Restrictions (Max Length)	<a href="https://healthdata.gov/dataset/U-S-State-and-Territorial-Gathering-Bans-March-11-8tfm-md2h/data?no_mobile=true">https://healthdata.gov/dataset/U-S-State-and-Territorial-Gathering-Bans-March-11-8tfm-md2h/data?no_mobile=true</a>
Rate of Vaccination	<a href="https://covid.cdc.gov/covid-data-tracker/#vaccinations_vacc-total-admin-count-total">https://covid.cdc.gov/covid-data-tracker/#vaccinations_vacc-total-admin-count-total</a>
Length of Vaccine Availability	<a href="https://covid.cdc.gov/covid-data-tracker/#vaccinations_vacc-total-admin-count-total">https://covid.cdc.gov/covid-data-tracker/#vaccinations_vacc-total-admin-count-total</a>
Rate of Jobs that went Remote	<a href="https://www.teamflowhq.com/blog/states-where-the-most-people-worked-remote-because-of-covid-19">https://www.teamflowhq.com/blog/states-where-the-most-people-worked-remote-because-of-covid-19</a>
Political Standing	<a href="https://ballotpedia.org/Election_results,_2020:_State_trifectas_and_the_2020_presidential_vote">https://ballotpedia.org/Election results, 2020: State trifectas and the 2020 presidential vote</a>
Average Salary (per state, 2021)	<a href="https://www.statista.com/statistics/243850/private-industry-wages-per-employee-in-the-us-by-state/">https://www.statista.com/statistics/243850/private-industry-wages-per-employee-in-the-us-by-state/</a>
Income Tax	<a href="https://www.irs.gov/statistics/soi-tax-stats-individual-income-tax-statistics-2020-zip-code-data-soi">https://www.irs.gov/statistics/soi-tax-stats-individual-income-tax-statistics-2020-zip-code-data-soi</a>
Total Income per state (2018 – 2021)	<a href="https://apps.bea.gov/iTable/?reqid=70&amp;step=1&amp;acrdn=2#eyJhcHBpZCI6NzAsInN0ZXBzIjpBMSwyNCwyOSwyNSwzMSwyNiwyNywzMCwzMF0sImRhdGEiOiRbYmxlSWQiLCI2MDAiXSxbIkNsYXNzaWZpY2F0aW9uIiwuTm9uLUluZHVzdHJ5Ii0sWyJNYWpvcj9BcmVhIiwuMCJdLFsiU3RhdGUuIiLFsiMCJdXSxbIkFyZWElFsiWFgiXV0sWyJTdGF0aXN0aWMiLCIxIi0sWyJVbml0X29mX21iYXN1cmUiLCJMZXZlbiHMlXsxbIIIiYXIlFsiMjAyMSljlwMjAiLClyMDE5IiwuMjAxOCJdXSxbIIIiYXJjZWdpbiIsIi0sWyJZZWFyX0VuZCIsl0x1I1dfQ==">https://apps.bea.gov/iTable/?reqid=70&amp;step=1&amp;acrdn=2#eyJhcHBpZCI6NzAsInN0ZXBzIjpBMSwyNCwyOSwyNSwzMSwyNiwyNywzMCwzMF0sImRhdGEiOiRbYmxlSWQiLCI2MDAiXSxbIkNsYXNzaWZpY2F0aW9uIiwuTm9uLUluZHVzdHJ5Ii0sWyJNYWpvcj9BcmVhIiwuMCJdLFsiU3RhdGUuIiLFsiMCJdXSxbIkFyZWElFsiWFgiXV0sWyJTdGF0aXN0aWMiLCIxIi0sWyJVbml0X29mX21iYXN1cmUiLCJMZXZlbiHMlXsxbIIIiYXIlFsiMjAyMSljlwMjAiLClyMDE5IiwuMjAxOCJdXSxbIIIiYXJjZWdpbiIsIi0sWyJZZWFyX0VuZCIsl0x1I1dfQ==</a>
Party Affiliation Proportion (2020)	<a href="https://www.pewresearch.org/religion/religious-landscape-study/compare/party-affiliation/by/state/">https://www.pewresearch.org/religion/religious-landscape-study/compare/party-affiliation/by/state/</a>

# LIST OF REFERENCES (articles)

Title	Link
<i>Disentangling policy effects using proxy data: Which shutdown policies affected unemployment during the COVID-19 pandemic?</i>	<a href="https://www.sciencedirect.com/science/article/pii/S0047272720301213">https://www.sciencedirect.com/science/article/pii/S0047272720301213</a>
<i>Lockdown Without Loss? A Natural Experiment of Net Payoffs from COVID-19 Lockdowns</i>	<a href="https://journals.sagepub.com/doi/abs/10.1177/07439156221143954?journalCode=ppoa">https://journals.sagepub.com/doi/abs/10.1177/07439156221143954?journalCode=ppoa</a>
<i>Jobs loss to remain high due to slow vaccines, COVID variants: ILO</i>	<a href="https://www.aljazeera.com/economy/2021/6/2/job-loss-to-remain-high-due-to-slow-vaccines-covid-variants-ilo">https://www.aljazeera.com/economy/2021/6/2/job-loss-to-remain-high-due-to-slow-vaccines-covid-variants-ilo</a>

# QUESTIONS?

