

# Healthcare

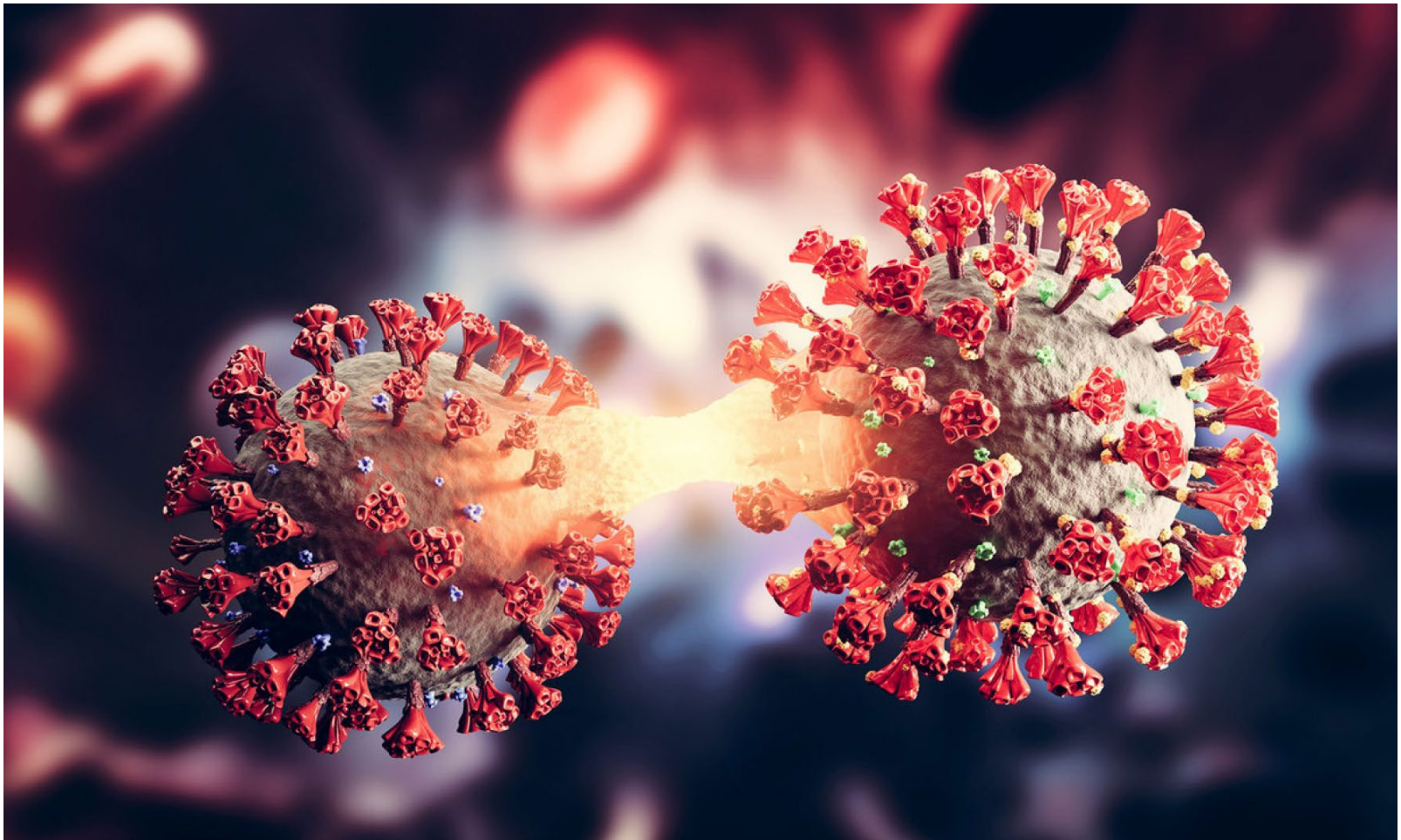
Dr. Robert Sonora

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Bureau of Business and Economic Research  
Senior Research Professor  
University of Montana



