

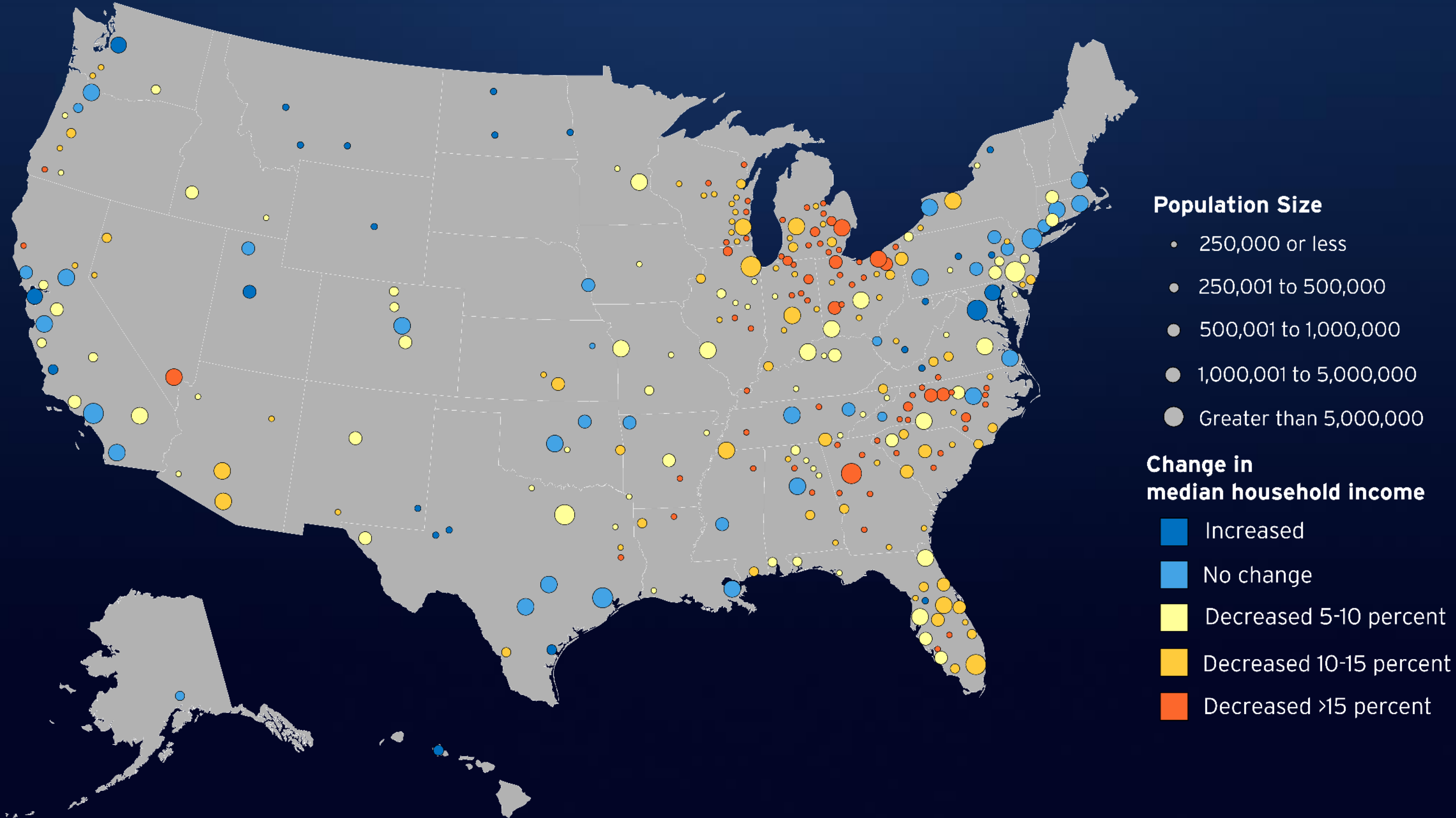


Modernizing Shared Transportation: Public Responsibilities in the Digital Age

BROOKINGS
Metropolitan Policy Program

Images: Hafidh Satyanto on Unsplash

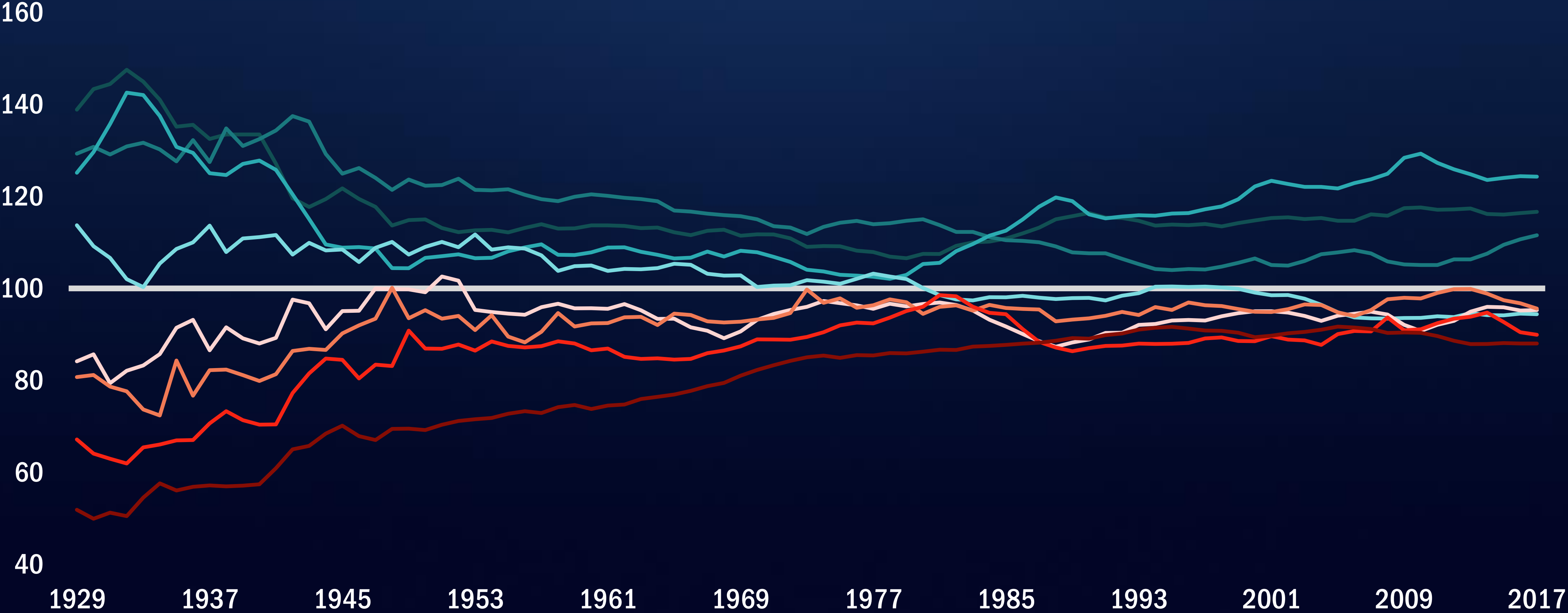
Divergence defines America's recent economic story



