

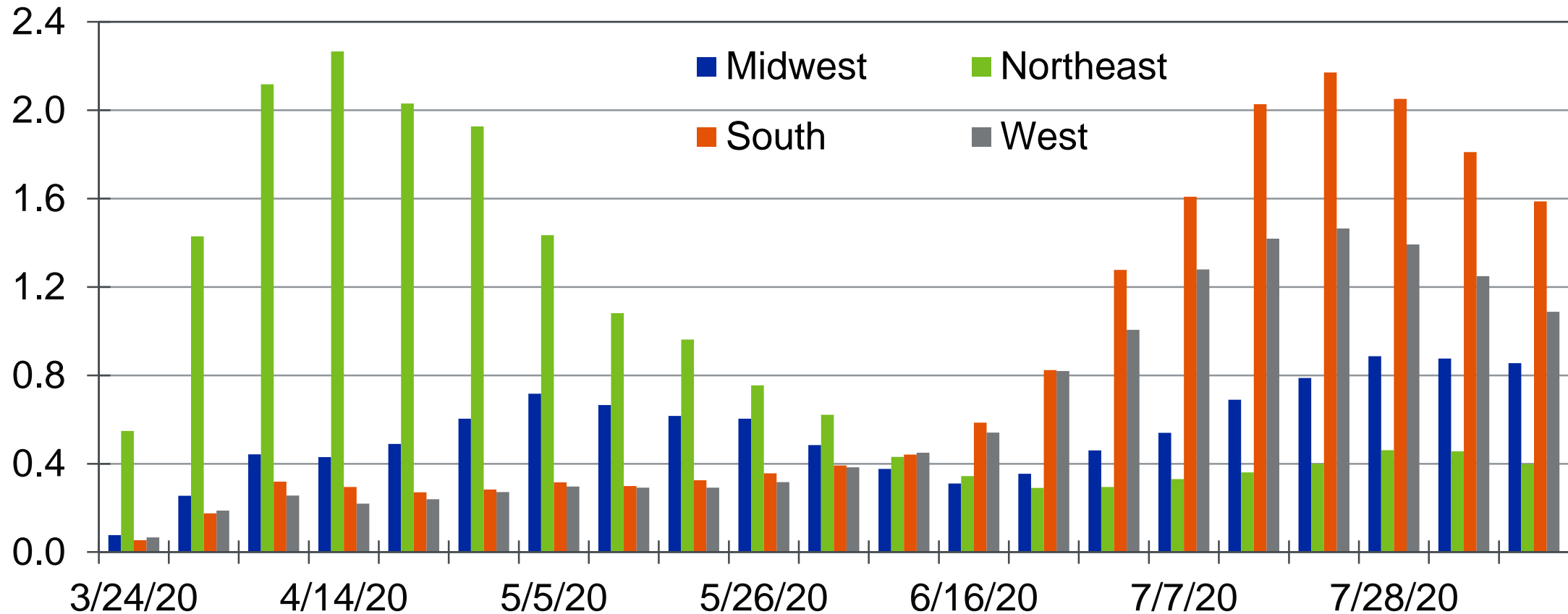
COVID-19 and the U.S. Regional Outlook

1

The Current Regional
Landscape

Hot Spots Have Evolved Since Spring

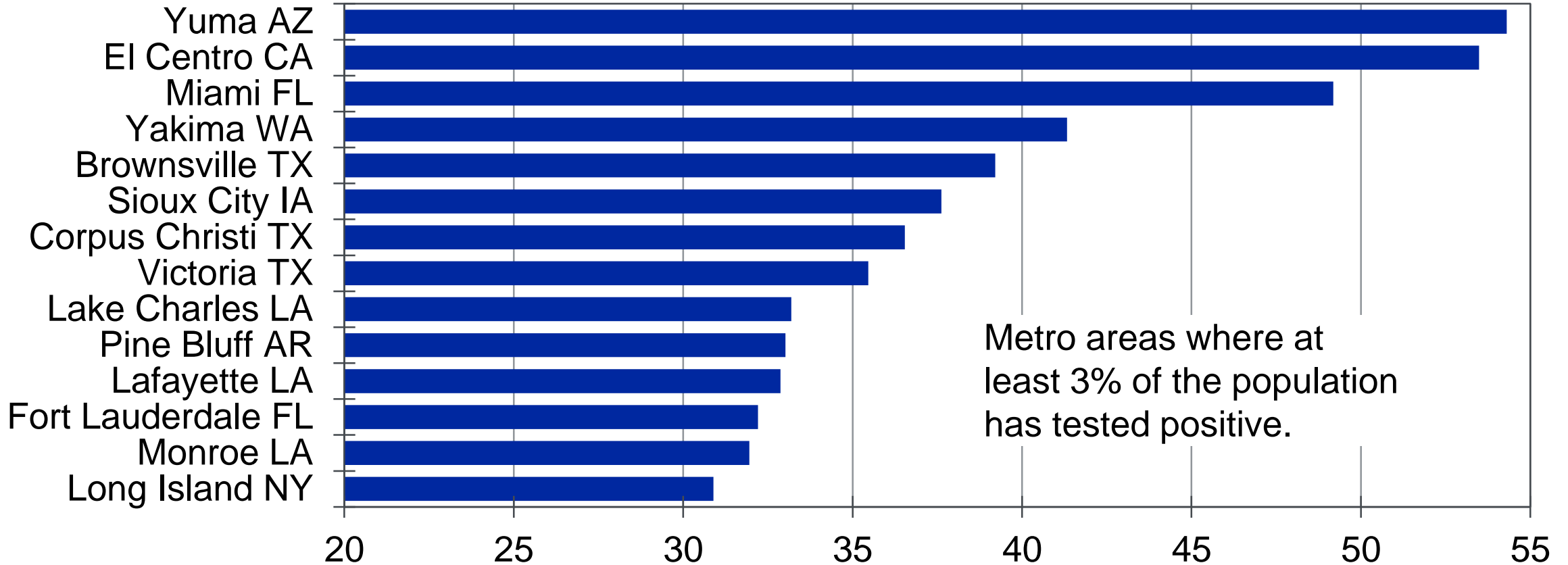
New weekly COVID-19 cases per 1,000 residents



Sources: Census Bureau, Johns Hopkins University, Moody's Analytics

Hardest-Hit Areas Span Size Categories, Not Regions

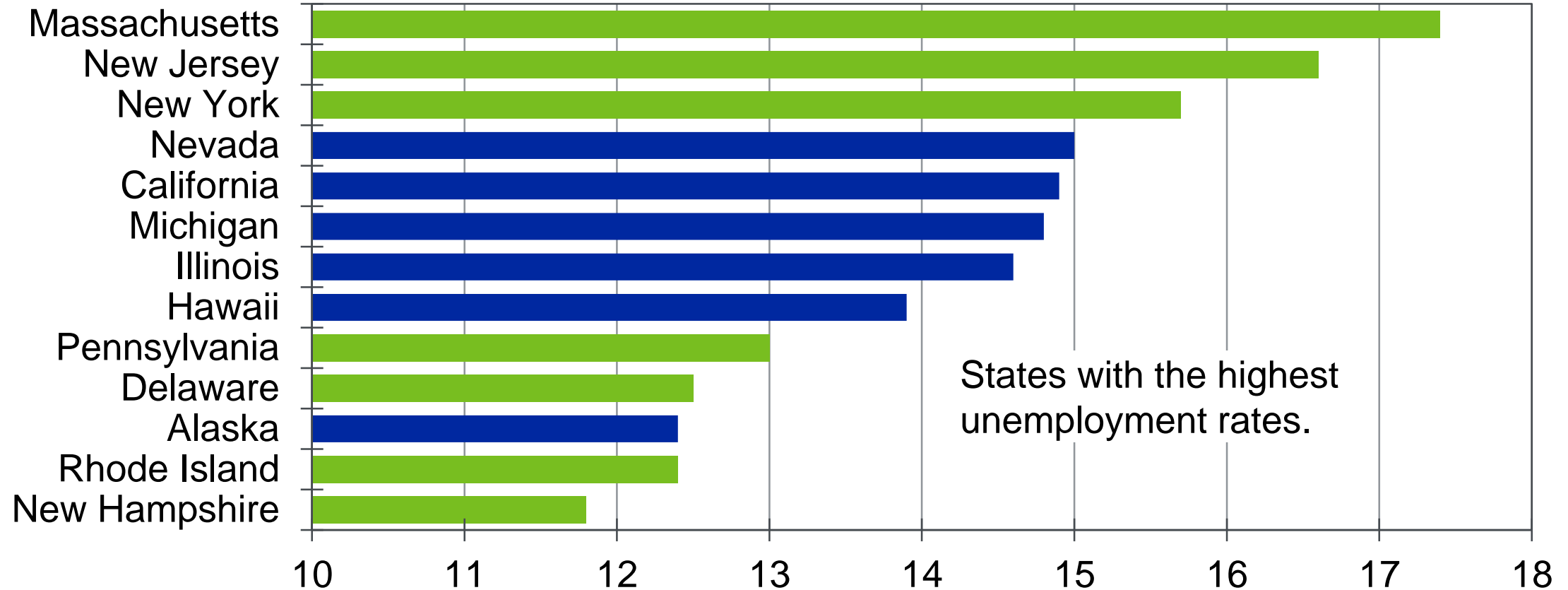
COVID-19 cases per ths residents as of Aug 10



Sources: Census Bureau, Johns Hopkins University, Moody's Analytics

Northeast Has Taken Biggest Hit to Date...