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Healthcare



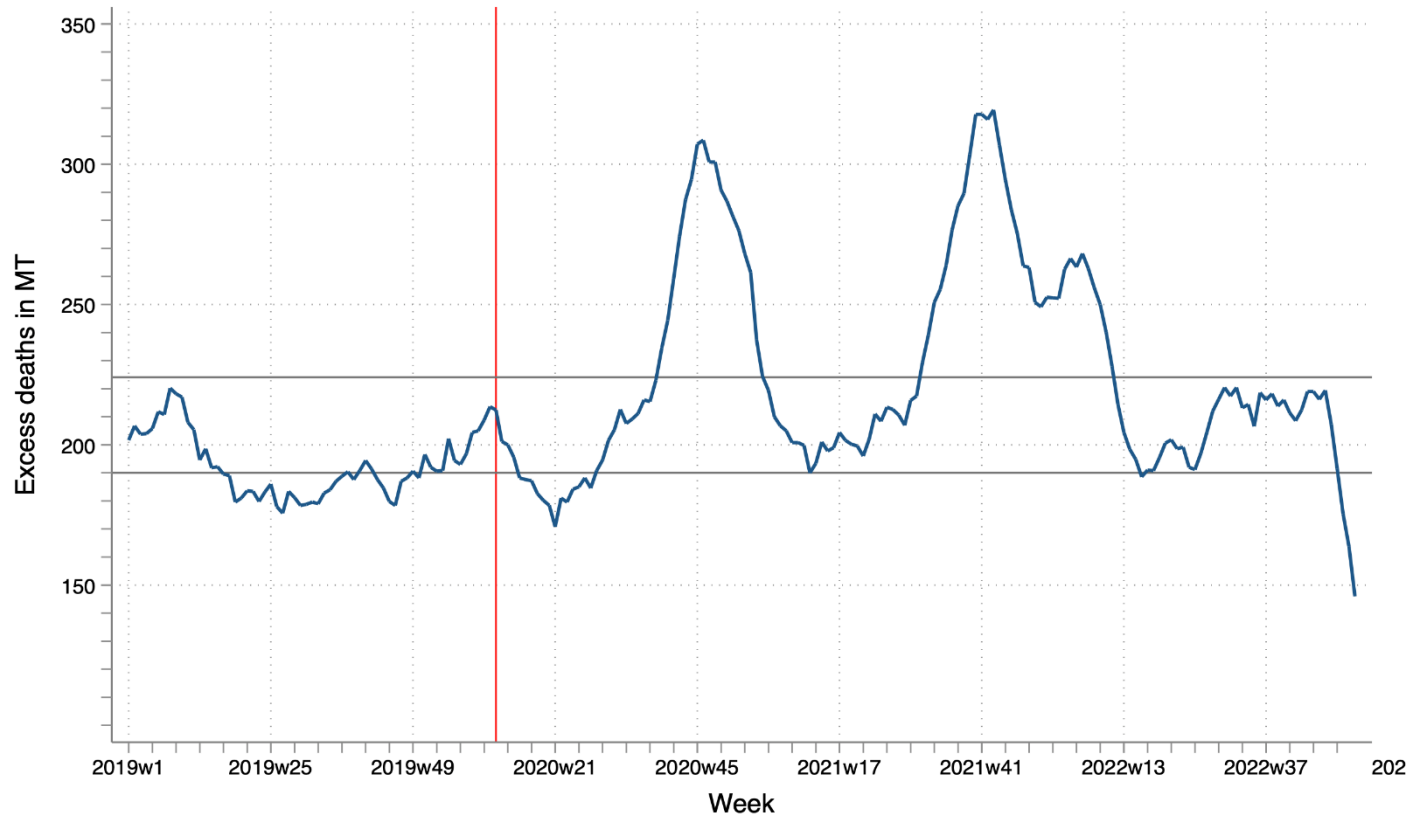
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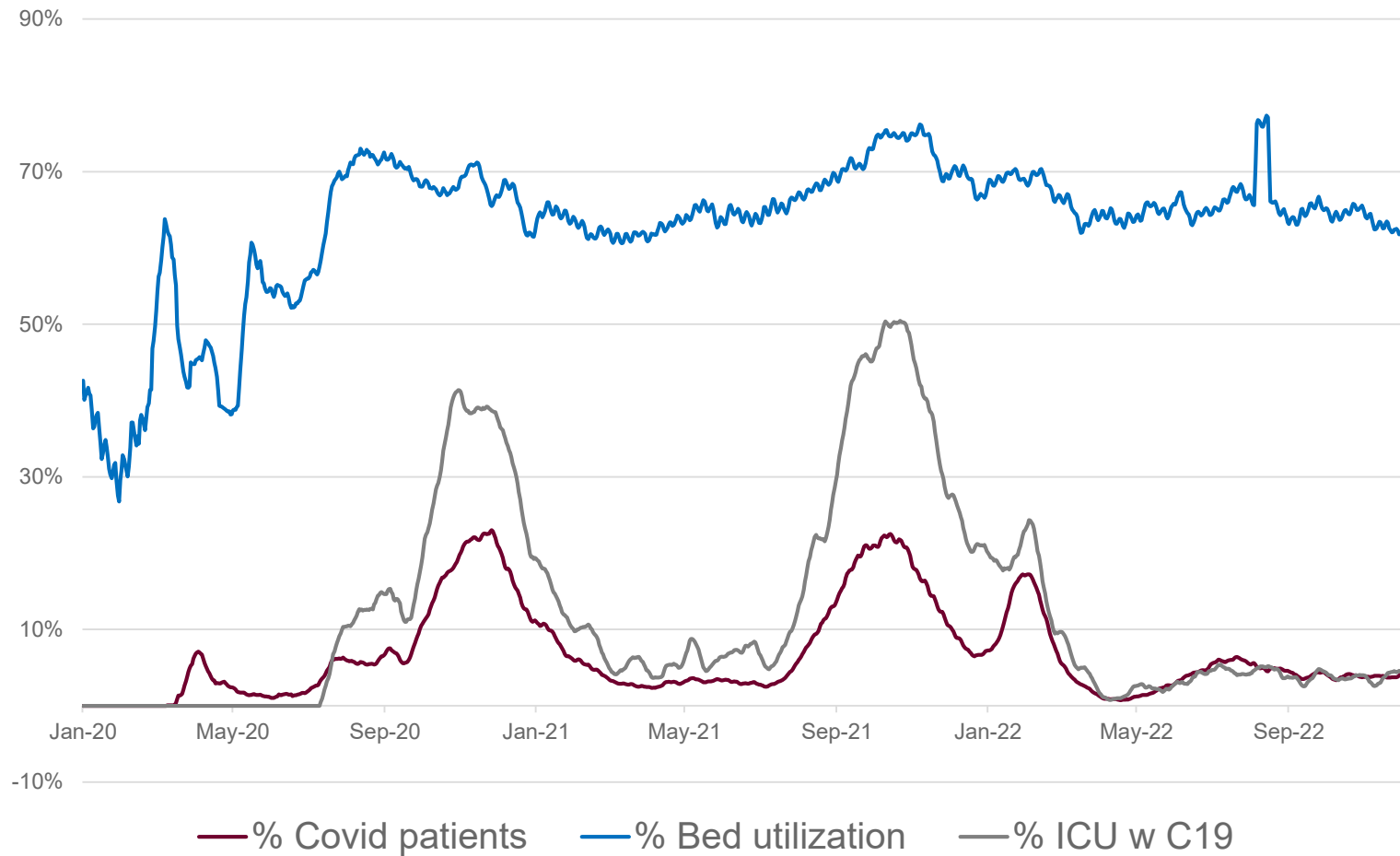
# Excess deaths Montana