Note: Income changes are significant at the 90% level, excepting "no change" category. Source: Brookings analysis of decennial Census and American Community Survey data

Divergence defines America's recent economic story

Regional Per Capita Income Compared to National Averages, 1929-2017



—Midwest —Far West —New England —Great Lakes —Rocky Mountain —Plains —Southwest —Southeast

Metro areas need assets to deliver global economic competitiveness



Innovative



Integrated



Digitalized

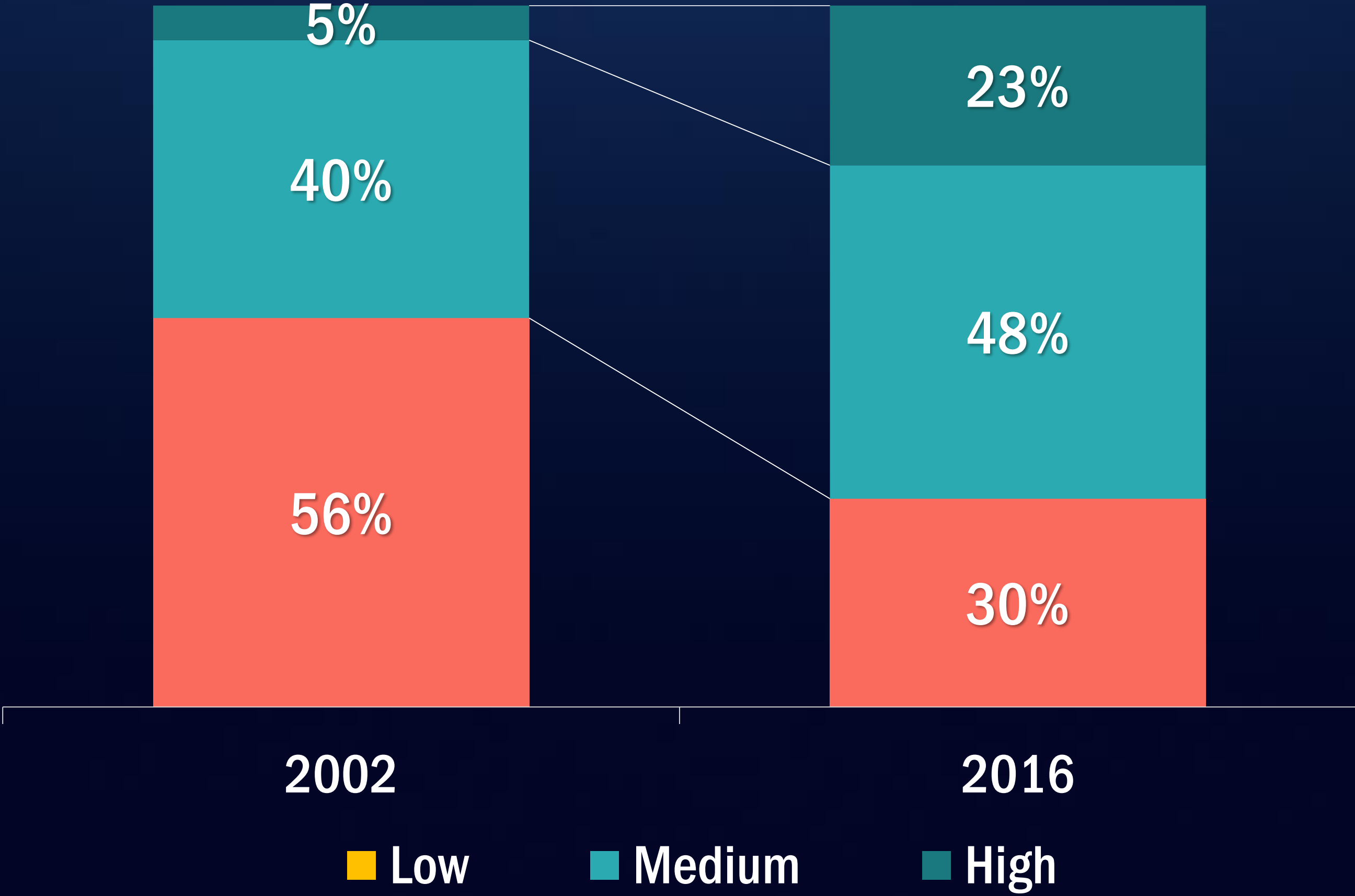


Productive

Source: McKinsey, "Superstars"

Technology is changing the nature of work

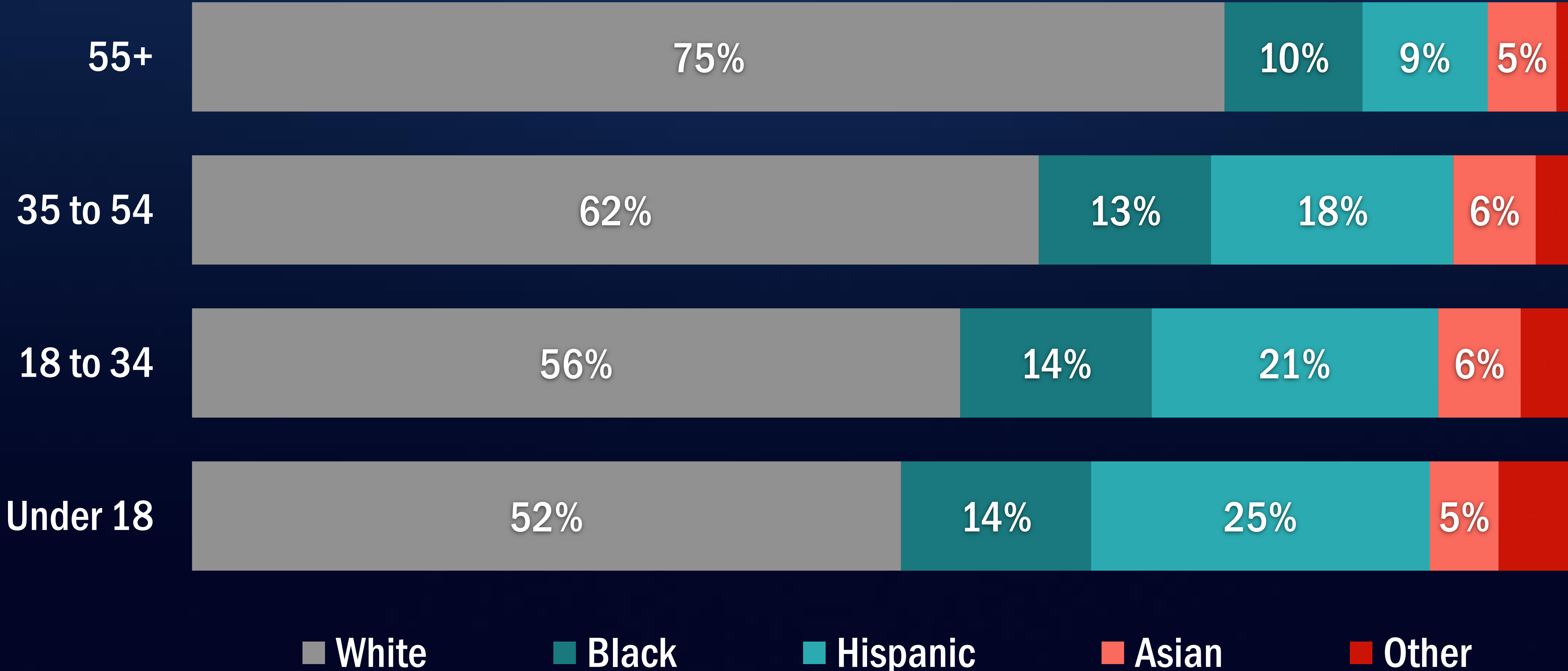
Share of U.S. employment by digital skill level