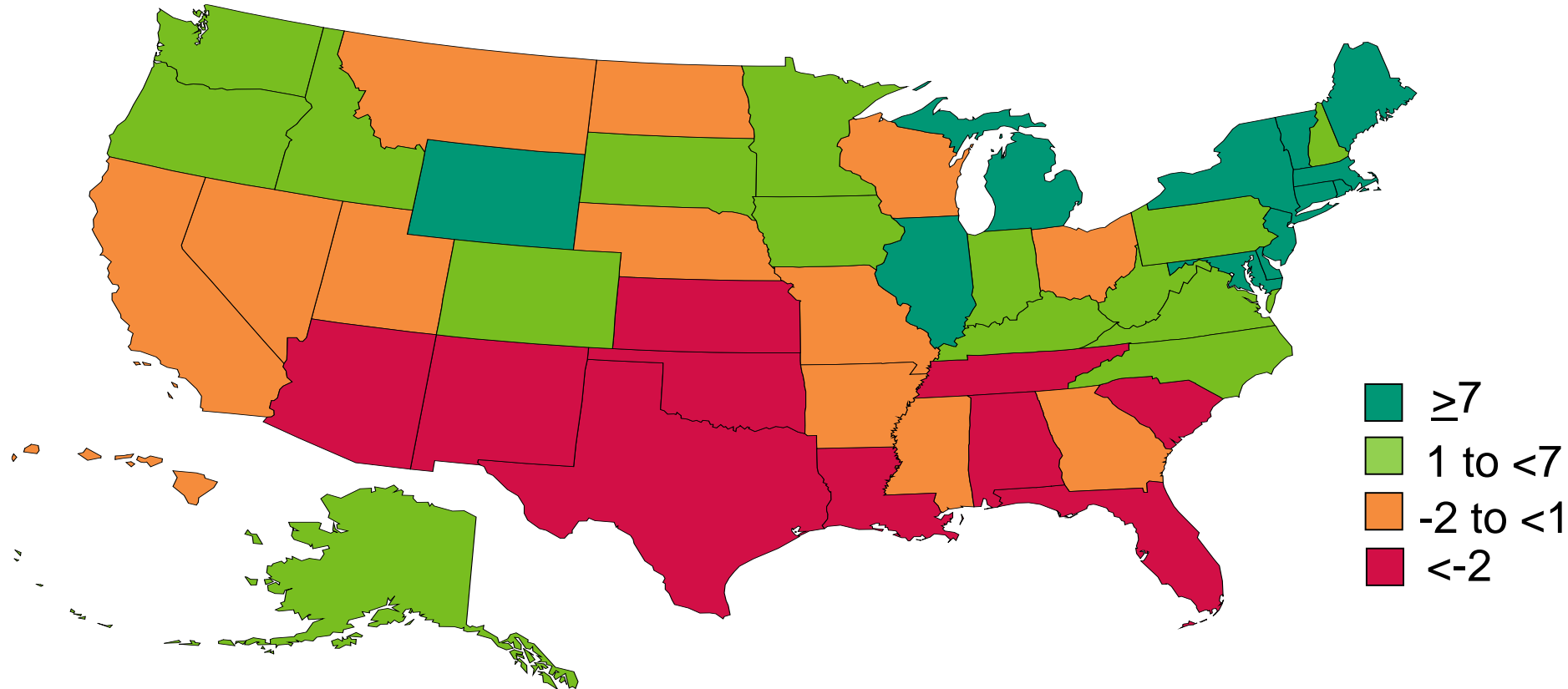
Unemployment rate, %, Jun 20



Sources: BLS, Moody's Analytics

...But the Economic Tide Has Begun to Turn

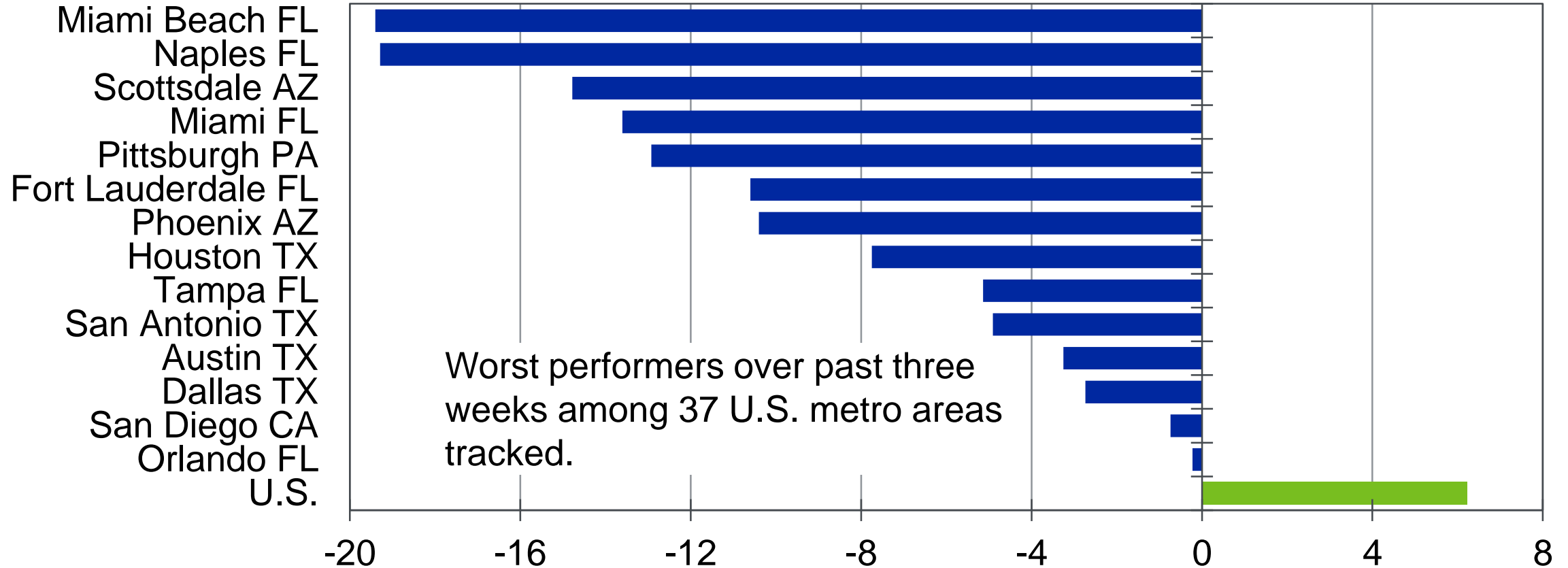
Hours worked index, Jul vs Jun average, % chg



Sources: Homebase, Moody's Analytics

Consumers Retrench in the Sun Belt...

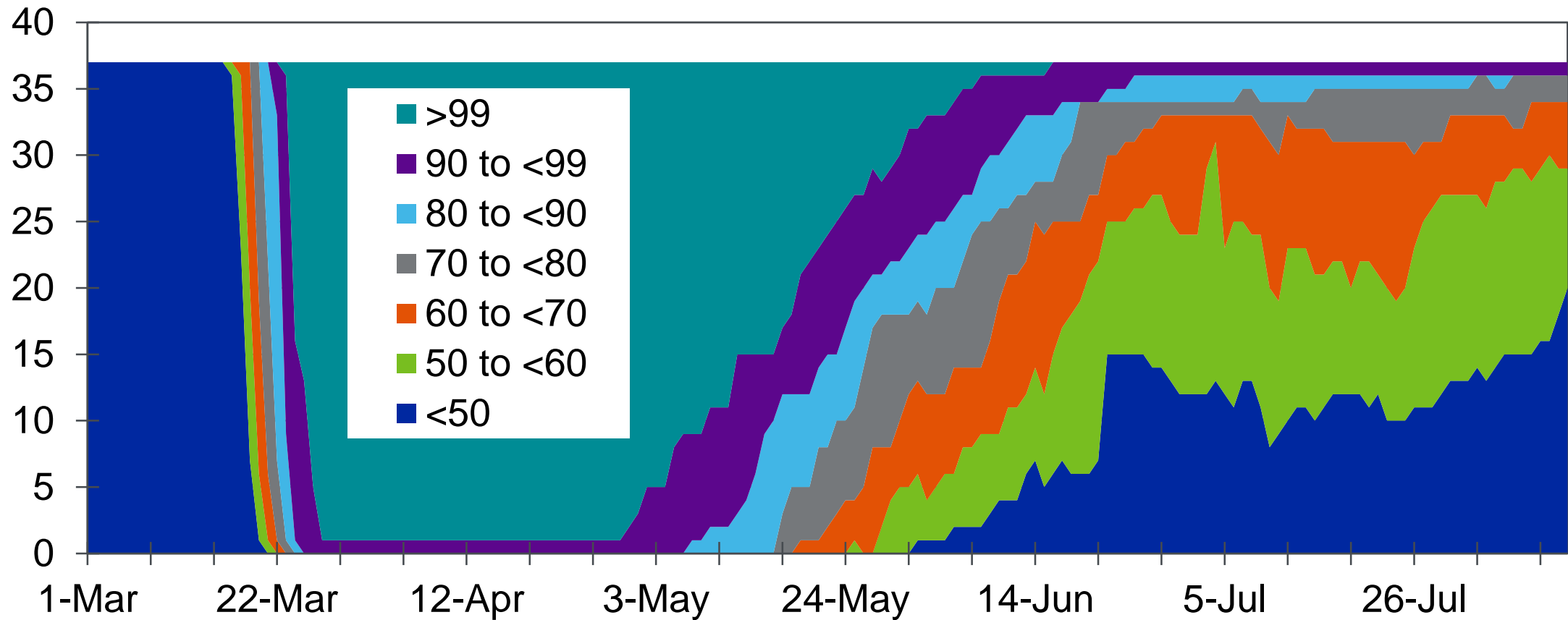
Seated diners, % chg yr ago, Jul vs. Jun avg



Sources: OpenTable, Moody's Analytics

...But Restaurants (Very) Gradually Improve

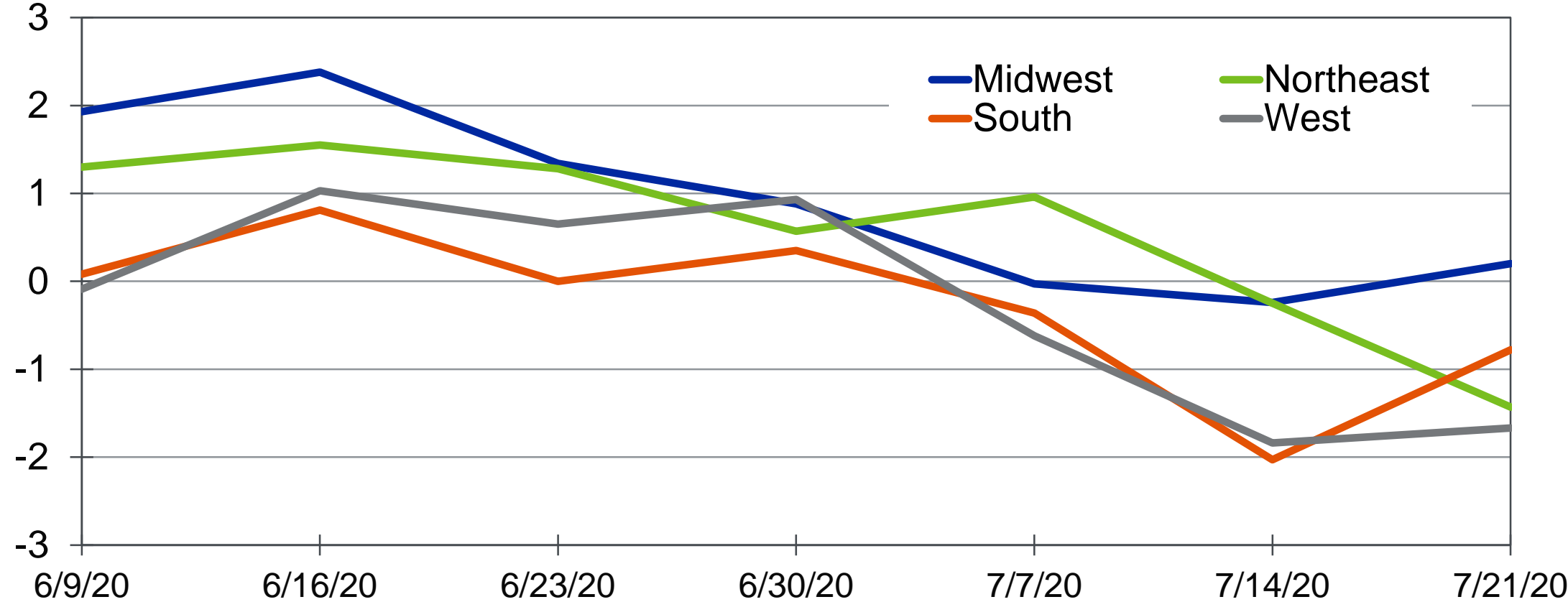
Seated diners, % decline yr ago, # of states in each category, 7-day MA