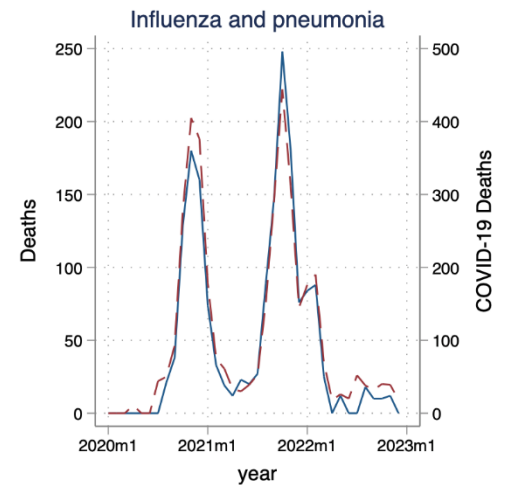
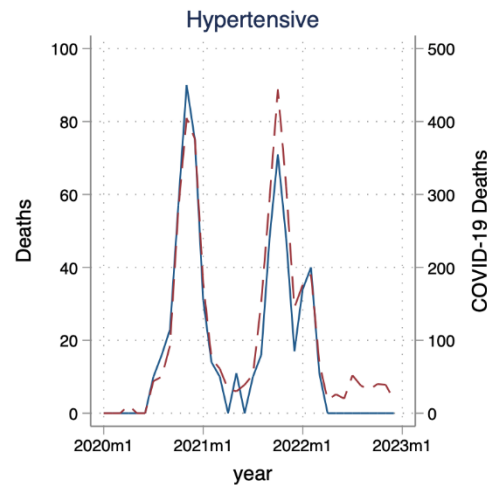
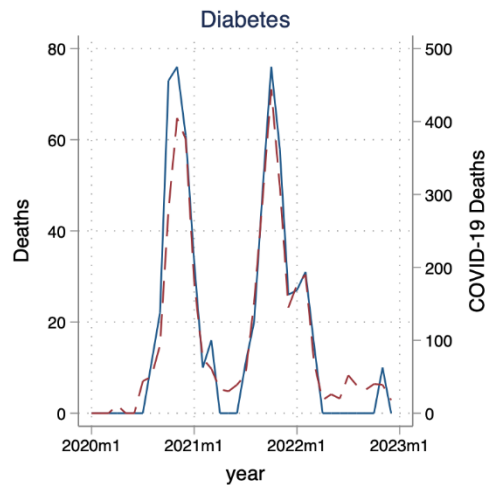
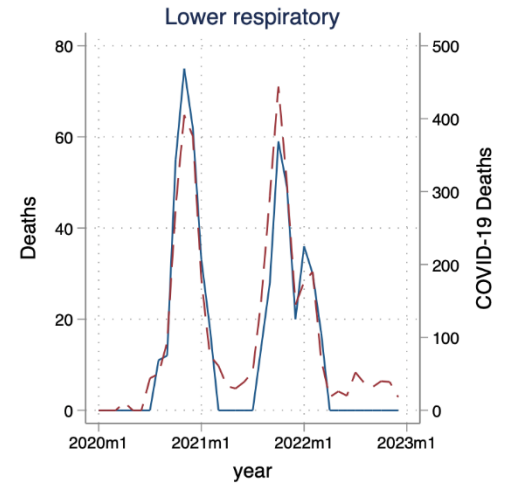
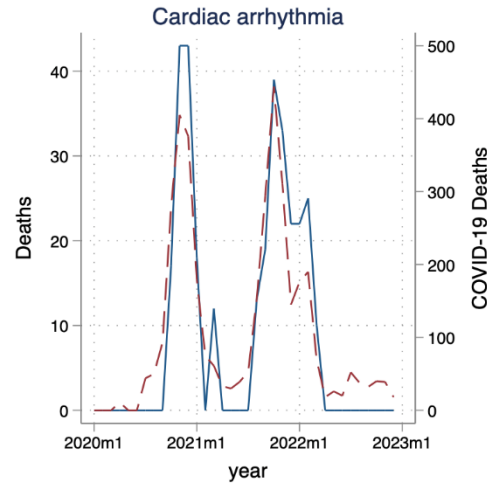
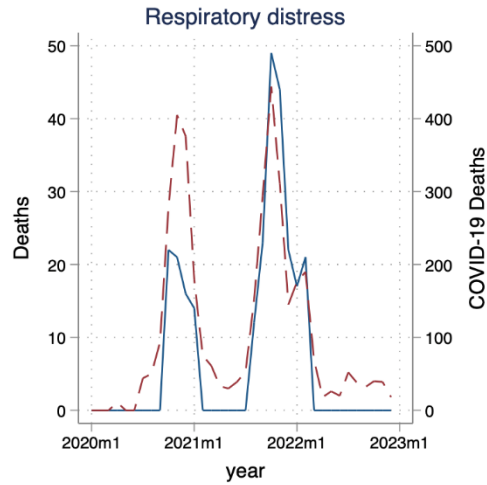
Vertical: date pandemic announced (3/11/20), horizontal lines is mean pre- and post-Covid  
(Source: US Centers for Disease Control)



# COVID in Montana: Hospitalization & ICU



# Co-cause of Cov in MT



# Number of hospitals reporting shortages



# Repercussions of COVID

- Mental health declining: anxiety, depression, PTSD
- Alcohol and drug (fentanyl, meth) use on the rise
- Homicide/Suicide/Violence
- Fewer hospital visits for non-COVID medical needs
- Long (COVID) term effects: lasting impact on healthcare system and economy – no such thing a mild case (25-50%)