Source: Brookings, "Digitalization and the American workforce," 2017

Our country is aging and becoming more diverse

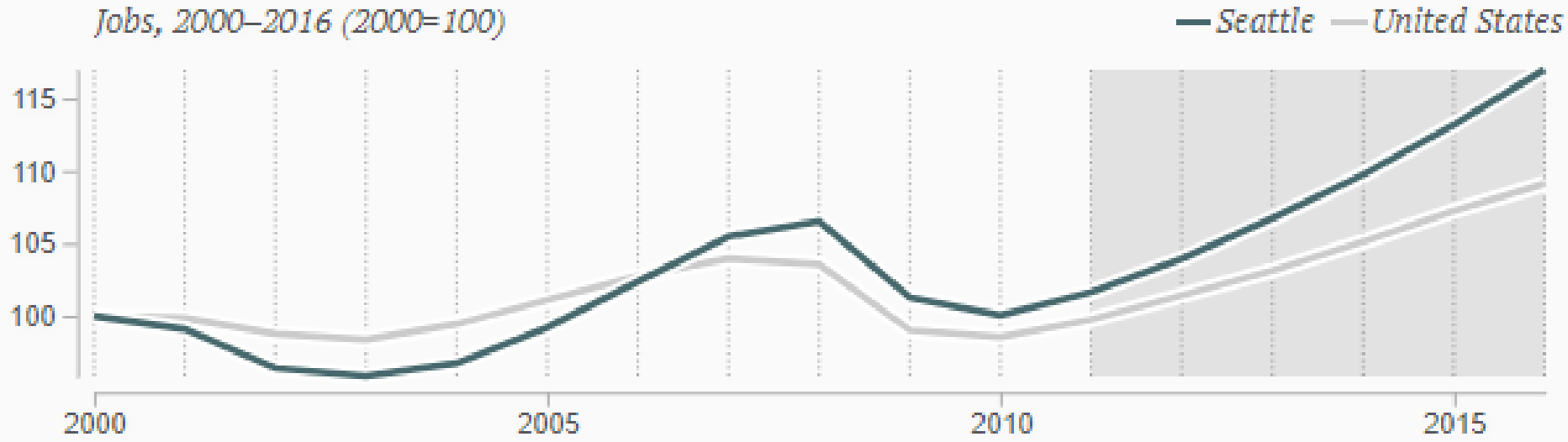
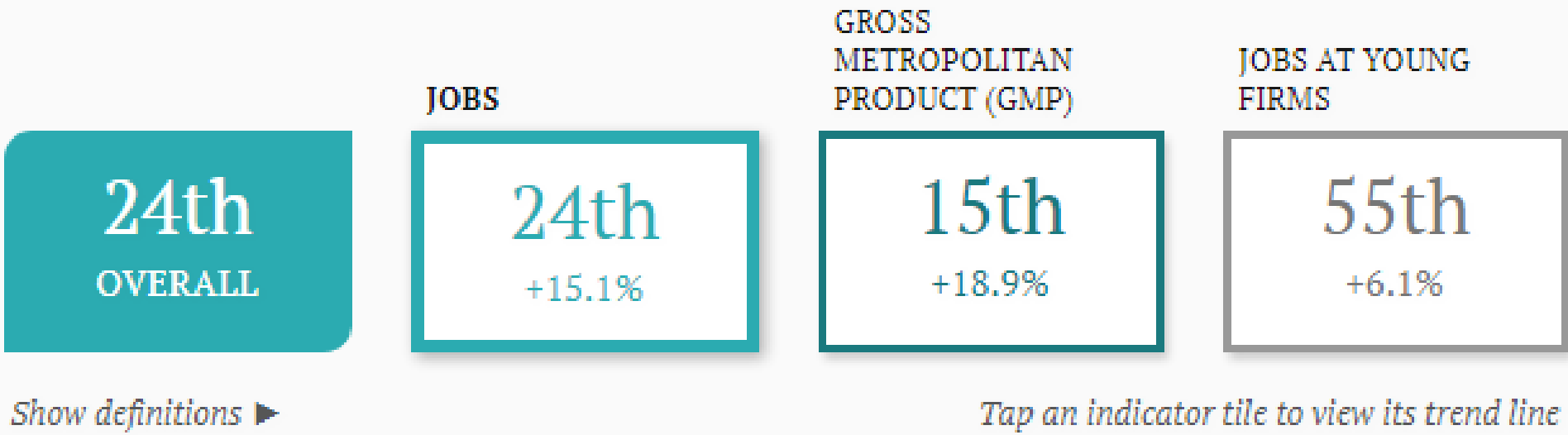
Ethnicity by generation, United States, 2015