Sources: OpenTable, Moody's Analytics

Real-Time Jobs Data Weakened in July

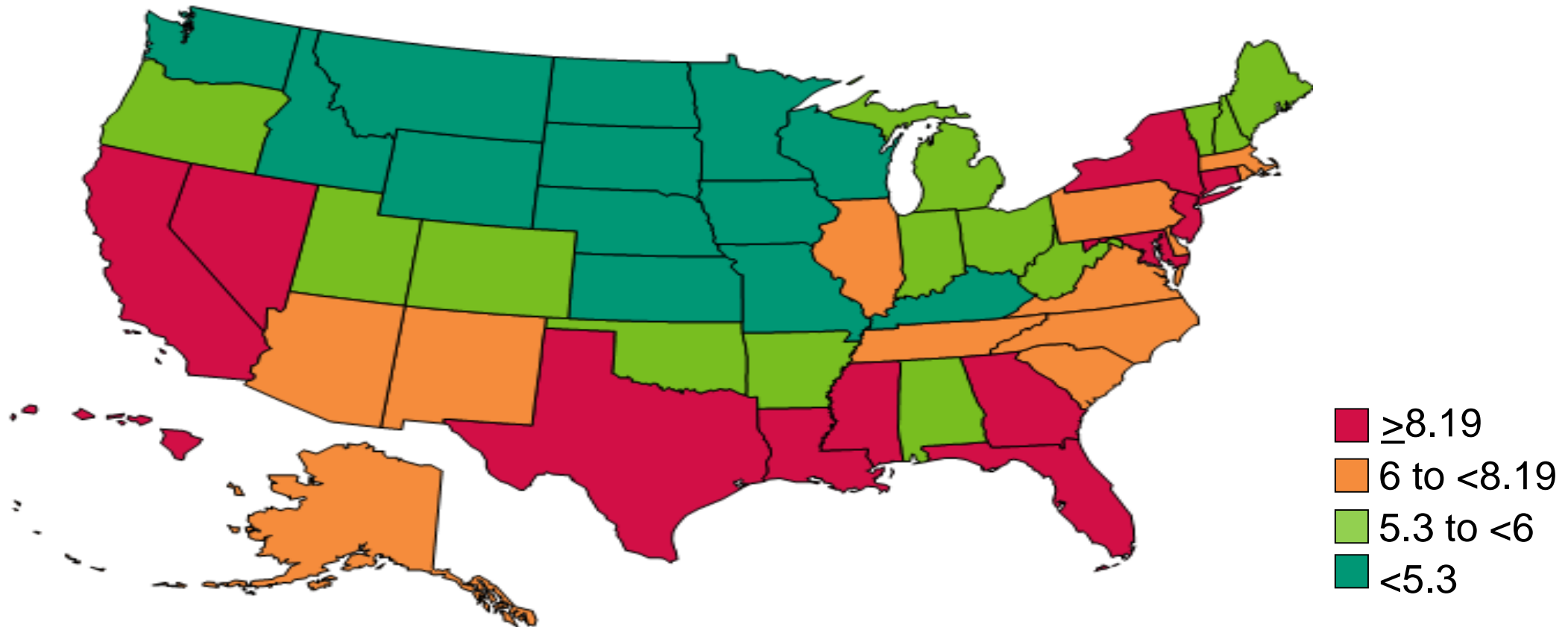
Employment, % change, 4-wk MA



Sources: Census Bureau, Moody's Analytics

Troubled Borrowers Get a Reprieve

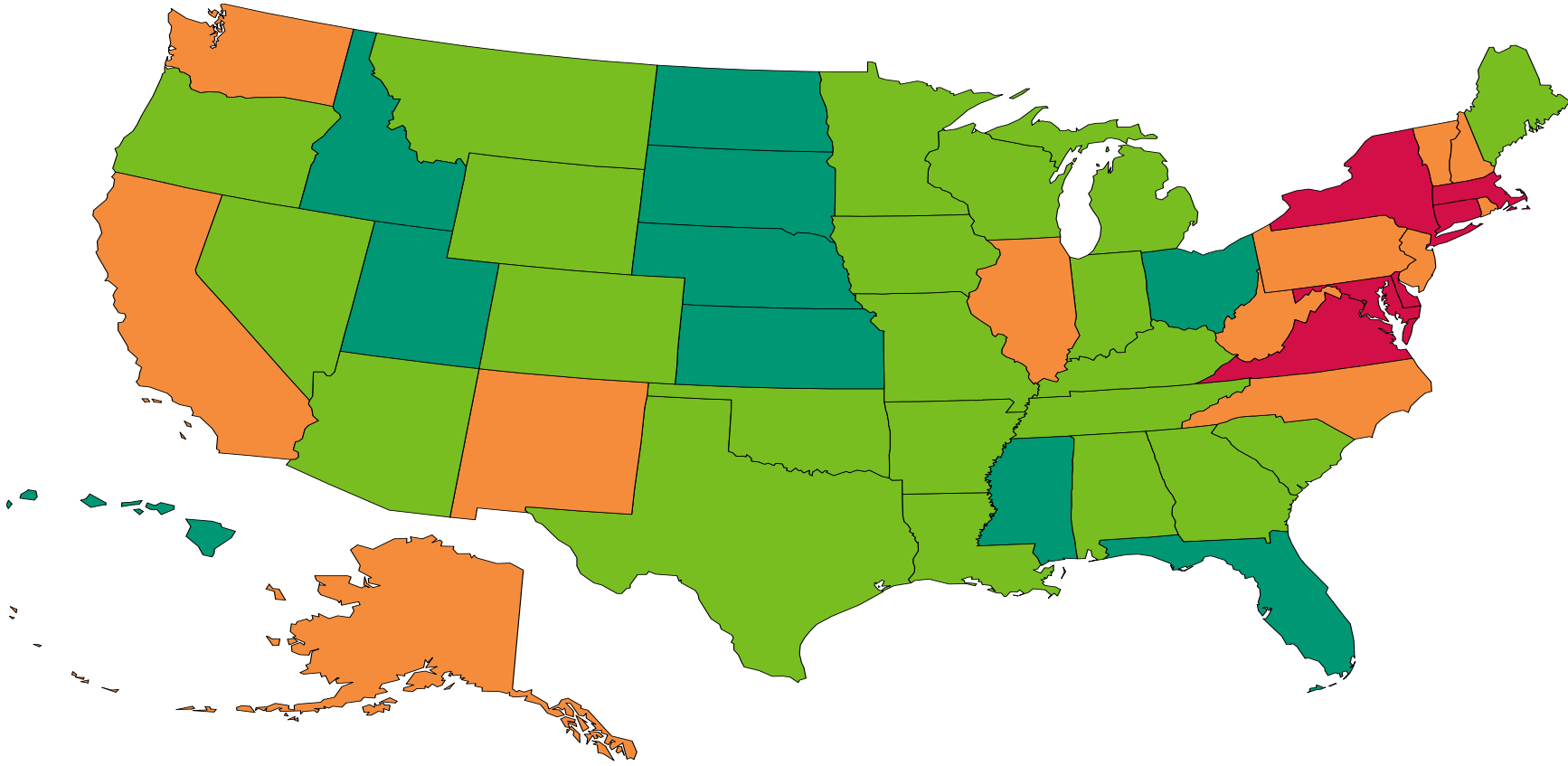
% of first mortgage loans receiving accommodations, Jul 20



Sources: Equifax, Moody's Analytics

Coastal Centers Lag Interior in PPP Loans

PPP loan amounts, % of total annual payroll



Reflects both rounds of PPP and cancellations as of 8/8/20. Annual payroll is from 2017 and only for firms with <500 employees.

U.S. avg = 19.4

- Dark Teal: ≥21
- Light Green: 19.4 - <21
- Orange: 18 - <19.4
- Pink: <18

Sources: Census Bureau, Small Business Administration, Moody's Analytics

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COVID-19 Exposure

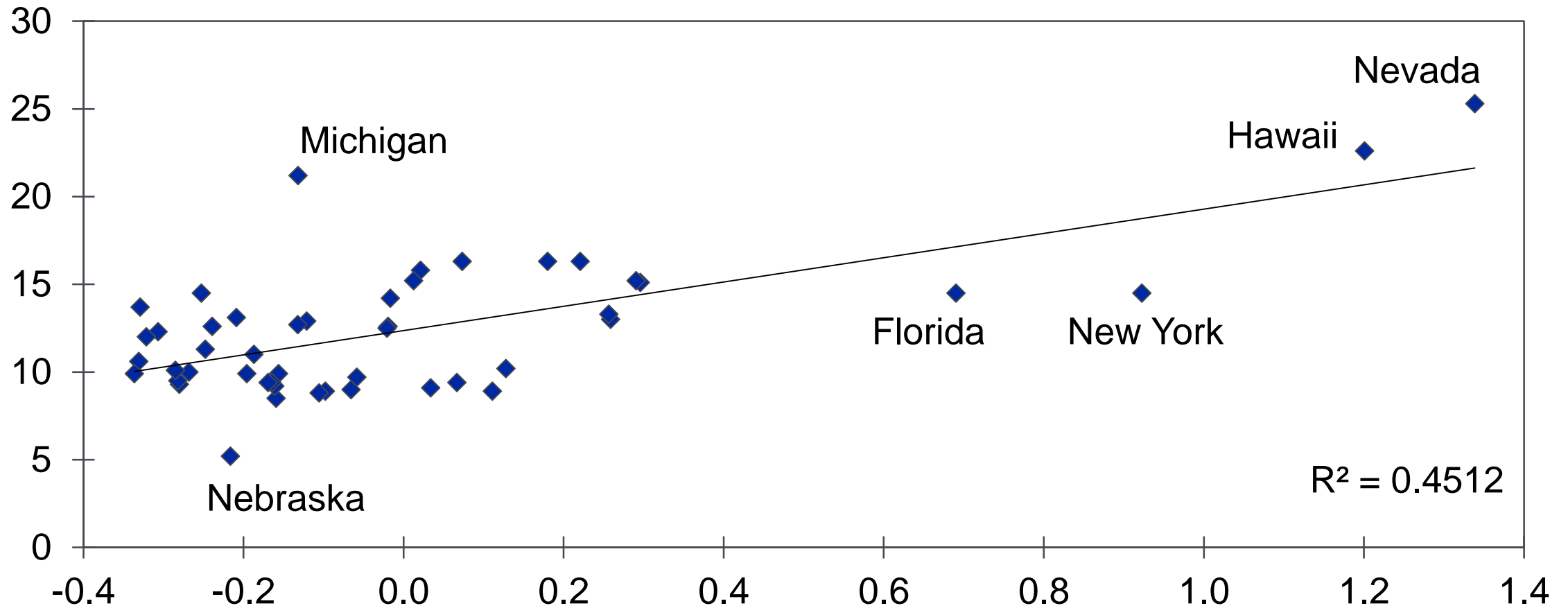
What Makes a Region Vulnerable?

