



MISSOURI Supply Chain Task Force

presented to
Missouri Supply Chain Task Force
Members

presented by
MFA
MO Higher Education & Workforce
Development
USDOT
AmerisourceBergen
General Mills

May 5, 2022

Chris DeMoss

MFA



National Priorities

Dr. Mardy Leathers
Director, Office of Workforce Development
Department of Higher Education & Workforce Development



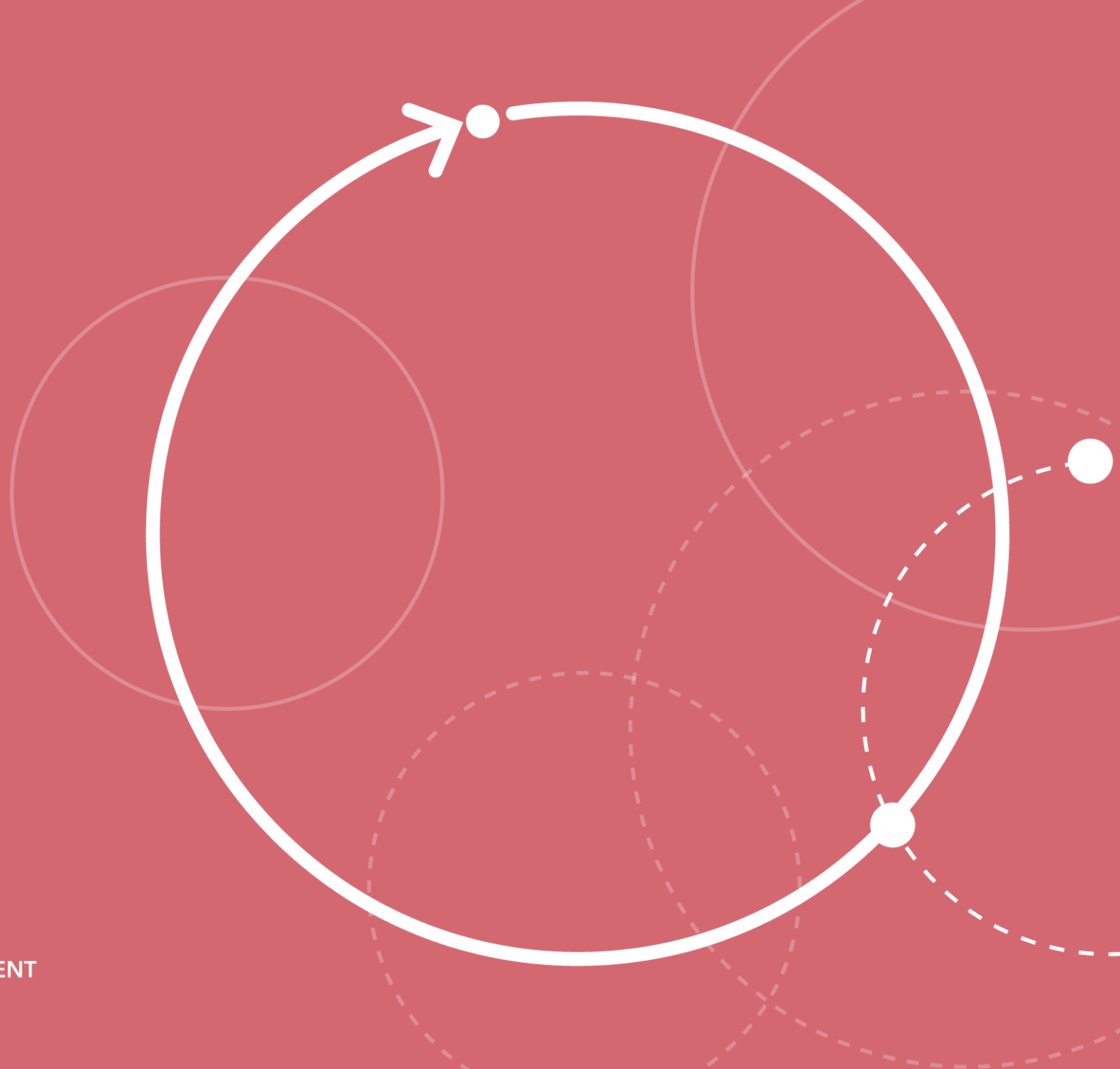
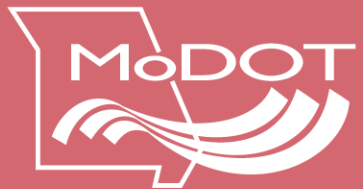