Estimated cost of long COVID: **\$3.7 trillion, roughly 15% of 2021 GDP**

- Loss of LR healthcare investment
- Industry Burnout



# Repercussions of COVID: adoption of tech

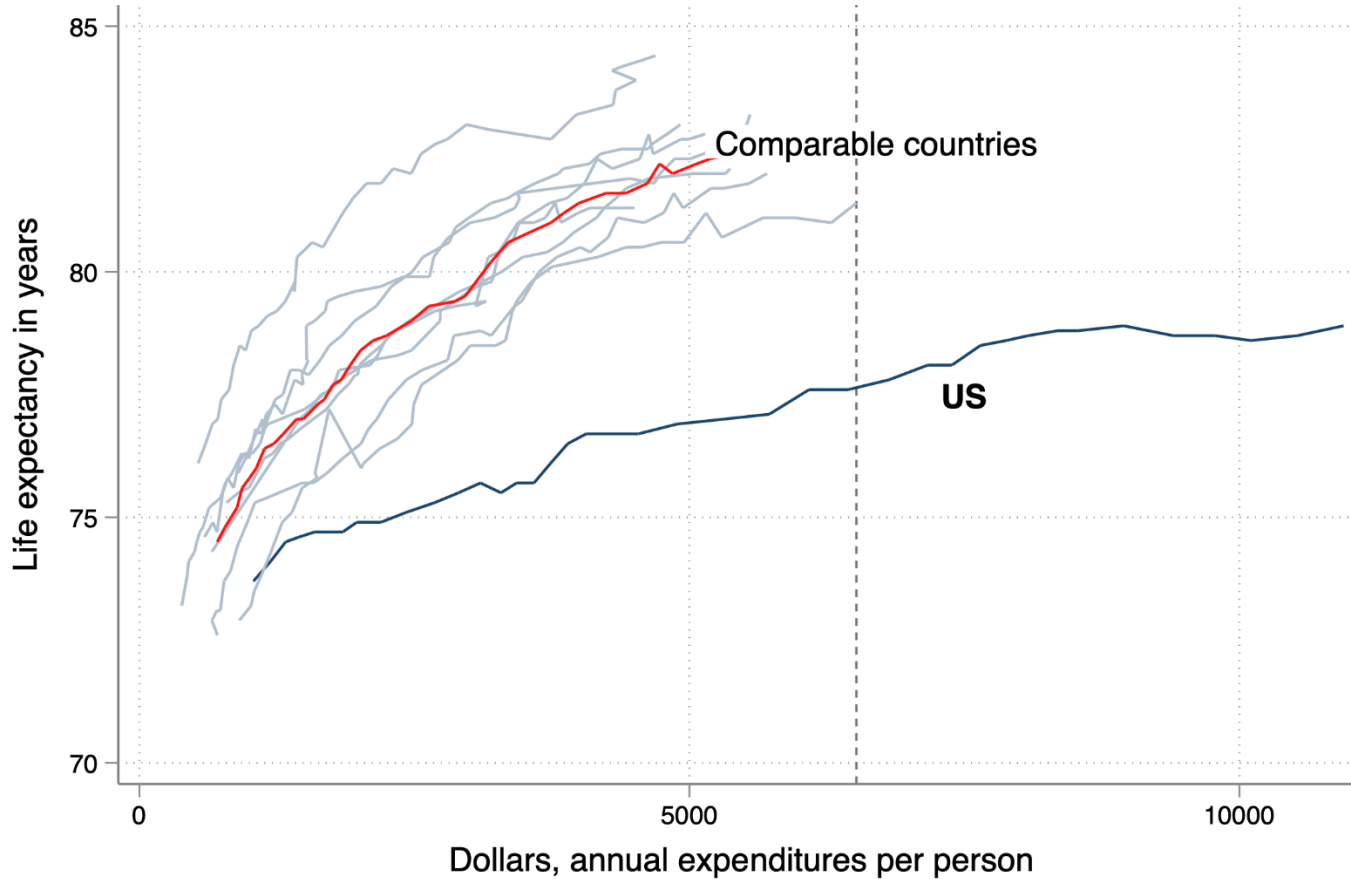
Restrictions on mobility and in-person visits during Covid have reshaped the delivery of healthcare – particularly in mental health services.

- Forecasts between 2020 and 2025 telehealth will grow by almost 40%.
- Industry will continue to adopt technology, particularly in information, to provide quality care
- Artificial intelligence and data analytics are proving helpful in predicting ailments and disease transmission
- Home based health care
- Aging society and rural areas