Distance from the mean (z-score) across numerous dimensions

- » Social/demographic factors
 - » Direct exposure to virus: number of cases, disease curve
 - » Demographics: population density, share of seniors, net migration
 - » Commuting/trade/travel: work from home share, reliance on public transportation, airline passengers, export share of GDP
- » Economic factors
 - » Tourism: share of output tied to events/hotels/restaurants, tourism exports
 - » Vulnerability: share of employment at small businesses, poverty rate
 - » Industries: share of output tied to private office-using jobs, reliance on oil, agriculture

Most States Stuck to the Script

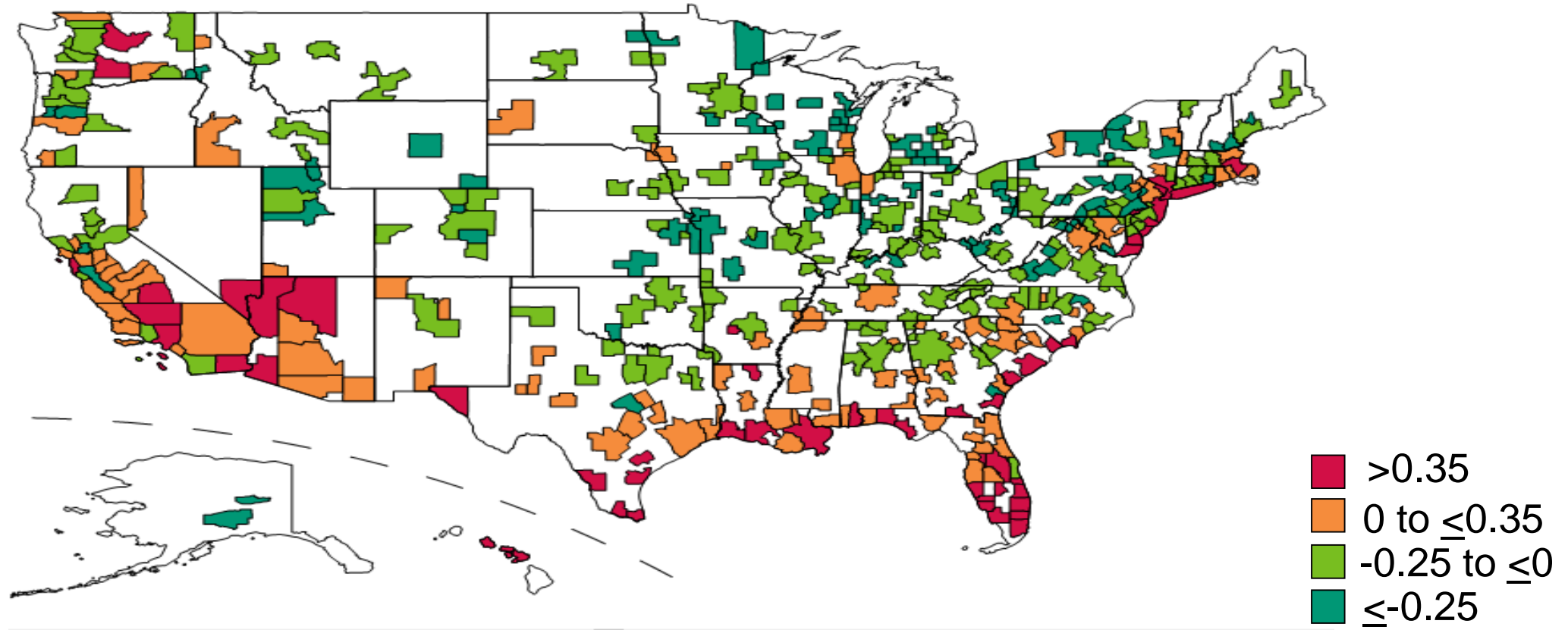
March z-score (X) vs. change in unemployment rate, ppt, Mar to May (Y)



Sources: BLS, Moody's Analytics

Northeast, Sun Belt Remain Most Vulnerable

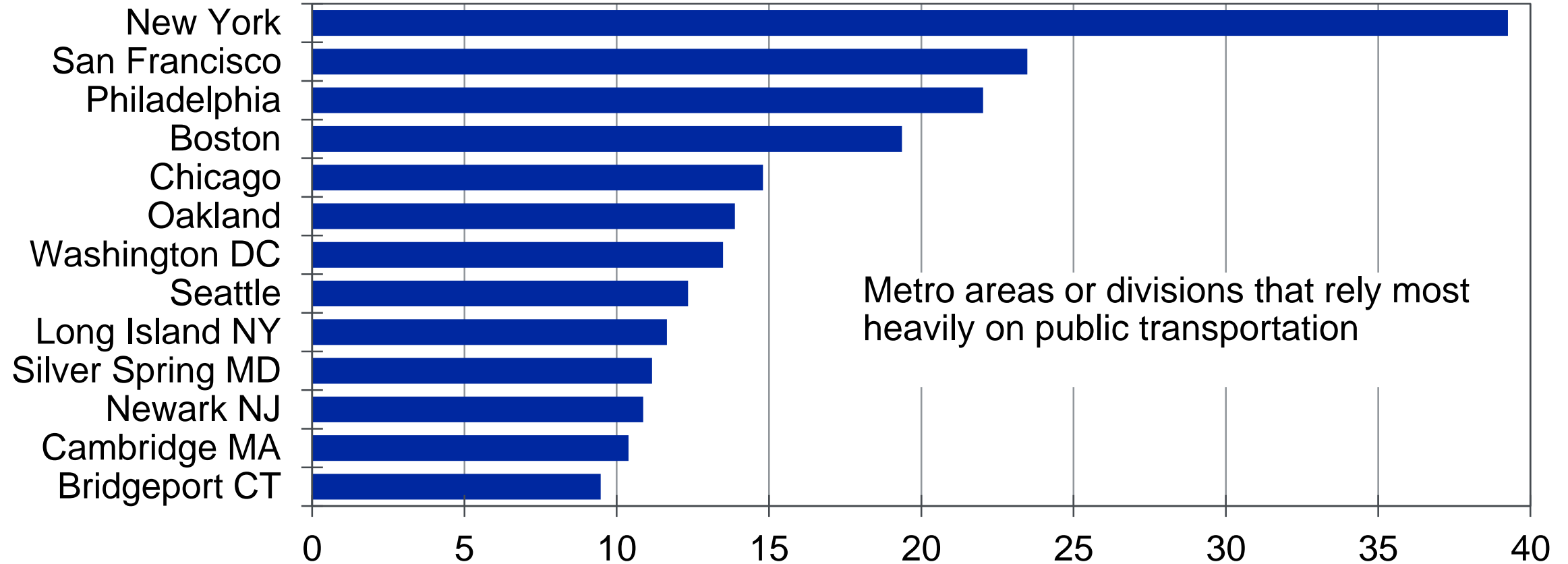
Average z-score across rankings, 0 = metro area average, Aug 20



Source: Moody's Analytics

Subway Reliance Hurts Northeast

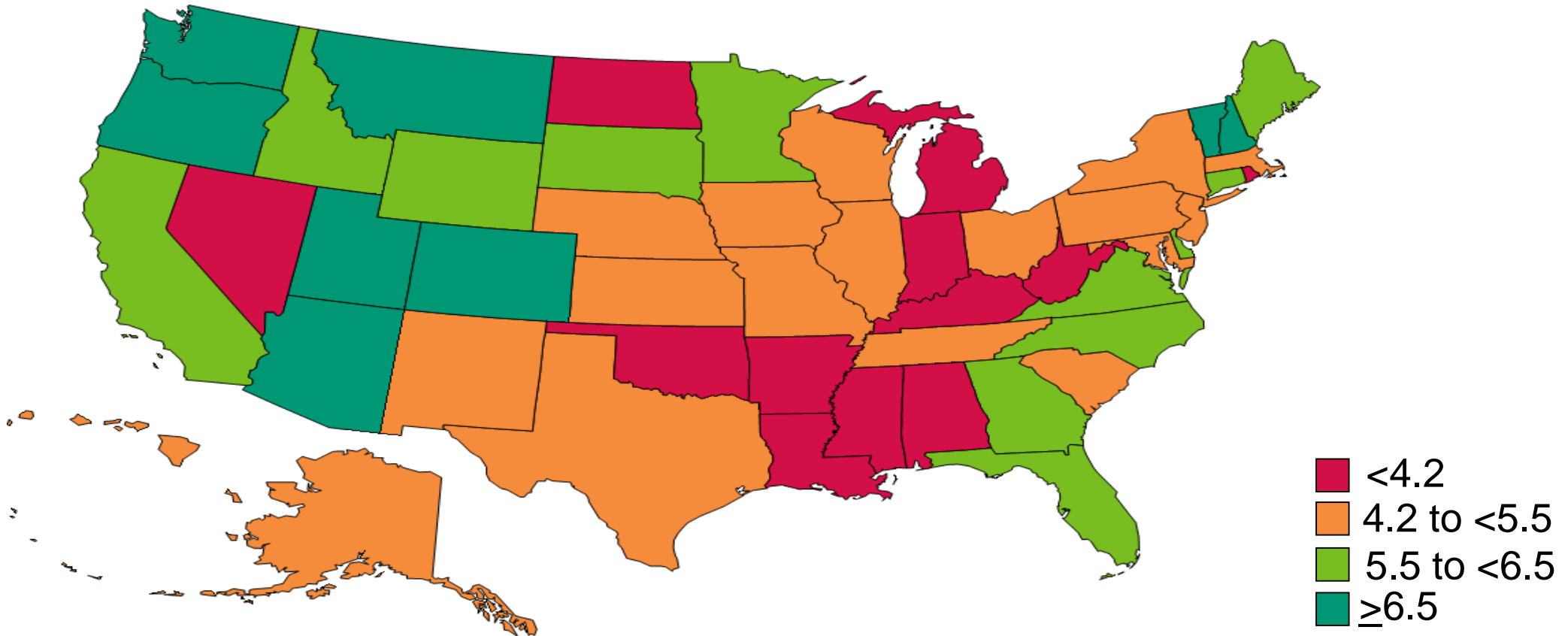
Share of workers who use public transportation, 2018, %