<https://www.nga.org/ijia-implementation-resources/>

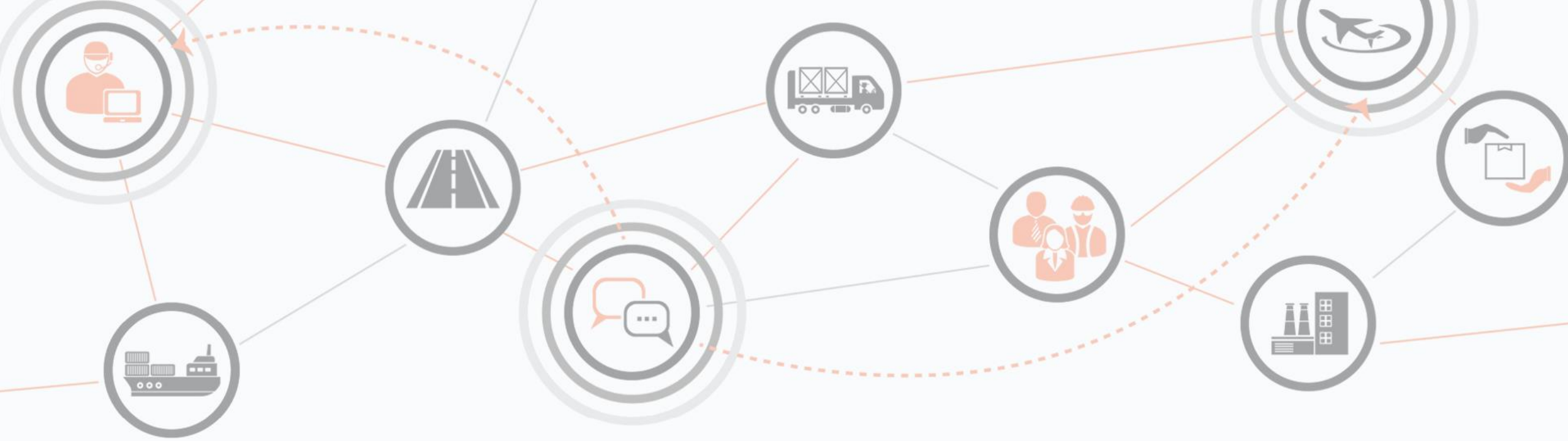
USDOT and USDOL Partnership

Paige Shevlin
USDOT





Paige Shevlin
Strategic Advisor for Infrastructure Workforce Development
Office of the Secretary – US Department of Transportation



Missouri Supply Chain Task Force Meeting

Enhancing Supply Chain Resilience through Public-Private Partnerships

May 2022

Assessing supply chain resilience

“[Supply chain resilience is] having the ability to anticipate and resist disruption; and, when disrupted, the ability to recover and the speed at which it does.” - Wayland Coker¹

Shortages

Supply driven

- Manufacturing / quality issues
- Logistics challenges
- Trade issues
- Structural / market economic issues

Demand driven

- Urgent, increased need for medication / supplies
- Behavioral response to perceived risk of shortage

Issues that can trigger both supply and demand-driven shortages:

Natural disasters, pandemic, bioterrorism, hostile or weak international relations

A resilient supply chain:

- Ensures product **availability** and **quality**, even during times of emergency
- Includes **transparency** that is needed to predict, prevent, and rapidly respond to disruptions
- Supports **national security**, and American competitiveness and jobs
- Is not concentrated **geographically** or overly reliant on overseas sources of supply
- Addresses supply chain **interdependencies / complexities**

1. AB and ASPR meeting, 7/23/21

Supply chain resiliency solutions

1

Stockpiling

Federal and state level

- Procurement and storage
 - Perpetual inventory cycling / replenishment
 - IT and financial systems
-