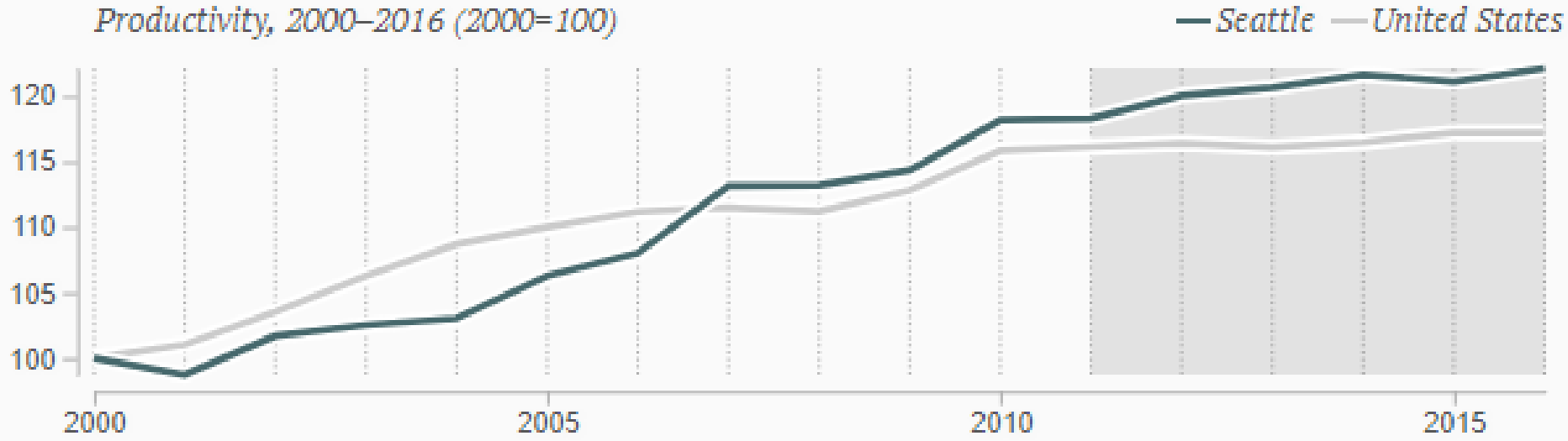
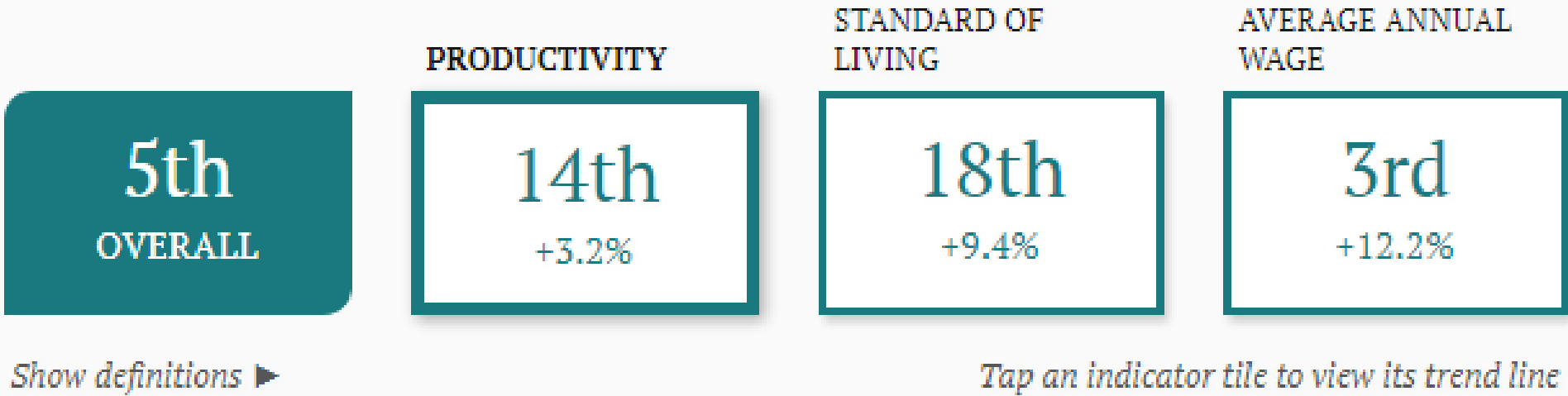
Source: Brookings analysis of 2015 1-year ACS

Divergence **within** metro areas

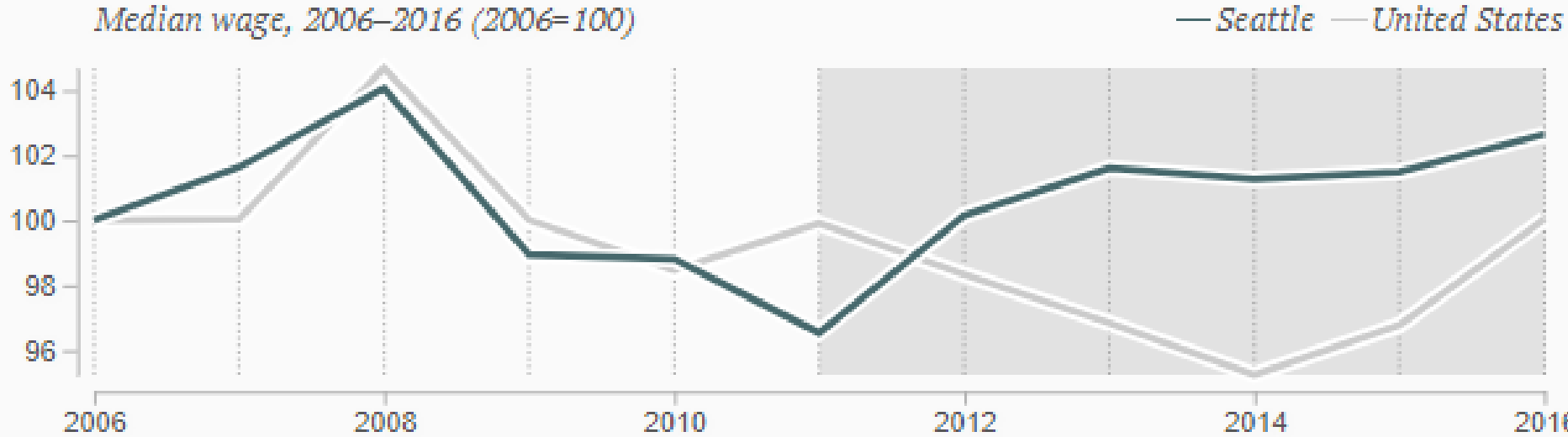
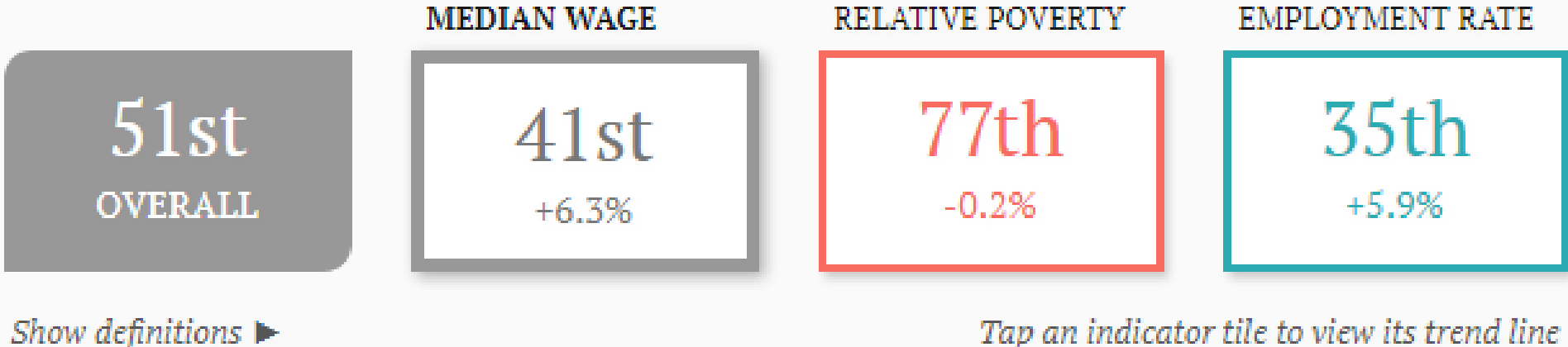
Growth in the Seattle metropolitan area, 2011–16