# US Expenditure and Life Expectancy

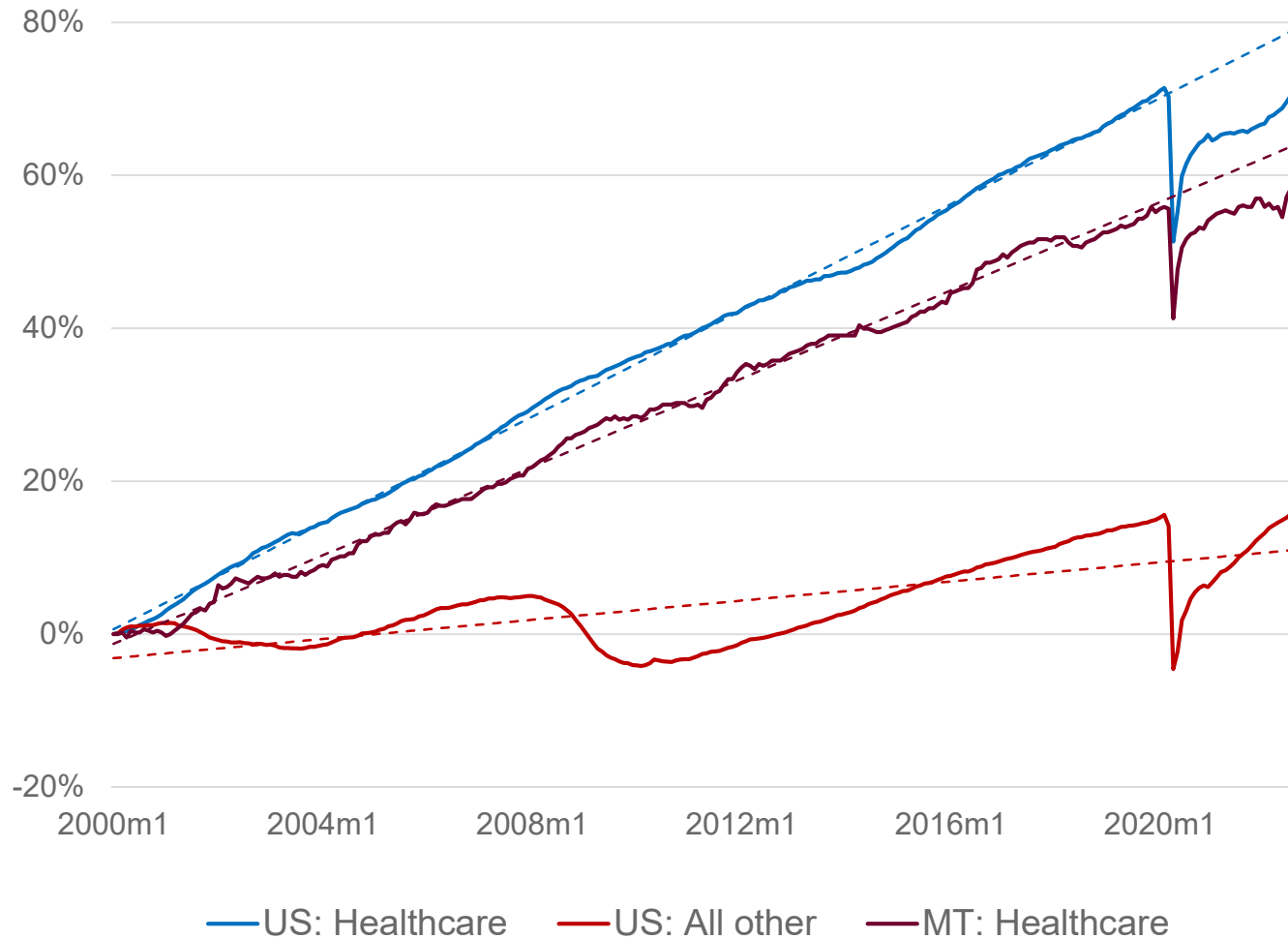


Why?

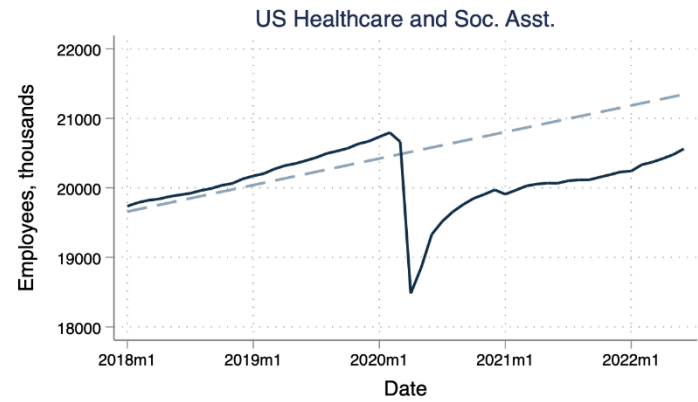
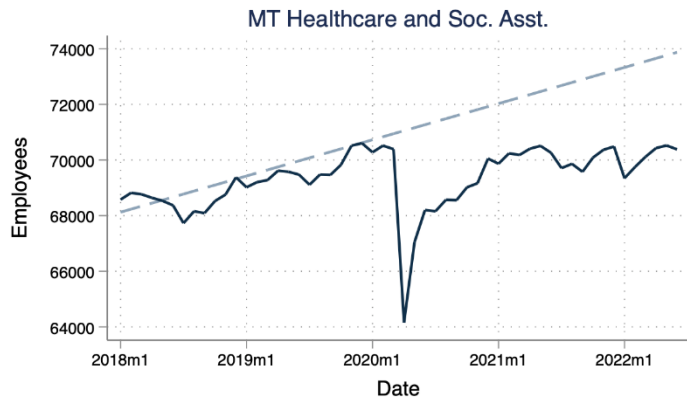
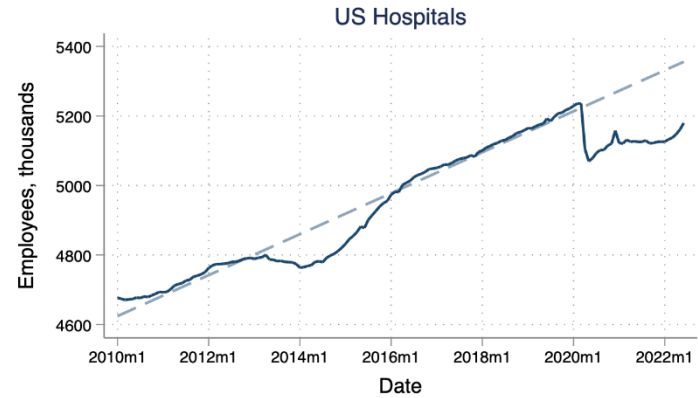
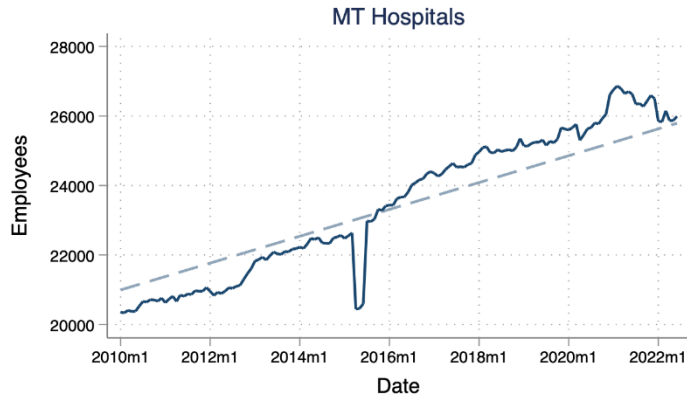
- **Opioids**
- **Homicide/suicide**
- Obesity
- Access to healthcare
- Road accidents
- COVID



