



# NEW SKILLS

READY NETWORK



## The Role of Labor Market Analysis in Pathway System Development

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# Agenda



- Introduction and Research Background
- Research Findings
- Takeaways and Opportunities
- Table Discussions
- Group Discussion and Conclusions





# Introduction

# New Skills ready network (NSrn) Theory of Change

## System Changes

- Increase in the number of high-quality, demand-driven 9–16 career pathways in cities and states
- Alignment of pathway programs with local and state labor market needs based on employer labor and the analysis of labor market data
- Creation and expansion of cross-sector partnerships for pathway development and implementation
- Articulation agreements between high school and higher education, including community colleges and 4-year colleges and universities
- Policies enacted at the state and local level that facilitate the creation and scaling of high-quality career pathways
- Elimination of systemic barriers that pose barriers to the participation and success for Black and Latino/a and other underserved student groups

## System Outcomes

Increase in the number of and the equitable representation of students....

- Participating in and completing high-quality, demand-driven career pathways
- Earning high-value, industry-recognized credentials
- Earning aligned post-secondary credits
- Participating in career exposure activities
- Participating in aligned internships or apprenticeships

## Impact

- Reduced economic inequities as young people enter high-skilled, high-wage, and high-demand careers offering economic mobility
- Regional and state economic growth as employers meet demand for talent

# What does labor market information (LMI) mean to you?



I use it on a weekly basis!



I have some knowledge of it and want to learn more.



I know very little about it.



# Research Methods



- RTI reviewed *NSrn* sites' labor market analyses and interviewed representatives from each of the six sites on the role of LMI in pathway development, collecting the following:
  - Analysis of LMI at the start of initiative
  - Criteria for quality career pathways
  - Pathways decisions informed by LMI
  - Ongoing analysis and updates



# Research Findings





# What LMI Sources Do Sites Use?

Sources of Information	Boston	Columbus	Dallas	Denver	Indy	Nashville	Total
State workforce agencies and statewide reports	•			•	•	•	4
Regional chambers, businesses, private industry associations	•	•				•	3
Analytical tools including Lightcast* and Chmura				•	•	•	3
Educational institutions		•	•		•		3
Regional workforce boards' reports		•			•		2
Original analysis of federal data including BLS QCEW/OEWS**	•						1

\*Previously known as EMSI BurningGlass

\*\* Bureau of Labor Statistics' Quarterly Census of Employment and Wages and Occupational Employment and Wage Statistics. Federal data and definitions used across sites in statewide and regional reports.