2

Transparency

Predict, prevent, respond

- Understanding areas of risk and anticipating challenges
 - Leveraging data to gain insights that drive planning and response
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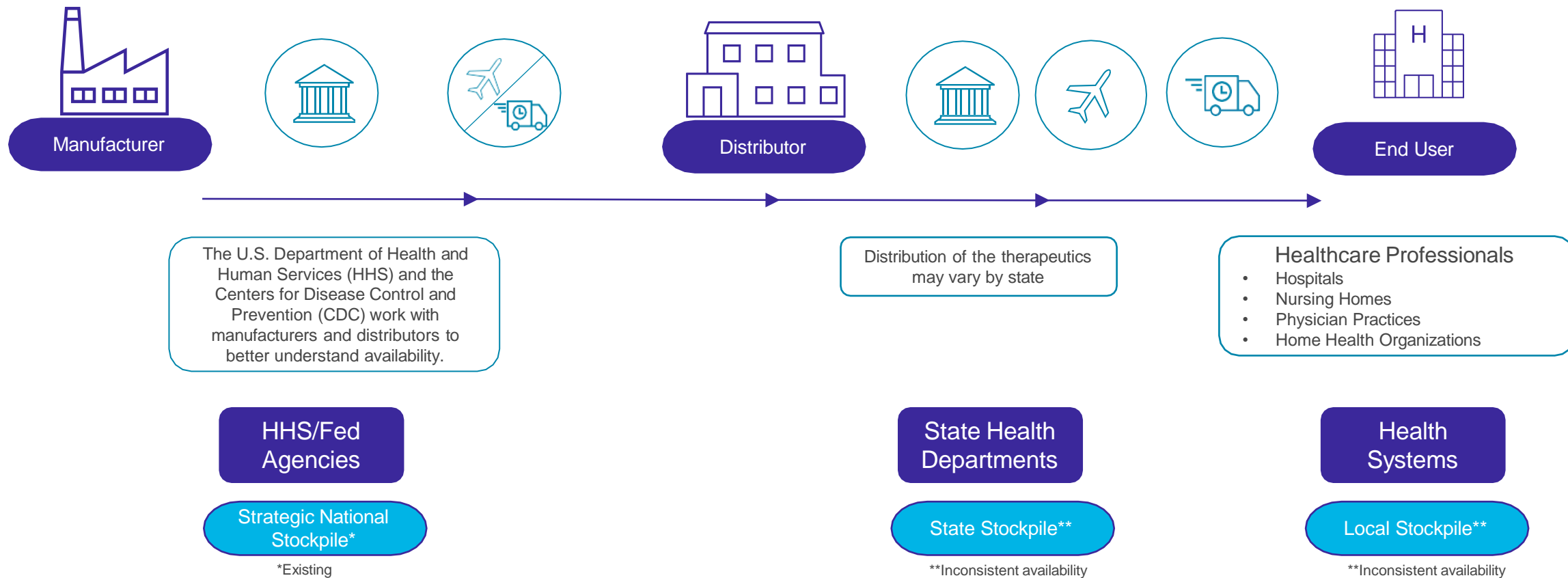
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Domestic manufacturing

Public/private partnerships

- Participation in U.S. government-supported manufacturing and technology innovation
- Price stability / competitiveness
- Reduce dependency through diversification

Stockpiling at various levels provides finished products at the time when needed



- Where, if anywhere, should we hold pharmaceutical stockpiles?
- And who should pay for them?
- What is the cost of not having one?

Transparency initiatives need to span all supply chain stages for success

Product manufacturing + downstream market insights



Early inputs / raw materials



APIs and finished goods




Pricing and distribution



Drug administration

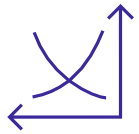
- Transparency discussions are often focused on the important area of product manufacturing
- A product shortage can create unintended consequences for secondary or tertiary products and can disrupt patient care even in non-emergency times
- Because of the interdependency and complexity of the supply chain network, all stages impact resiliency
- Data that is extracted from / evaluated within a broader supply chain context supports holistic response strategies

Domestic manufacturing alone does not provide all the answers

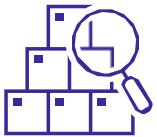
		
	Off-shoring	On-shoring
Cost	↓	↑
Quality	↓	↑
Risk	↑	↑
Product Availability	↓	↑
	Off-shoring offers often lower prices, subjectively differing quality, wider variety, and potentially more innovation but with higher risk and greater dependency	On-shoring could increase costs and reduce affordability of pharmaceuticals as well as create even greater risk due to vulnerabilities of disruption through natural disaster or the like

Adapted from: National Academies of Sciences, Engineering, and Medicine 2022. Building Resilience into the Nation's Medical Product Supply Chains. Washington, DC: The National Academies Press. <https://doi.org/10.17226/26420>.