# Cumulative HC employment growth: 2000 – today



# Employment in Montana vs US

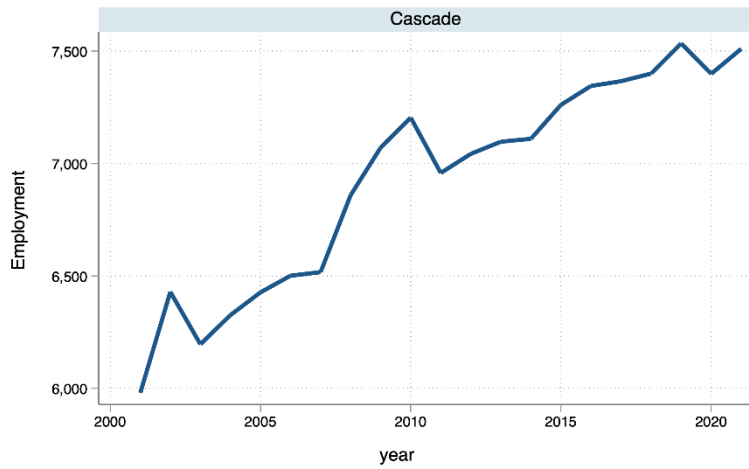


-- pre Feb 2020 Trend

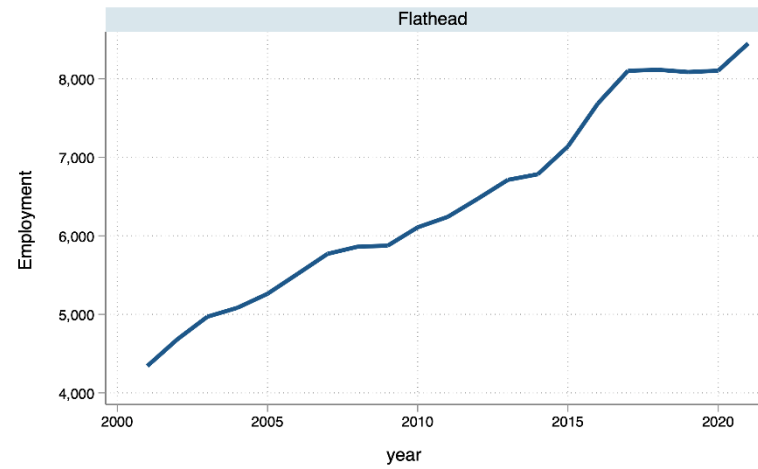
— Employees



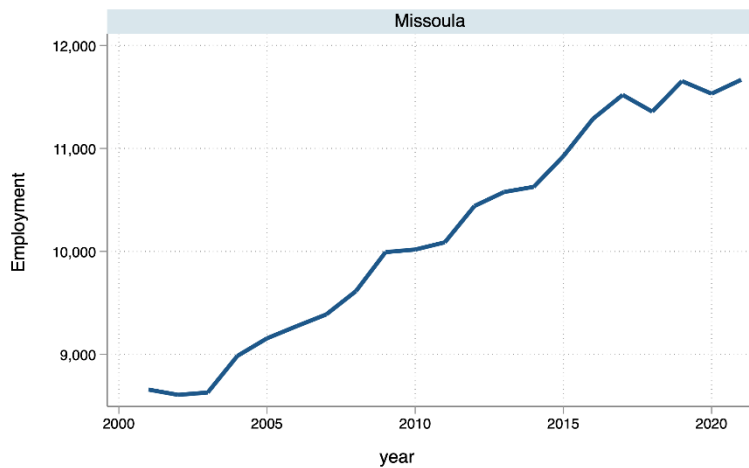
# Healthcare-Soc Asst. Employment: Four largest hospital counties