Sources: Census Bureau, Moody's Analytics

Flexibility Bolsters Rockies

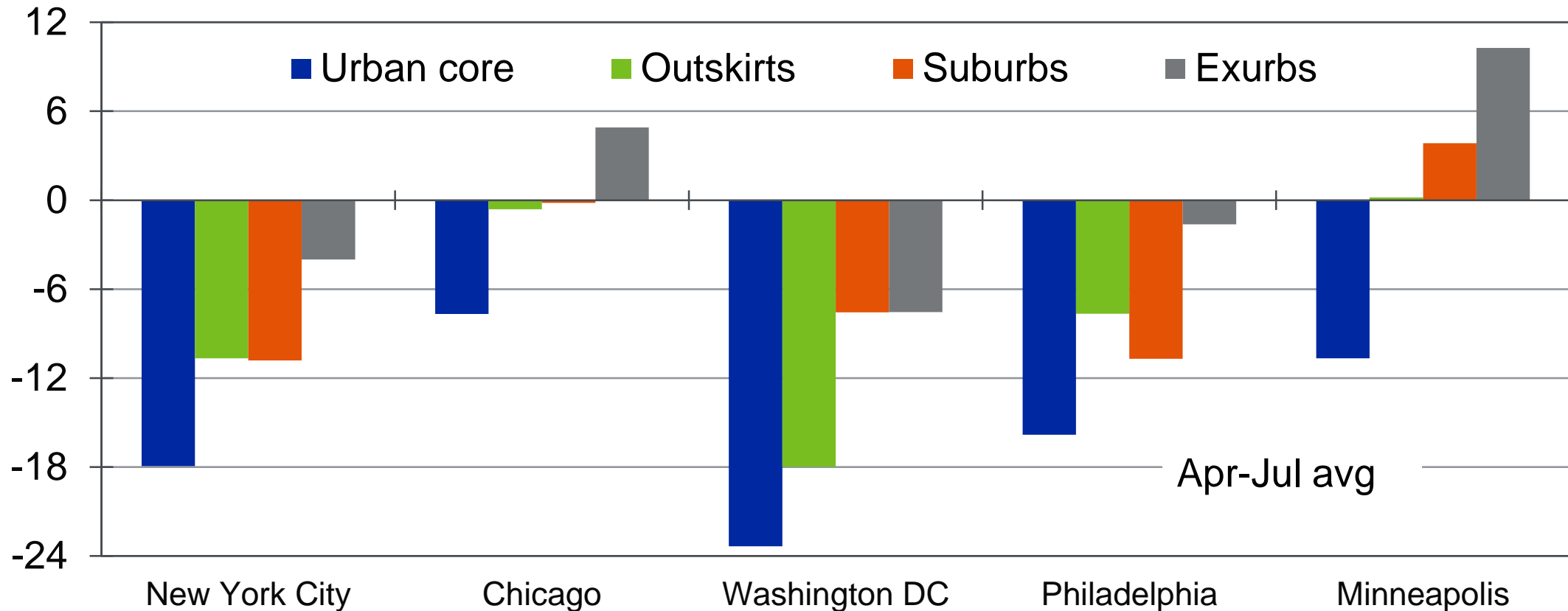
Share of workers who telecommute, 2018, %



Sources: Census Bureau, Moody's Analytics

Shift Out of Big Cities Is Pronounced

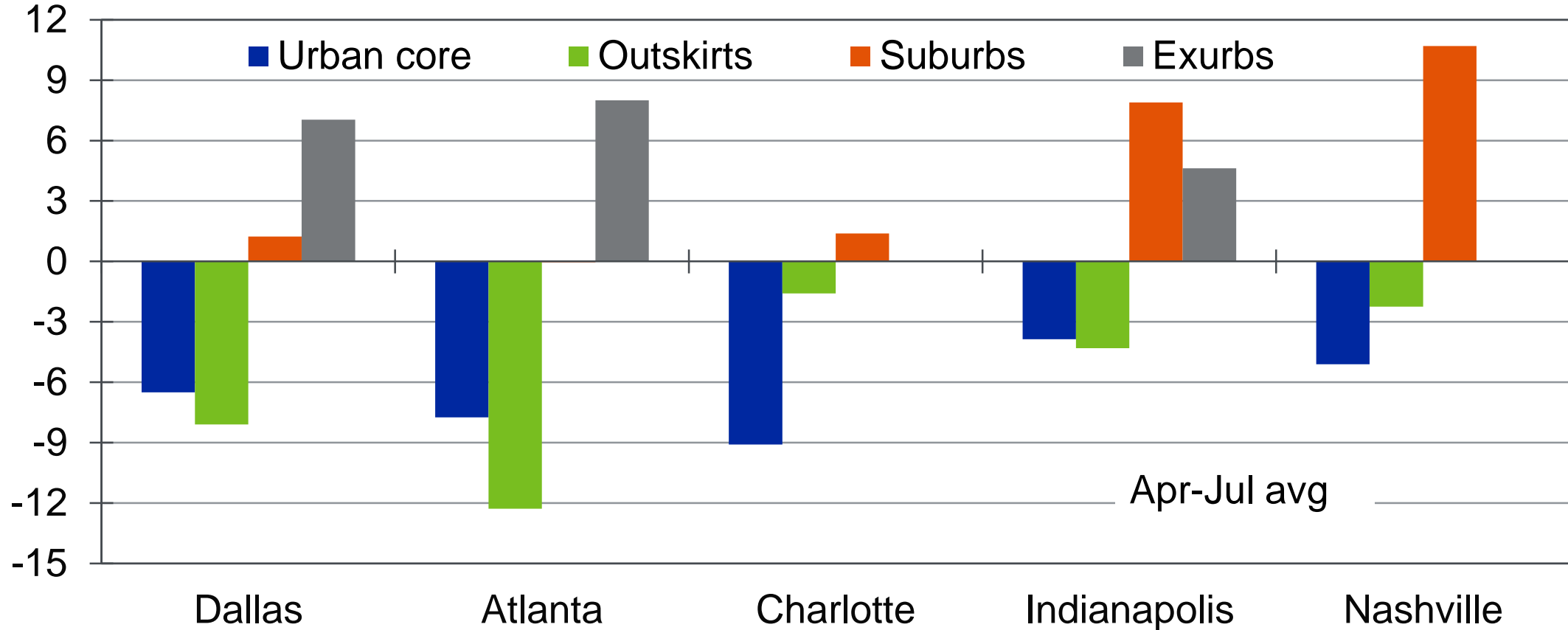
Grocery/pharmacy mobility score, % chg since Jan 3-Feb 6



Sources: Google, Census Bureau, Moody's Analytics

“Newer” Suburbs and Exurbs Look Best

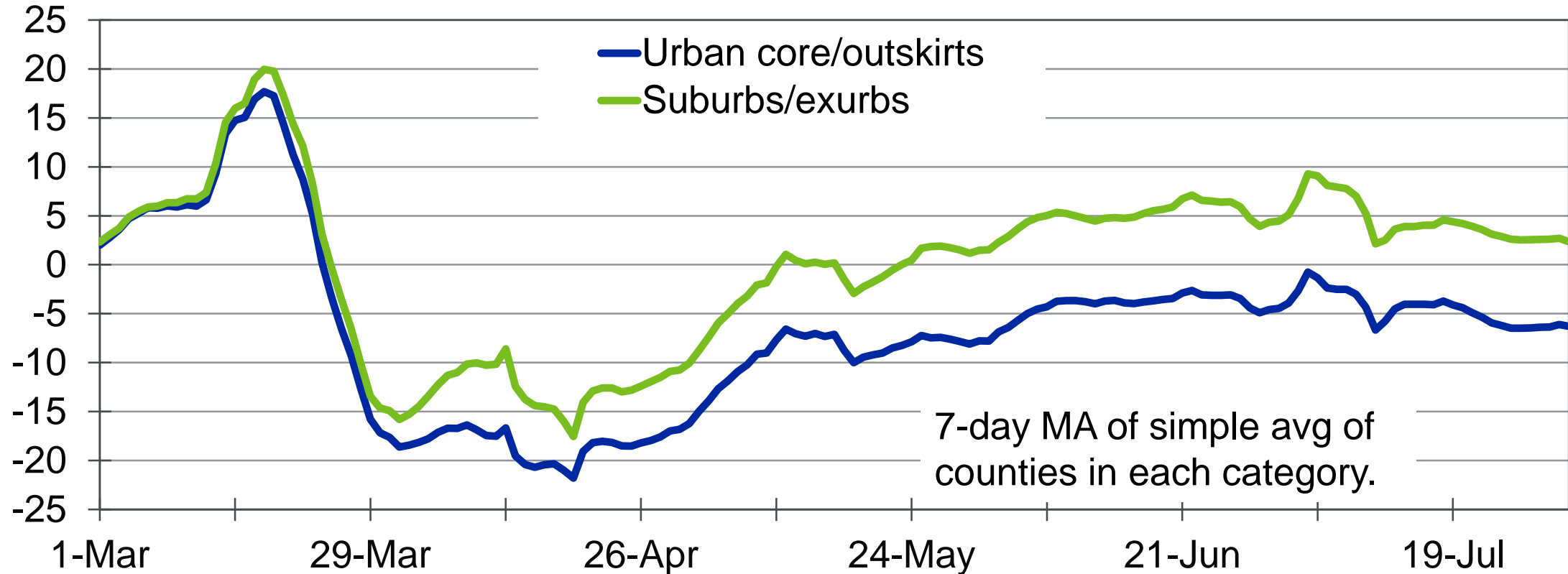
Grocery/pharmacy mobility score, % chg since Jan 3-Feb 6