Prosperity change in the Seattle metropolitan area, 2011–16

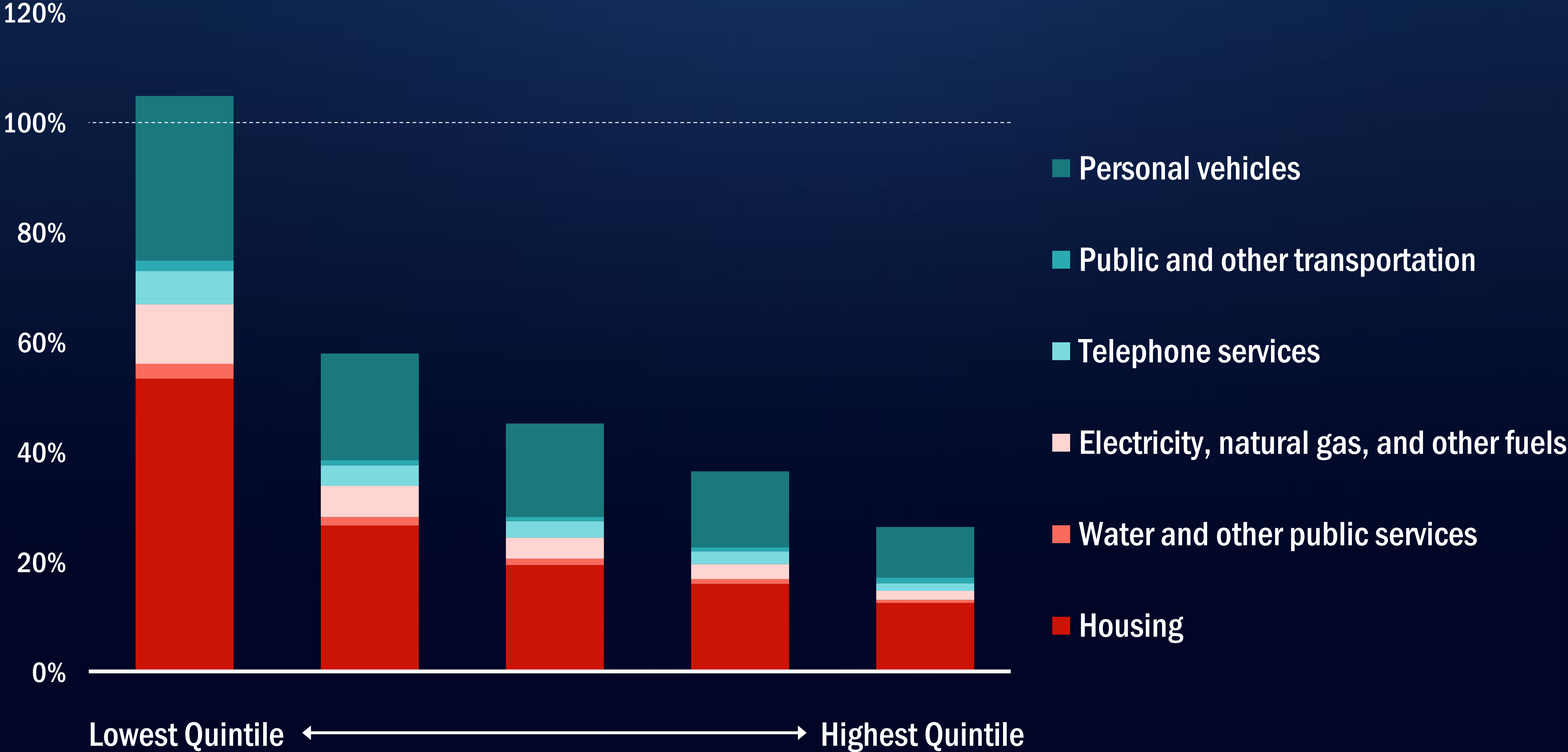


Inclusion change in the Seattle metropolitan area, 2011–16



The built environment only intensifies economic disparity

Share of after-tax income spent on infrastructure services, by income quintile, 2016





1

Local Transportation: From Static to Dynamic

2

Core Questions

3

Emerging Local Responses

Persistent, but slowed, driving

+3.0%

VMT CAGR, 1970-2000

0.9%

VMT CAGR, 2000-2016



Deep uncertainty within traditional transit systems



Digital connections unlock new opportunities while leaving others behind

70+ mil

Population in low-broadband neighborhoods

64%

National smartphone adoption



New digital transportation habits



28%

Share of 18-49 year-olds who have used ride-hailing apps

100+

Bikeshare systems in the U.S.