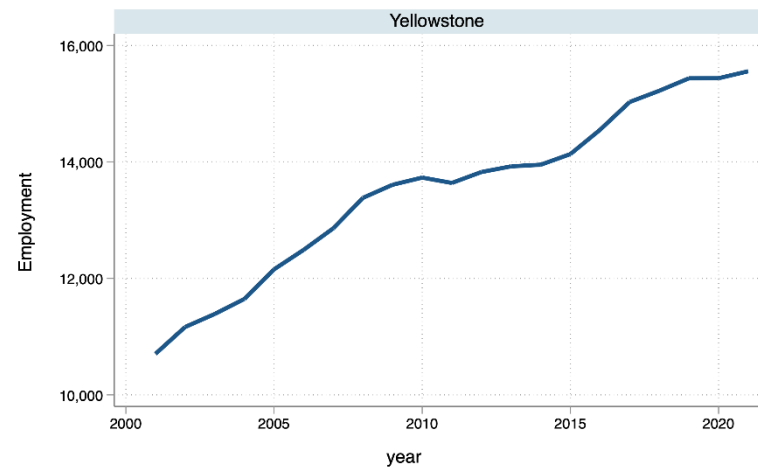
Graphs by County



Graphs by County



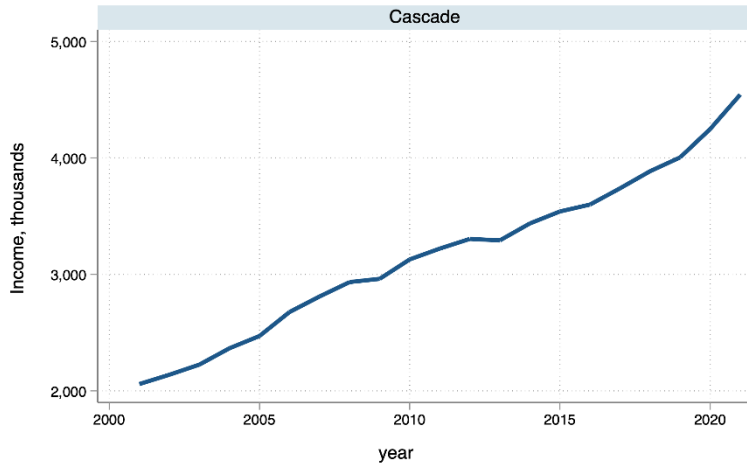
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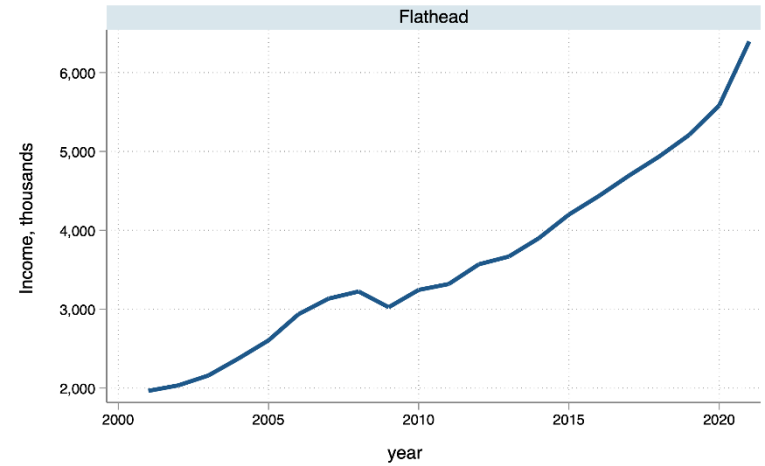
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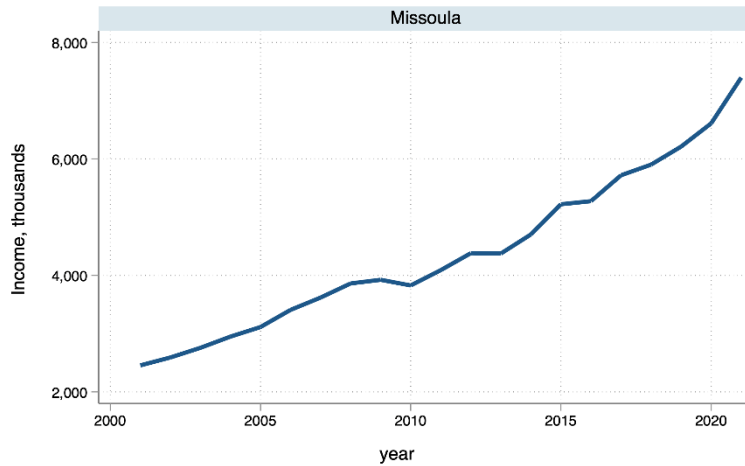
# Income: Four largest hospital counties (thousands \$)