Sources: Google, Census Bureau, Moody's Analytics

No Sign of Urban-Suburban Gap Closing

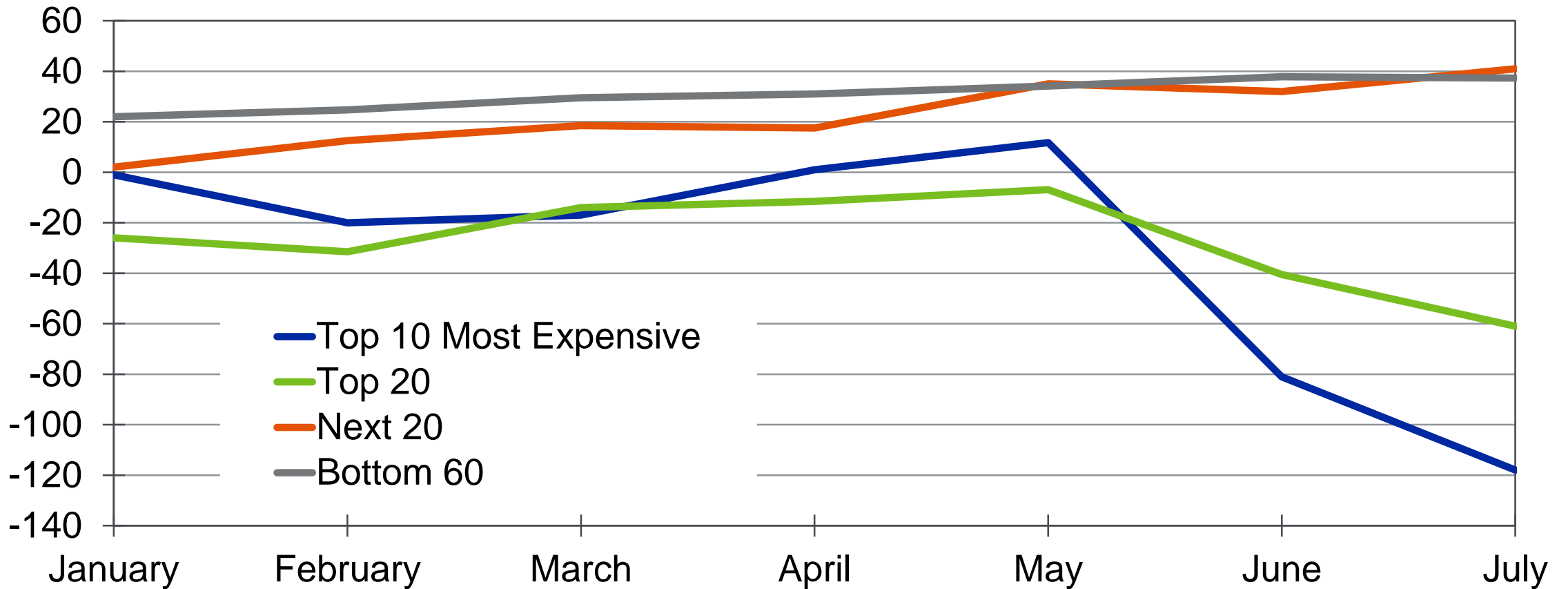
Grocery/pharmacy mobility score, % chg since Jan 3-Feb 6



Sources: Google, Census Bureau, Moody's Analytics

Rents Fall in Superstar Cities

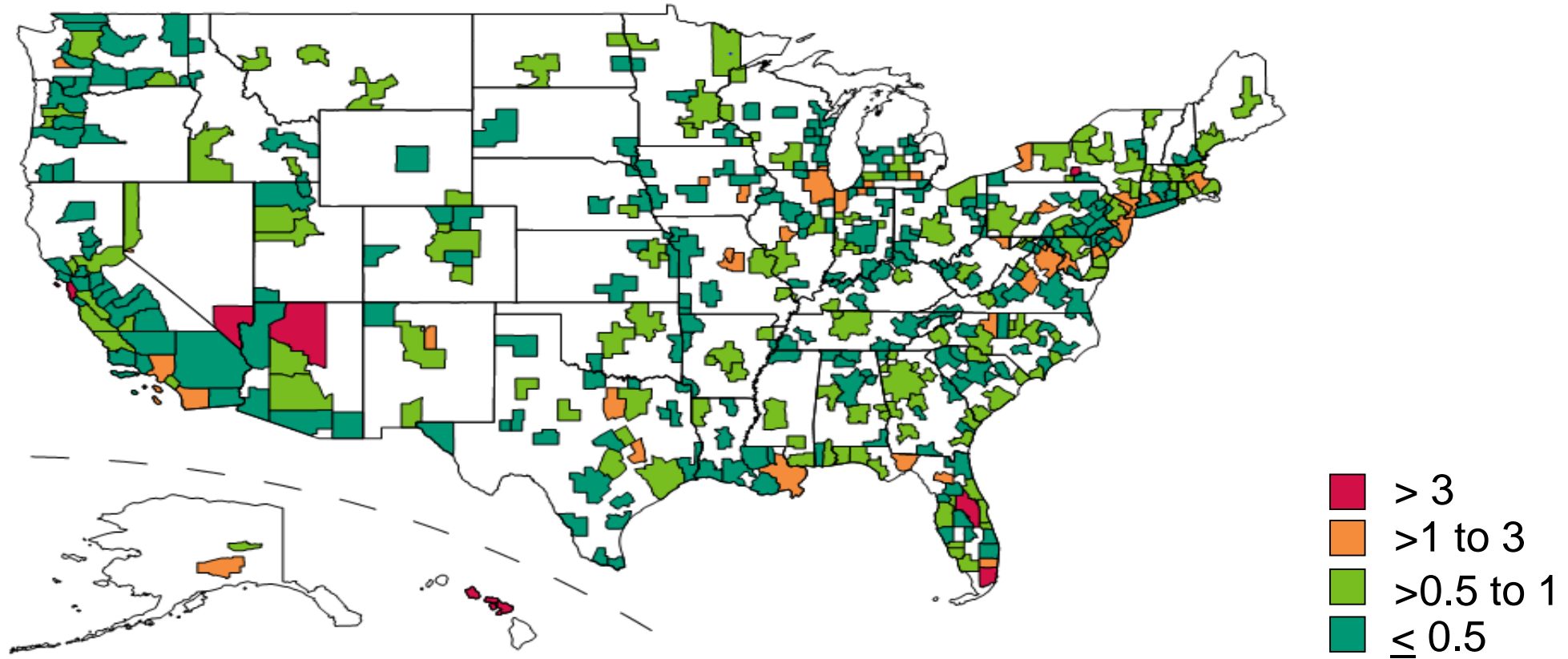
Change yr ago, \$ per mo for a one-bedroom apartment



Sources: Zumper, Moody's Analytics

A Dark Picture for Tourism Hubs

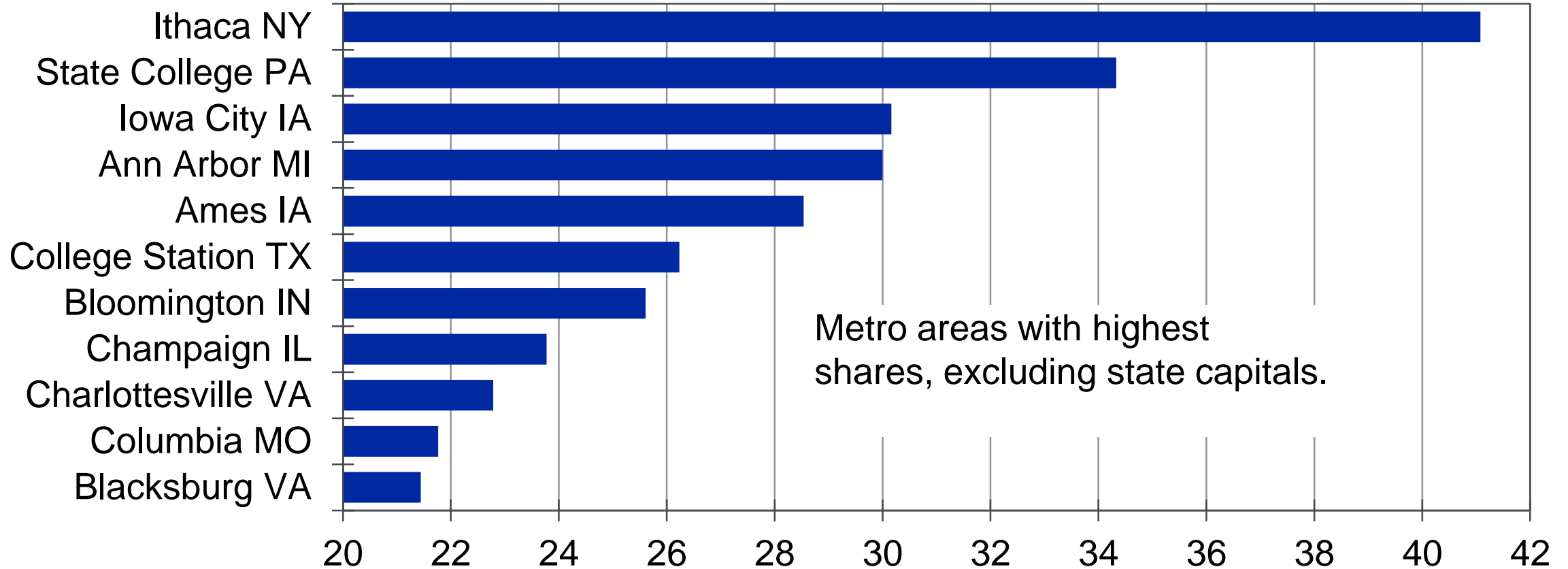
Travel exports as a share of GDP, %, 2017