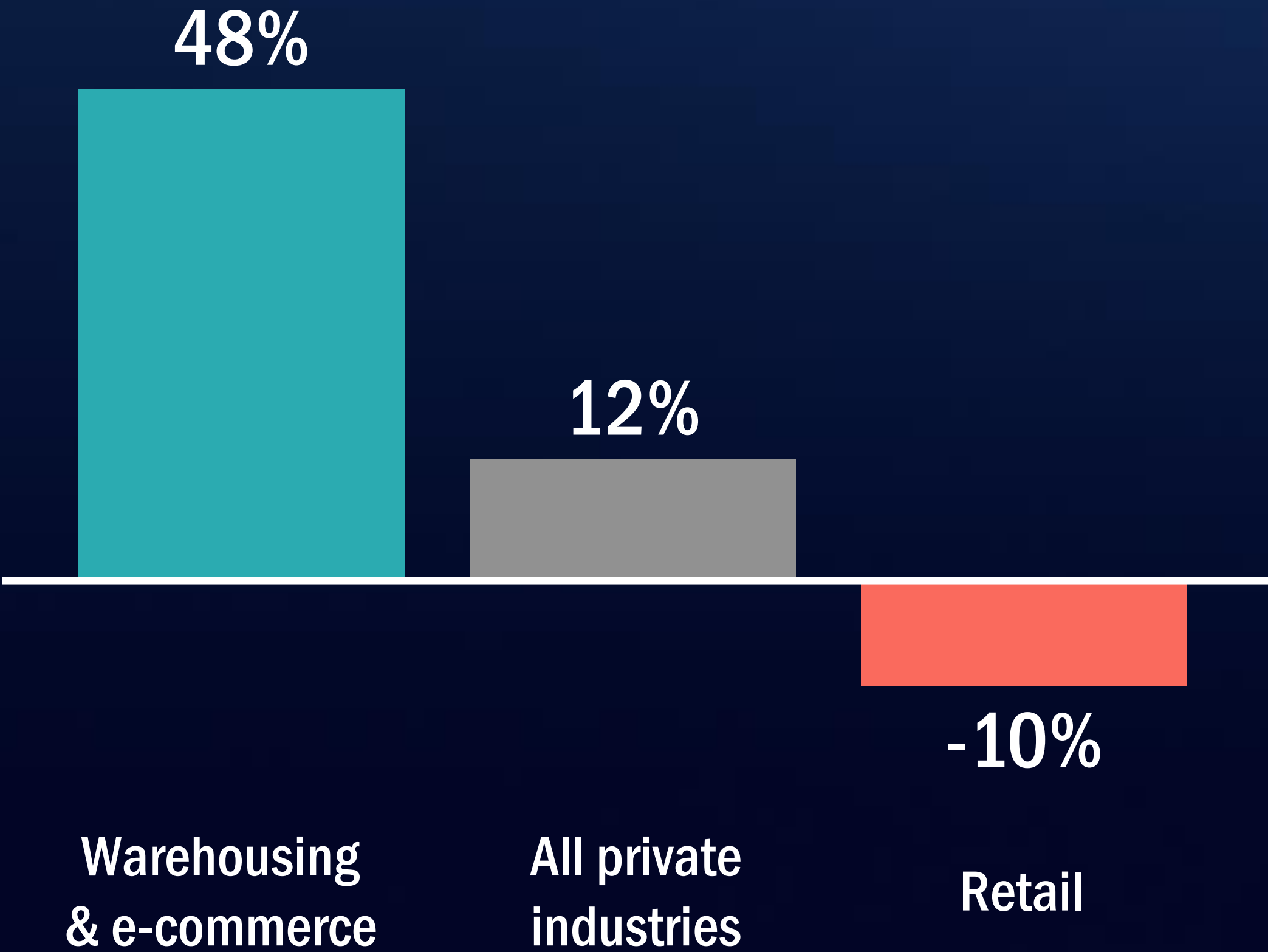
43%

Share of adults who work remotely at least part of the time

Source: US Census, Pew Research Center, NACTO, and Gallup

E-commerce inextricably connected to transportation and land use

U.S. job growth, 2010 - 2016



Source: Brookings,

Autonomy will bring even more powerful market-shaping forces

9.5 mil

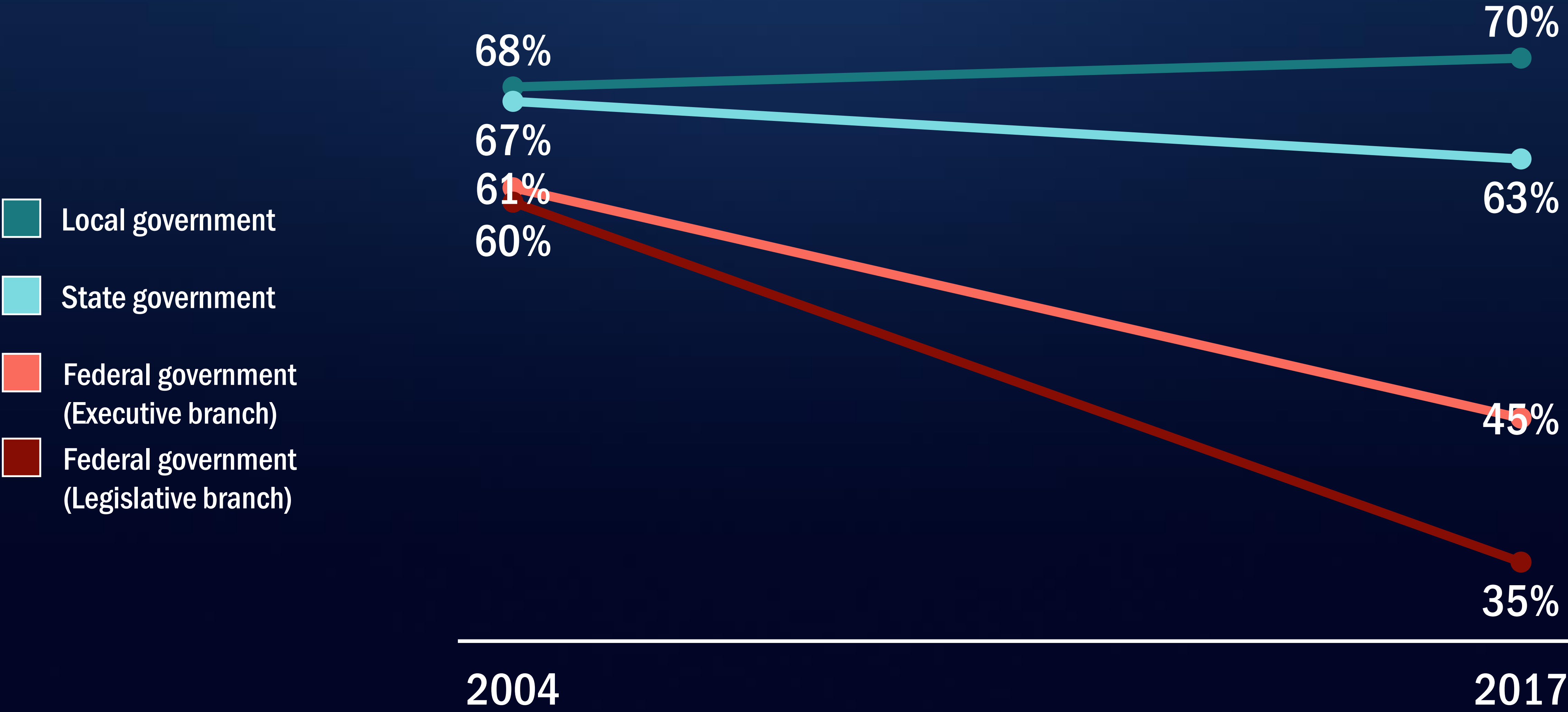
Impacted transportation workers

69.4 mil

Urbanized land acres



Public trust is difficult to build, easy to lose



Source: Gallup

States and localities are willing to invest more in themselves ...