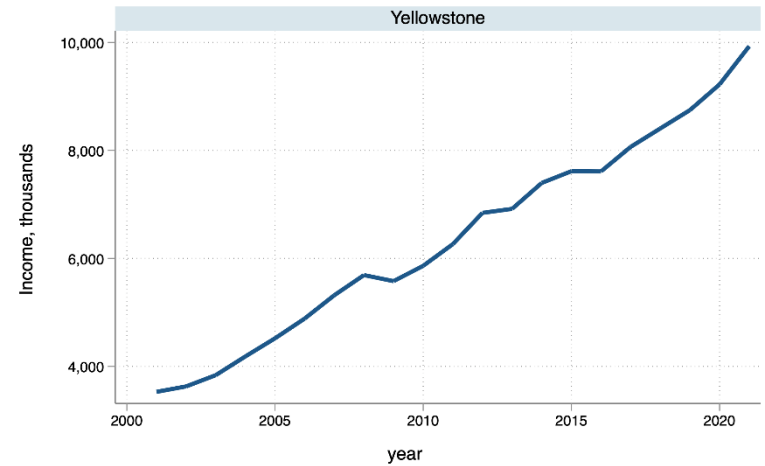
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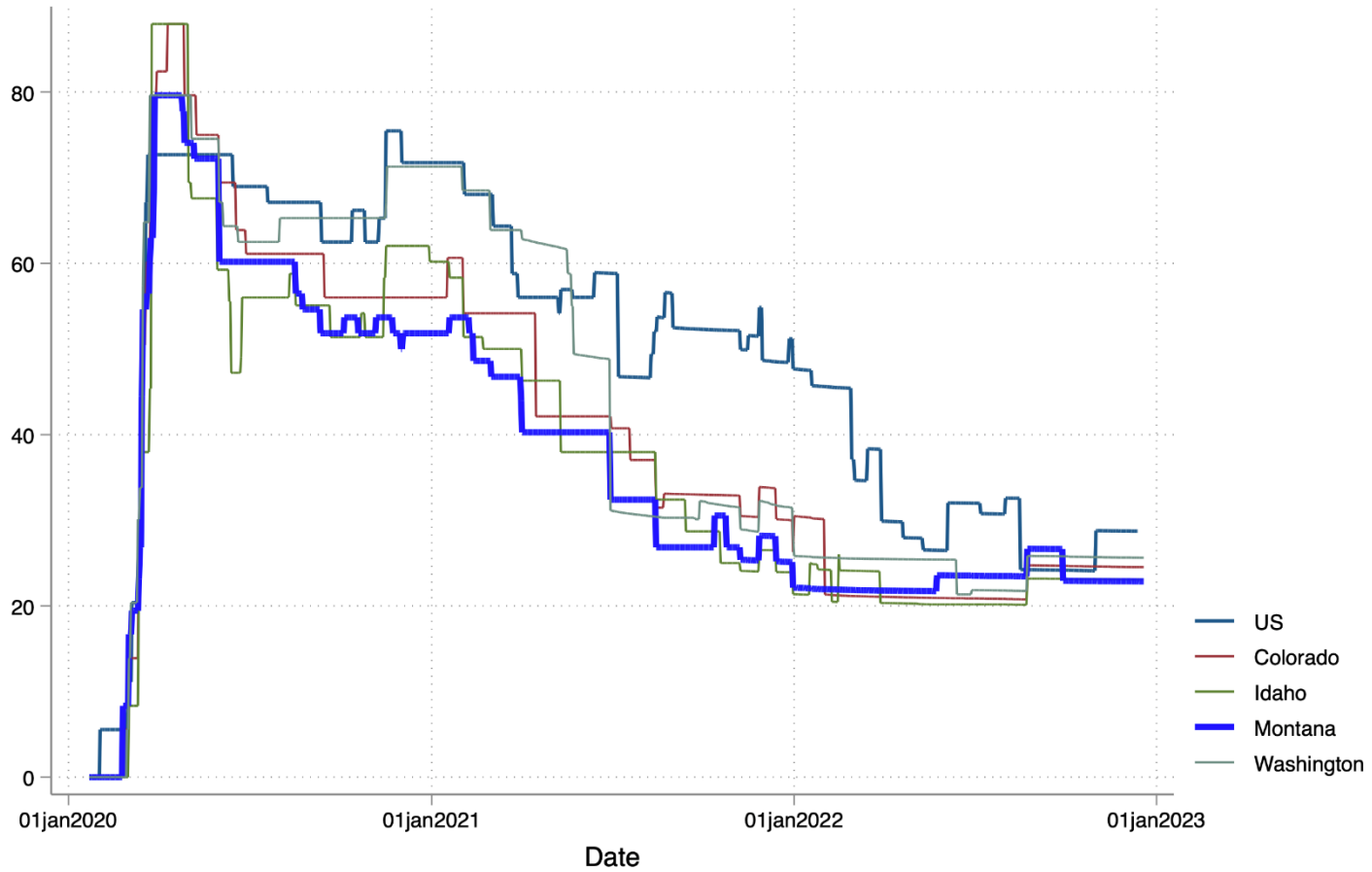
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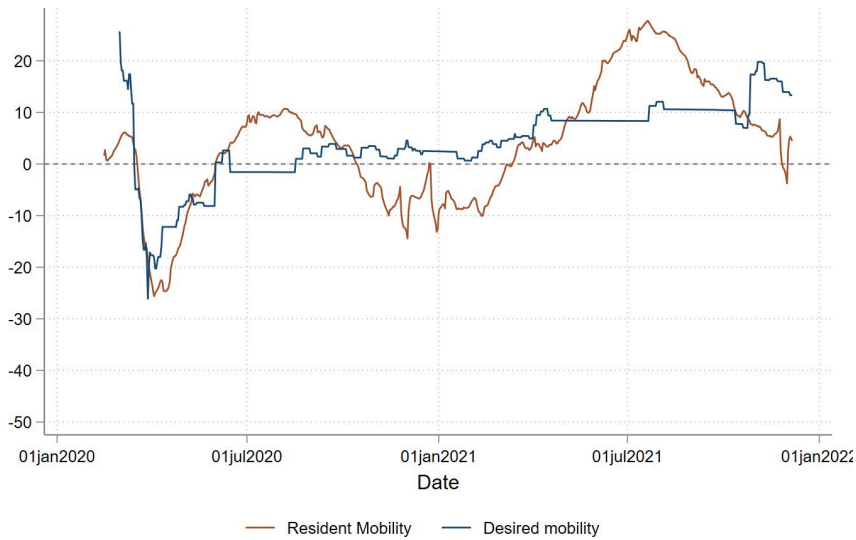
# Covid policy



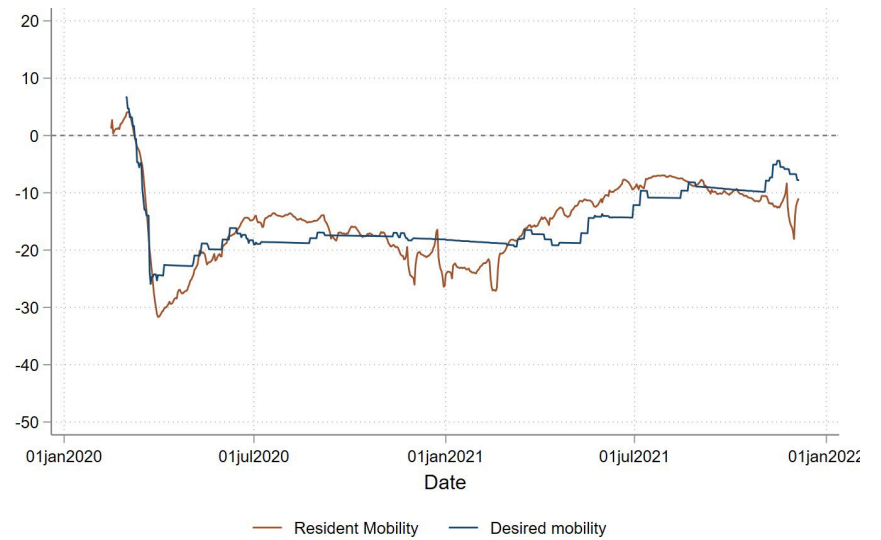
(Source: Oxford Covid-19 Government Response Tracker (OxCGRT))



# Policy maker “preferred” behavior vs actual behavior: based on cell phone data



Montana



Washington



# Thank You

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