Sources: Census Bureau, BEA, Moody's Analytics

Risks Rise for College Towns

Combined university and state government employment share, 2019, %



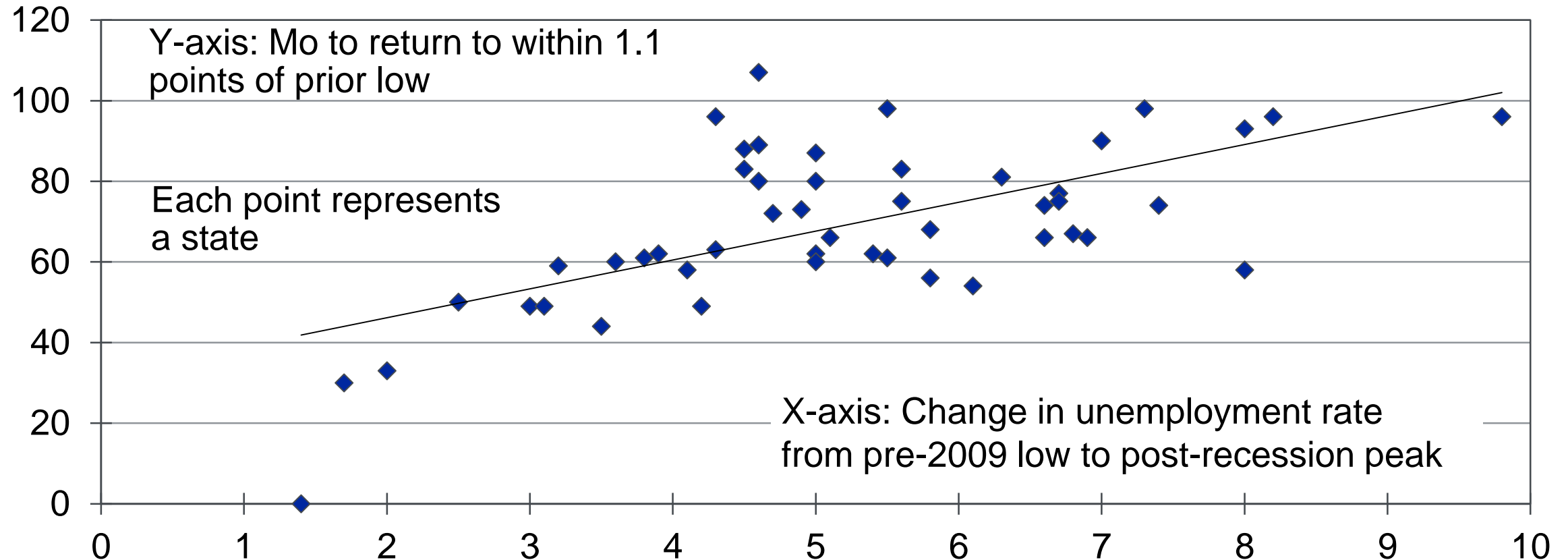
Sources: BLS, Moody's Analytics

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What Comes Next?

Bigger Hit Typically Spells Slower Rebound

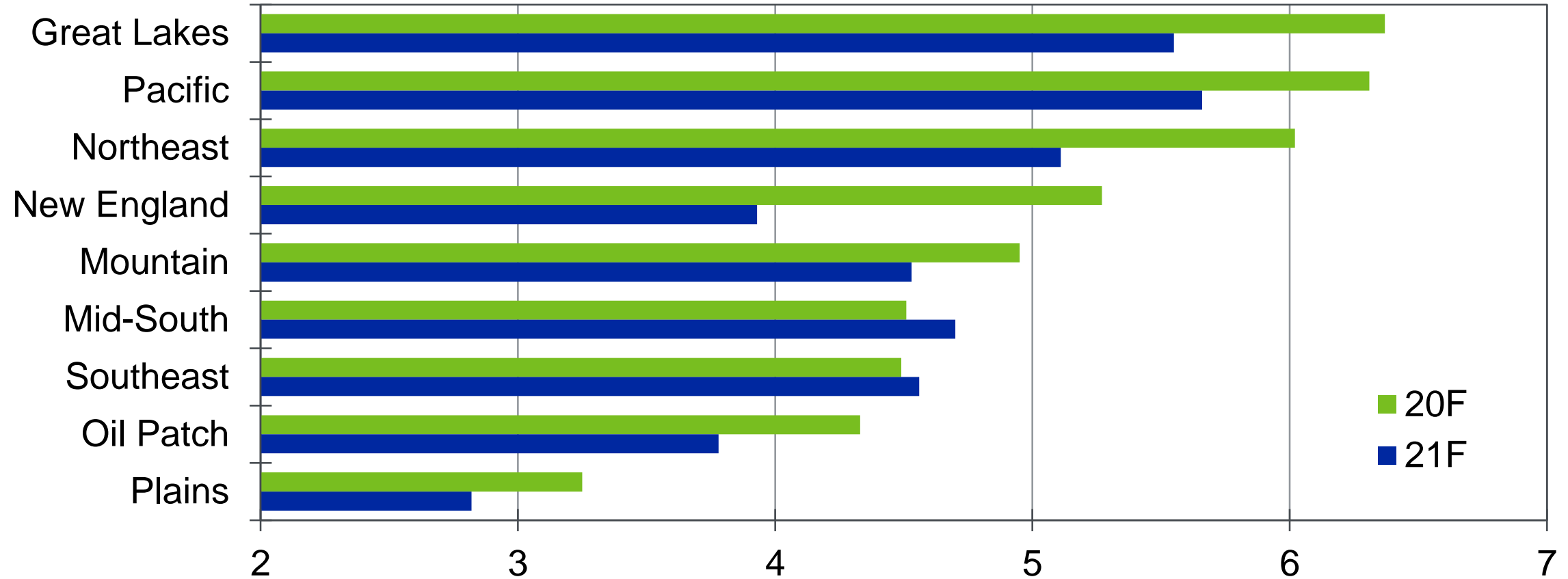
Great Recession unemployment rate increase vs. mo to full recovery



Sources: BLS, Moody's Analytics

Gradual Improvement Everywhere – Except the South

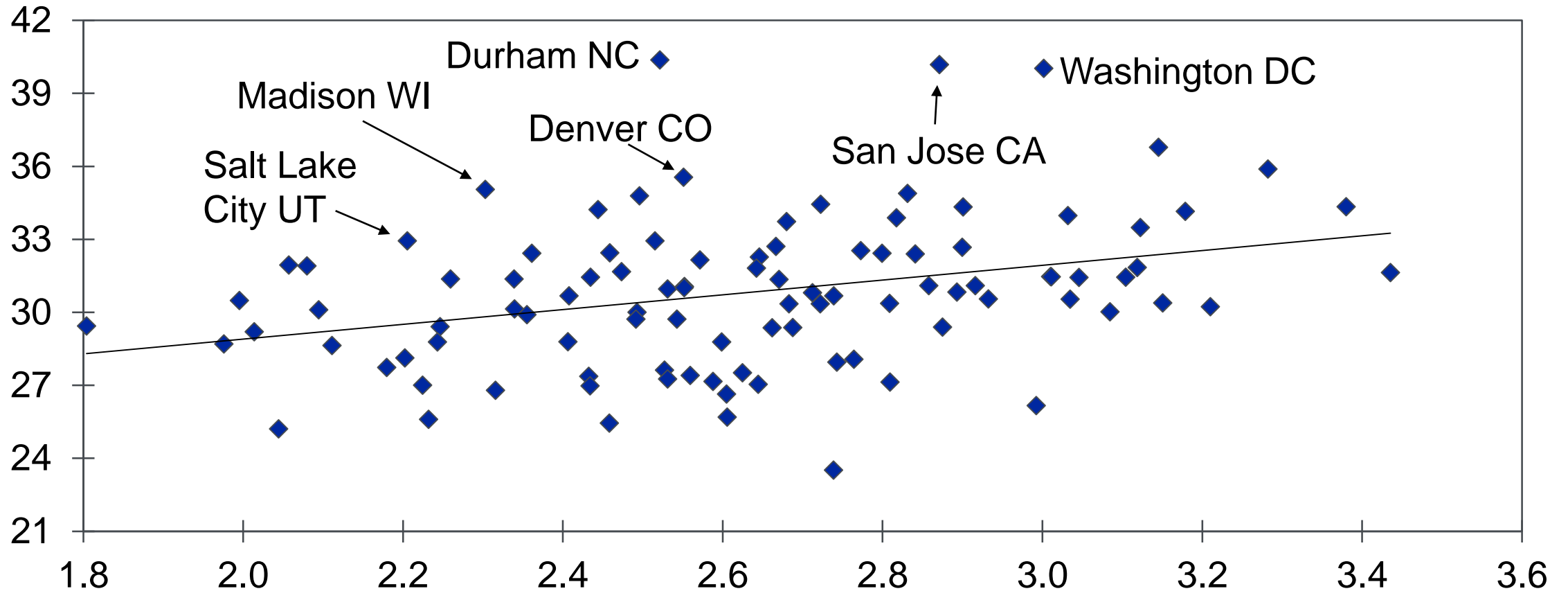
Change in unemployment rate compared to 2019 avg, ppt



Sources: BLS, Moody's Analytics

Some Metro Areas Are Better Positioned

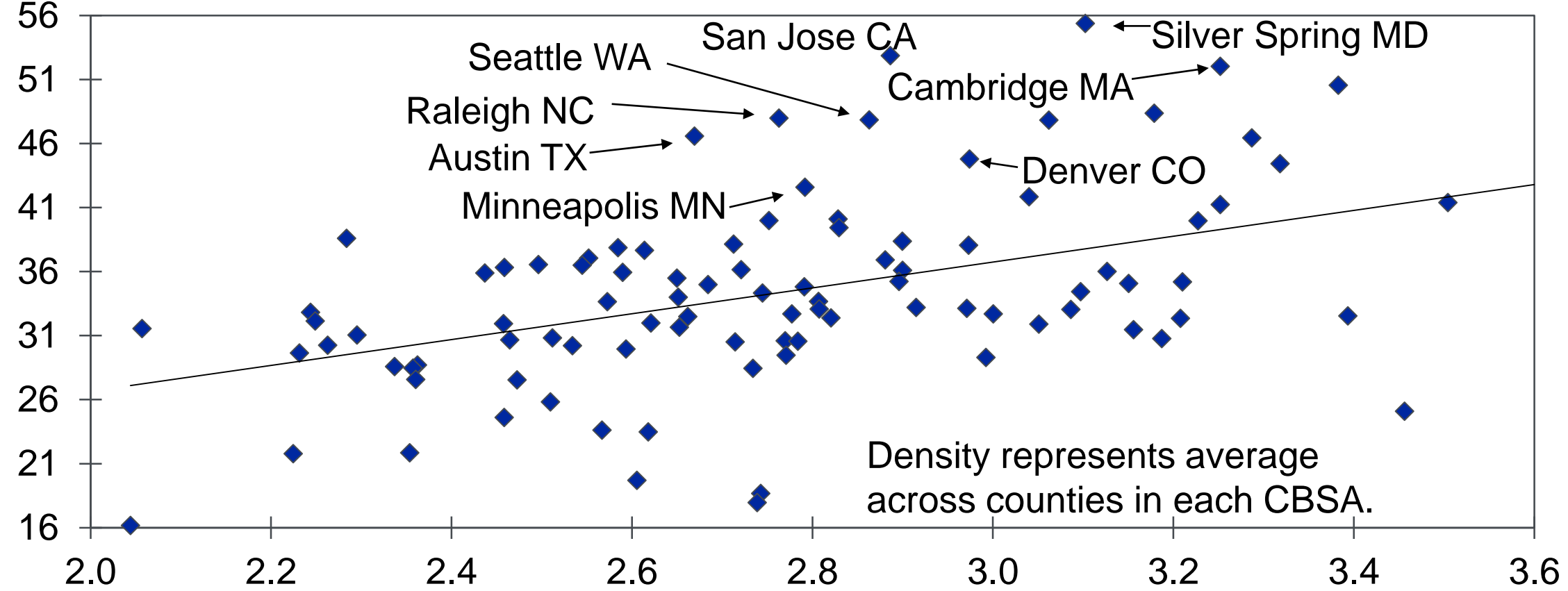
Log population density, 2018 (X) vs. share of jobs requiring college, % (Y)