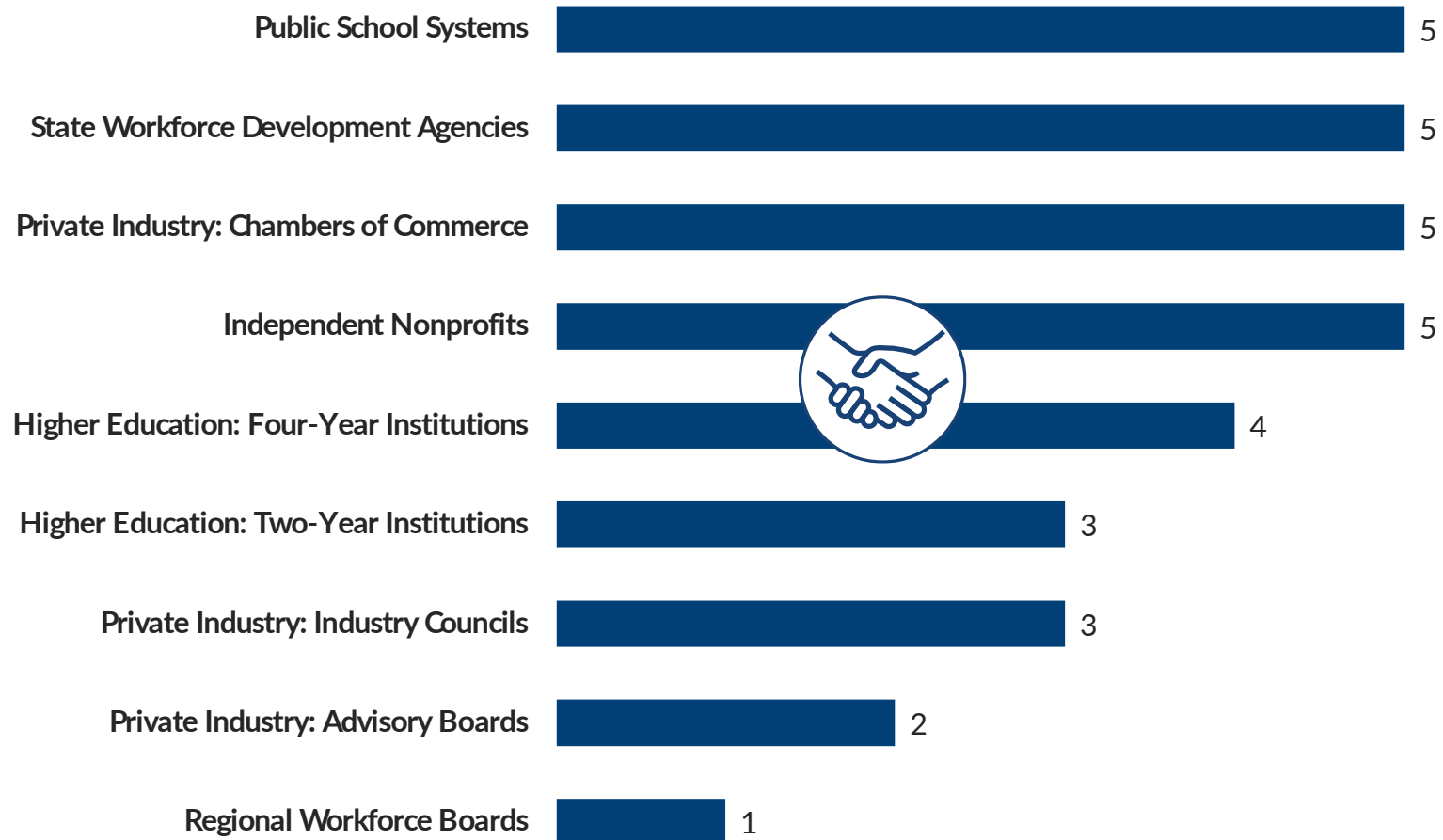
# Who Partnered on the Labor Market Analysis?

Partners		Boston	Columbus	Dallas	Denver	Indy	Nashville	Total
Public school systems   K-12		●	●		●	●	●	5
Higher education institutions	2-year institutions	●		●		●	●	4
	4-year institutions	●	●	●				3
Regional workforce boards				●				1
State workforce development agencies		●			●	●	●	4
Private industry associations	Advisory boards	●		●				2
	Chambers of commerce	●	●	●		●	●	5
	Charitable entities	●	●	●	●	●		5
	Industry councils		●		●	●		3

Source: RTI analysis of NSrn site LMI analyses and interviews with LMI analysts

# Who Partnered on the Labor Market Analysis? (continued)

## Key Partners for Analysis



Source: RTI analysis of NSrn site LMI analyses and interviews with LMI analysts

# What Pathways Did the Labor Market Analyses Identify?



## LMI-based criteria for identifying priority pathways:

- Wages
  - Family-sustaining
- Regional demand
- Growth projections
- Clear direction toward attainable credentials

# NSrn Sites' Priority Pathways

	Healthcare	IT & Cybersecurity	Trades	Manufacturing	Business	Engineering
Boston	●	●				
Columbus	●	●		●		
Dallas	●	●		●		
Denver	●	●			●	●
Indianapolis	●	●	●	●		
Nashville	●	●		●		●
<b>Total</b>	<b>6</b>	<b>6</b>	<b>1</b>	<b>4</b>	<b>1</b>	<b>2</b>

Source: RTI Interviews

# Information Included in Labor Market Definitions

- Metropolitan Statistical Area (MSA) definition
- Standard Occupational Classification (SOC) codes
- Growth projections, wages, and education from the Bureau of Labor Statistics' Occupational Employment and Wage Statistics (OEWS)

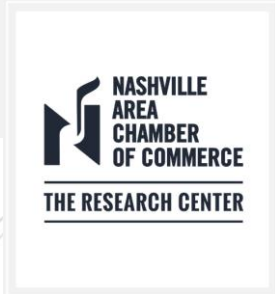
# Example Indicators for Labor Market Analysis: Nashville