25

States who have raised their gas tax in the past 4 years

\$70_b

Muni bonds included within state and local ballot measures in 2016

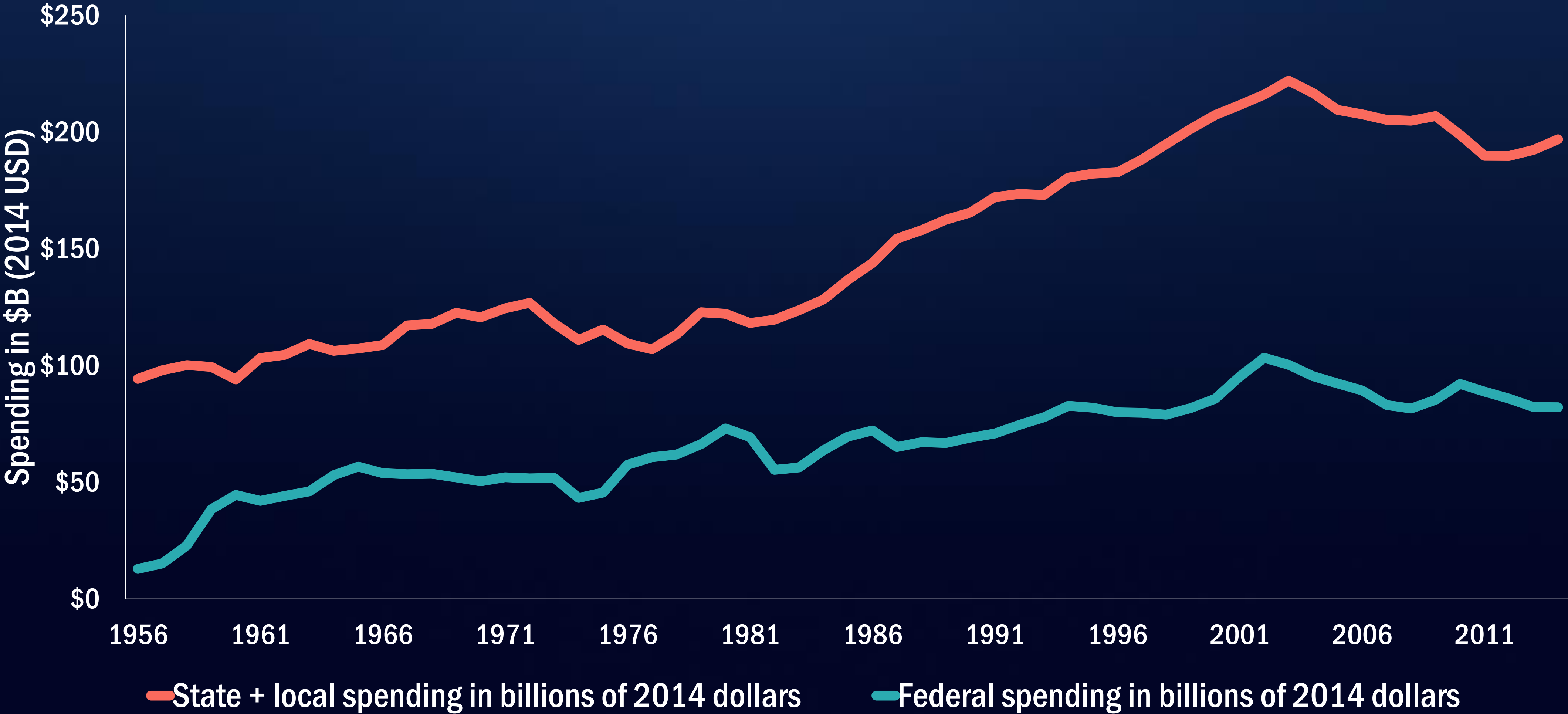
+70%

Passage rate for transportation-focused ballot measures

Source: Pew Charitable Trusts, Reuters, and APTA

While the federal government keeps reducing its role

Federal vs. state and local spending on transportation infrastructure, 1956-2014



Source: Brookings analysis of Congressional Budget Office data

1

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What does it mean to connect people to economic opportunity in the digital age?



What tools do people need access to?



How is local economic geography changing?



How can land use regulations and other public policies tilt market dynamics?

How do we prepare this century's transportation workforce?



**Which jobs will disappear?
Stabilize? Still to be invented?**



**What are the ingredients for a
digital-age workforce development
ecosystem?**

What environmental risk factors can be managed locally?



How could climate risks impact local transportation networks?



How can a region sustainably finance more resilient infrastructure and usage?

What does it mean to be a local transportation agency in the digital age?



What's the Mission Statement? What's the balance of internal and external services?



Where do public subsidies flow? What are the revenue sources?



How must employment approaches and digital content management evolve?