Securing pharmaceutical supply chain resilience



Aimed to address supply or demand-driven shortages



Ensures preparedness to minimize disruptions



Provides assurance that patients will receive the care they need, at the time of need

Thank you

General Mills

Stacey Giltner
Human Resource Manager





Stacy Giltner
Human Resources Manager
General Mills, Hannibal Plant

Barriers to Employment and Government Interventions

Dr. Mardy Leathers
Director, Office of Workforce Development
Department of Higher Education & Workforce Development



Barriers to Employment



Workforce readiness

Training or certification requirements



Childcare

Cost, reliability, and supply of providers



Workforce Housing

Cost, condition and supply of housing



Transportation

Cost, reliability, and options

Workforce Readiness

- Training / certification required
 - » Demonstrate proficiency with tools, tech, processes, regulations
 - » May take six weeks to one year to complete training programs
- In-person requirement for programs may be necessary to demonstrate skills or pass assessments
- Workforce pipeline is necessary to supply businesses with area labor pool

Common Entry-Level Certifications

Warehousing Sector	Manufacturing Sector
<ul style="list-style-type: none">• Certified in Production and Inventory Management• Certified Supply Chain Professionals• Forklift operator• Commercial Driver's License (CDL)	<ul style="list-style-type: none">• National Career Readiness Certificate (NCRC)• Certified Welder• Certified Production Technician (CPT)• Precision Sheet Metal Operator (PSMO)

Childcare

- Finding affordable options
 - » Limited number of child care centers in rural areas
- Work conflicts and risks
 - » Childcare providers often set strict rules for on-time pick-up
 - » Late shifts or other work conflicts raise the risk of losing childcare service

Number of Licensed Child Care Centers per City, 2019

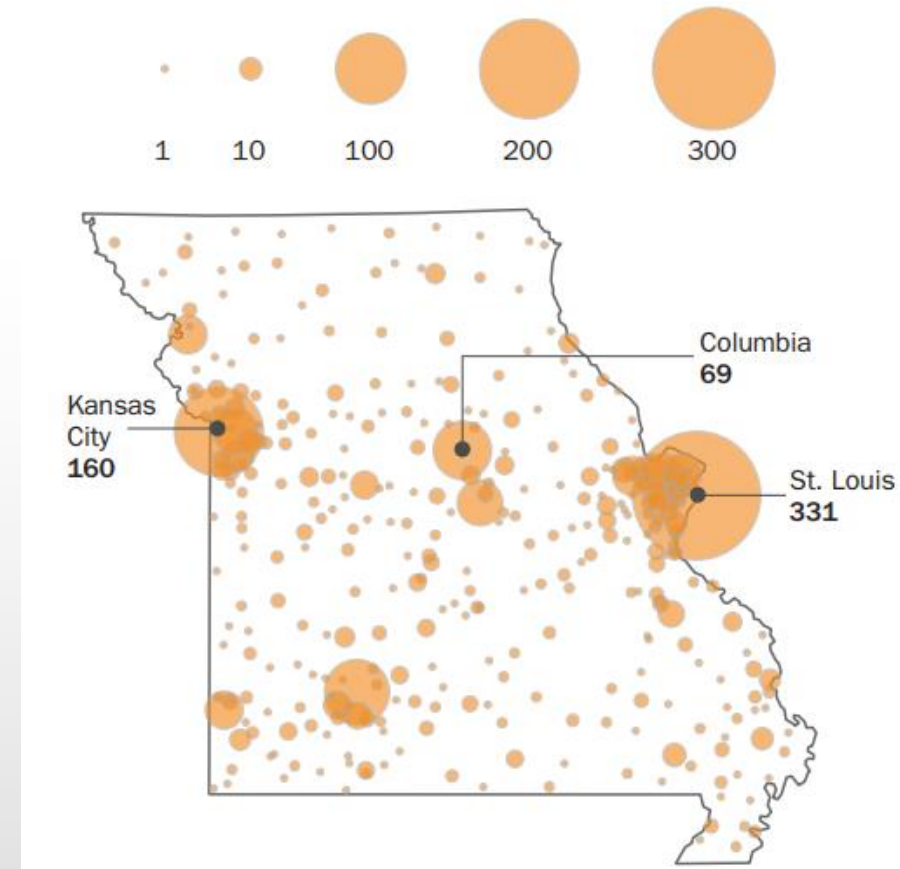
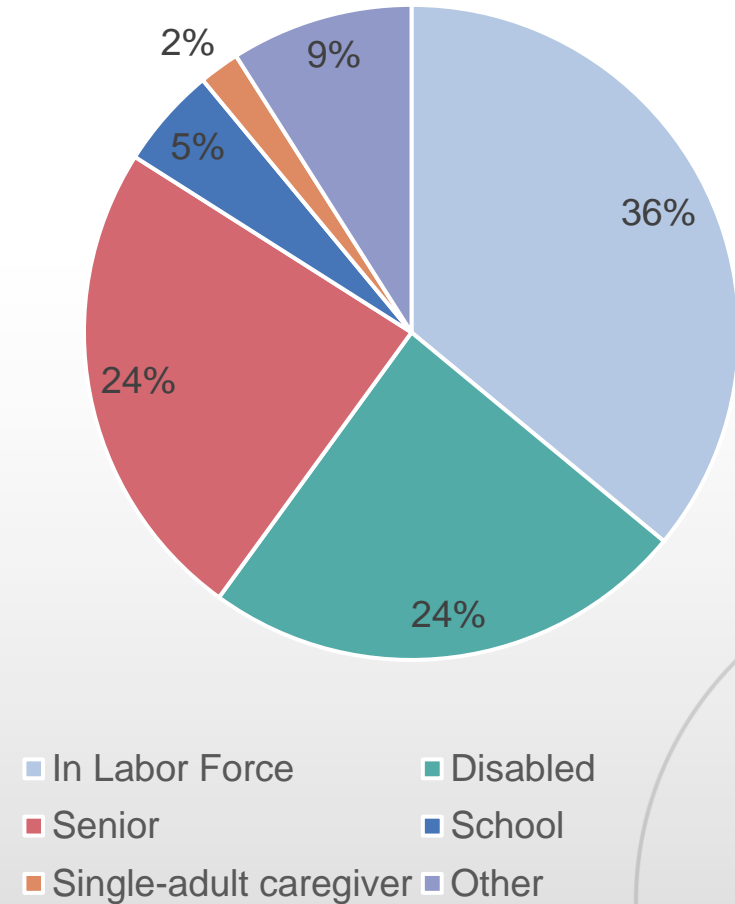