Sources: Census Bureau, Moody's Analytics

Suburbs, South, and West Benefit Most

Log population density, 2018 (X) vs. share of residents with a college degree, % (Y)



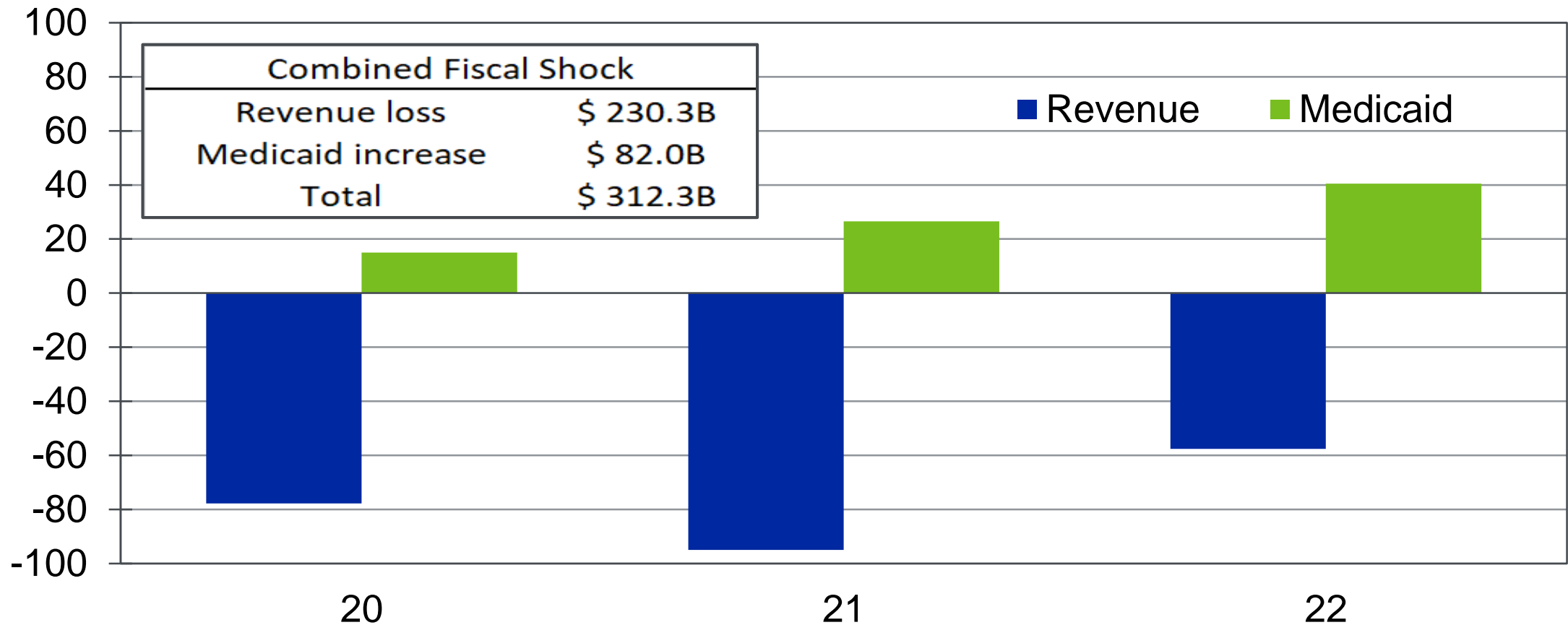
Sources: Census Bureau, Moody's Analytics

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State and Local
Government Impacts

Major Ramifications for State Finances Under Baseline...

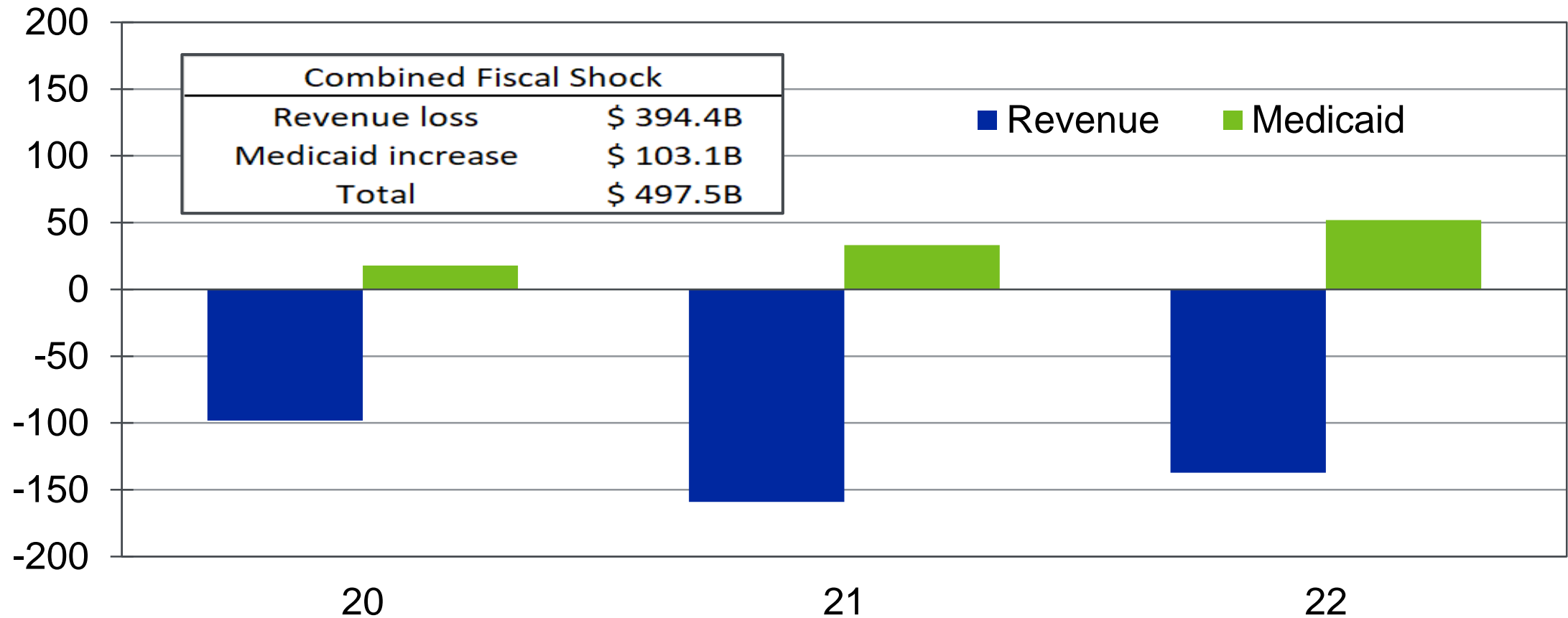
50-state aggregate projections, state fiscal yr



Source: Moody's Analytics

...With Half a Trillion Lost Under the S3 Scenario

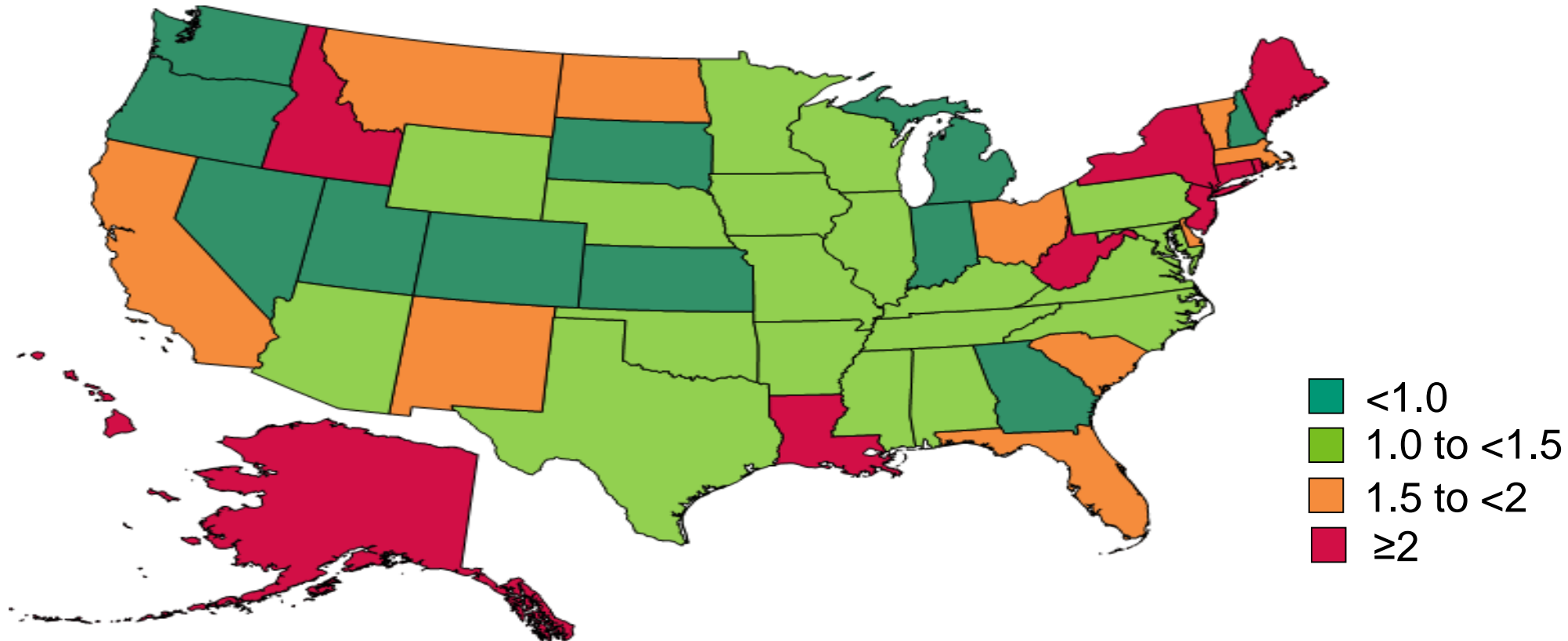
50-state aggregate projections, state fiscal yr



Source: Moody's Analytics

Shock Is Widespread, Worst in Northeast

Baseline fiscal shock through fiscal 2022 as a % of GSP



Sources: BEA, Moody's Analytics



Further Questions:

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