1

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2

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3

Emerging Local Responses

New Partnerships

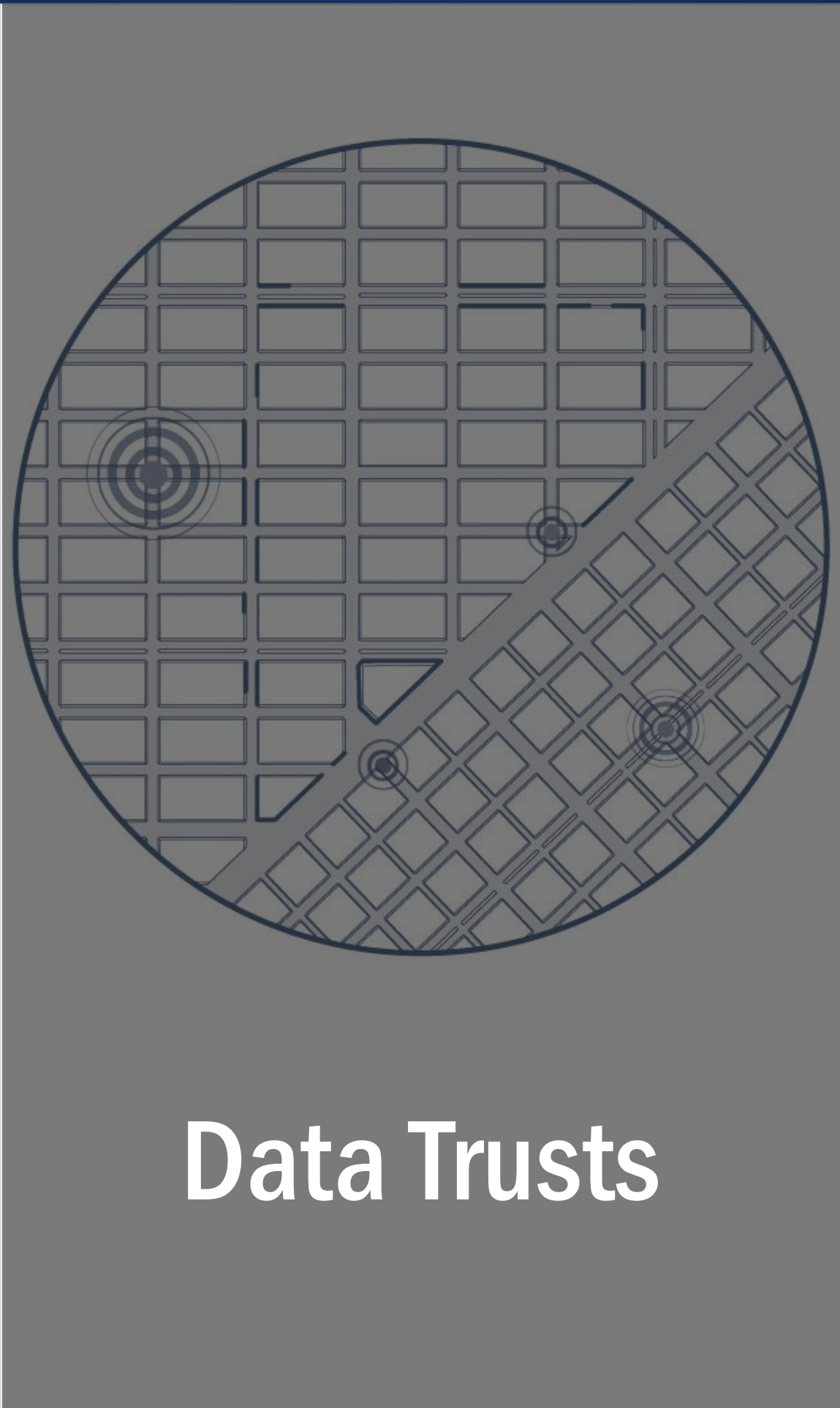
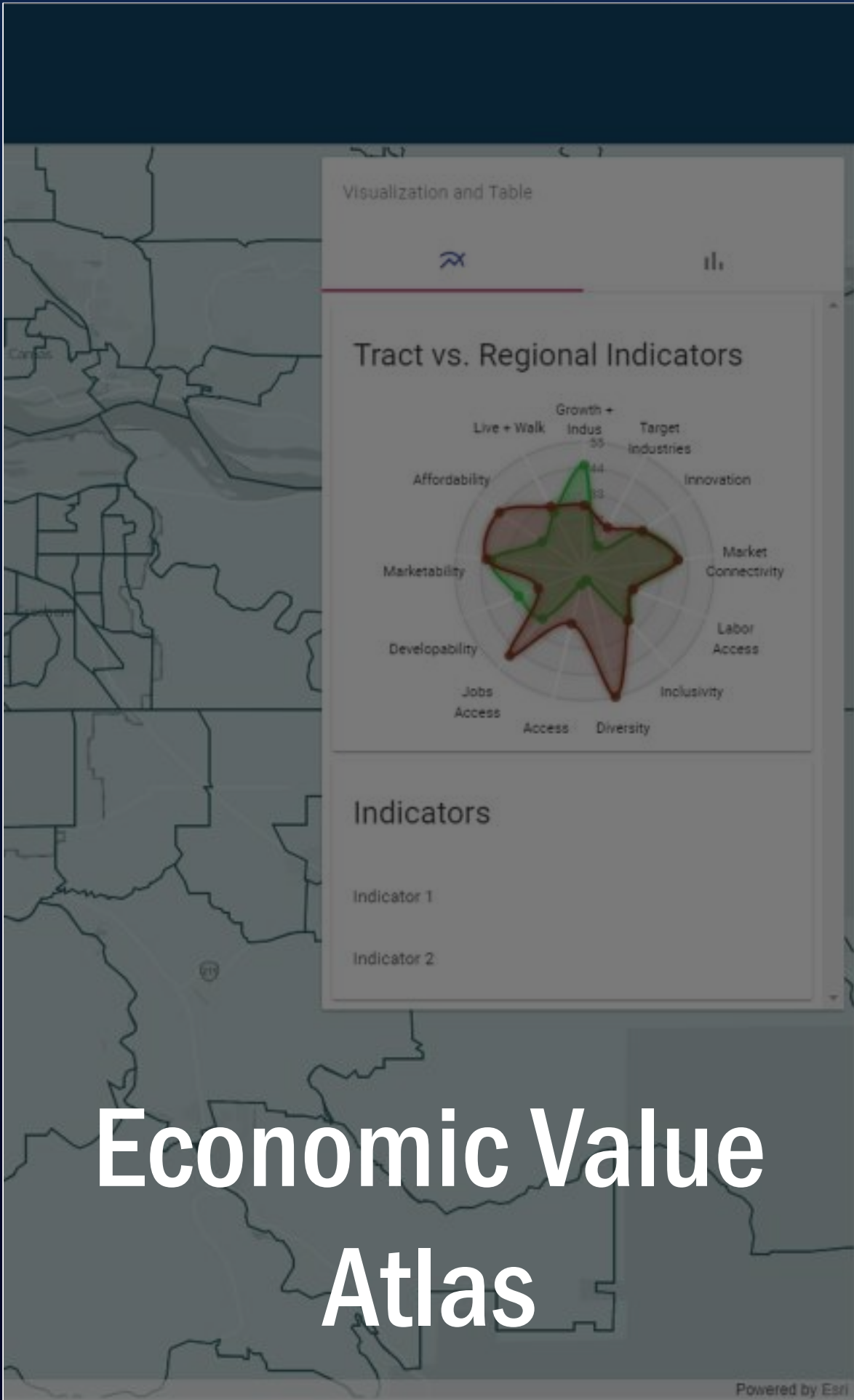


Transportation Network Company Agreements



Dig Once

Internal Intelligence, Upgraded



Fiscal Transformations



Congestion and Other Fees



Resilience Financing

Remaking Workforce Development



Infrastructure Academies



Redesigning Credentials



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