Image source: Columbia Missourian, 2019

Workforce Housing

- Supply constraints
 - » Housing often limited near industrial districts due to zoning laws, market preferences
- As of 2022, Missouri has a shortage of nearly **120,000 units** for extremely low-income renters (renters who earn less than 30% of Area Median Income)
- Poorly-maintained low-income housing can expose residents to health risks from mold, poor ventilation, etc.

Extremely Low Income Renter Households in Missouri (2022)



Source: National Low Income Housing Coalition, 2022

Transportation

➤ Private vehicles

- » Low-income HHs have lower rates of vehicle ownership and spend more on transportation than higher-income HHs

➤ Transit service

- » Harder to provide reliable, frequent transit service in low-density industrial areas
- » Low-frequency service creates longer wait times, increases cost of missed trips for workers



Image source: OATS Transit

A 2019 analysis found that Kansas City and St. Louis rank **33rd** and **40th**, respectively, among the top-50 metro areas for number of jobs accessible within a 60-minute transit commute

Potential Government Solutions

Barrier to Employment	Solution	Benefits
Workforce Readiness	Virtual credentialing programs	<ul style="list-style-type: none"> Reduces travel requirements for workforce training and development programs
	Accelerated credential-to-employment programs	<ul style="list-style-type: none"> Reduces time to receive credentials by counting current employment, apprenticeship hours, or prior military service towards credentialing
	Statewide credentialing standards	<ul style="list-style-type: none"> Enables workers and employers to focus on key credentials for skillset development
Childcare	Childcare subsidies for employees	<ul style="list-style-type: none"> Reduces direct costs of childcare for workers
	Childcare expenditure tax credits for businesses	<ul style="list-style-type: none"> Reduces tax burden for businesses that provide childcare subsidies to employees
	Incentives for on-site childcare provision	<ul style="list-style-type: none"> Reduces need for low-income workers to complete multiple trips in order to access childcare and work

Potential Government Solutions

Barrier to Employment	Solution	Benefits
Affordable Housing	Expanded housing subsidies	<ul style="list-style-type: none">• Reduces housing costs for low-income workers
	Affordable housing requirements for new developments	<ul style="list-style-type: none">• Increases affordable housing supply by requiring developers to set aside a portion of new housing units as affordable
	Zoning reform	<ul style="list-style-type: none">• Increases affordable housing supply by increasing the amount, size, and/or type of housing that can be built
Transportation	Dedicated on-demand transit for employment centers	<ul style="list-style-type: none">• Improves responsiveness of transit in low-density areas
	Subsidized trips on rideshare vehicles (Uber, Lyft, taxis, etc.)	<ul style="list-style-type: none">• Leverages TNC platforms for scheduling, booking, and payment
	Funding agreements with employment centers	<ul style="list-style-type: none">• Reduces costs for transit providers• Creates stability in funding sources

Questions?