**FASTEST  
GROWING  
TOP 10**

**Criteria:**

- Based on Nashville MSA
- Sorted by fastest Annual Growth
- At least 1,000 employed in the market
- Median wage near or above \$50,000

Occupation	Empl	Median Wage	Ann % Growth	Education
Nurse Practitioners	3,603	\$ 105,700	4.9%	Master's
Logisticians	1,403	\$ 67,000	4.1%	Bachelor's
Information Security Analysts	1,002	\$ 89,900	3.9%	Bachelor's
Medical and Health Services Managers	3,556	\$ 105,800	3.5%	Bachelor's
Massage Therapists	1,174	\$ 49,000	3.5%	Post-Secondary
Software Developers	9,544	\$ 108,500	3.0%	Bachelor's
Exercise Trainers and Group Fitness Instructors	1,990	\$ 51,300	3.0%	High School
Health Specialties Teachers, Postsecondary	1,051	\$ 88,200	3.0%	High School
Industrial Machinery Mechanics	2,404	\$ 65,600	2.9%	Doctoral
Financial Managers	7,307	\$ 134,500	2.8%	Bachelor's



Source: Nashville Chamber, Nashville Labor Market Trends and Projections

## Other Aspects of the Labor Market Assessed

<p><b>Industry diversity</b> – When looking at the composition of the industry workforce (e.g., race, ethnicity, gender, age), how does it compare to the profile of students and regional demographics? In trades high-wage jobs often have low representation of women and people of color.</p>	Indianapolis
<p><b>Geographic access</b> – Is there sufficient proximity and/or transit for accessing career and technical education, career opportunities, and jobs?</p>	Dallas, Nashville
<p><b>Risk</b> or needs related to automation, digitization, remote work, and technological change</p>	Columbus
<p><b>Rates of underemployment</b> – Share of workers who hold a 4-year degree in jobs that do not require a 4-year degree</p>	Boston

Source: RTI analysis of NSrn site LMI analyses and interviews with LMI analysts



# Ongoing Activities and Next Steps: Denver Example

## Summary of Common Themes Across Regions



### Access

Program options need to be accessible for *all* learners



### Communication

Focus on cultural competence and trusted people/sources



### Differentiation & Connection

Quality options need differentiation for learners, while WBL needs to be connected to classroom and postsecondary credit needs to be connected to the campus



### Barriers

Transportation, internet, scheduling conflicts, and work attire are very real barriers to address



### Durable Skills

Emphasis on durable skills earned (particularly in WBL) – confidence, financial literacy, time management, communication, and self expression



### Funding & Finances

Additional funding for opportunities, with a need to compensate WBL opportunities



### Support

Need for wraparound supports for learners, particularly around exploration and transitions



### Timeliness & Exploration

Offering opportunities early in High School encourages retention, exploration, and allows learners to fail





# Takeaways and Opportunities



# Proprietary, State, and Regional Data Sources Led to Similar Conclusions



- Health care and IT are consistent pathway priorities across all sites.
- Sites have a good understanding of the criteria for jobs that are high-growth and high-wage, with steady future growth and attainable credentials.
- Sites are leveraging connections with government and regional private industry groups, and noted improved communication with education partners.

# Cross-Site Challenges with Using Labor Market Analysis in Pathway Development



- Defining stackable credentials and career trajectories
- Lack of specificity about credentials and certifications for specific careers
- Difficult decisions related to high-demand, low-wage jobs

# Dallas College's Unique Approach to Labor Market Analysis Focused on Student Supply and Barriers to Entry

Dallas College developed a **community-aligned view** to LMI, focused on the supply of students, enrollment and graduation rates, and identification of the socioeconomic barriers in the community:



- Commuting, campus location, and access to transit
- Childcare
- Access to health care
- Access to healthy food and grocery stores

# Dallas College (continued)

## PRIORITY 1 Developing a Community- Aligned View of LMI



As the Dallas, Texas, team began the work of addressing the four priority areas of the grant, an initial action was to develop a community-aligned view of LMI. With the aligned data system, Dallas will be able to work collectively on the priority of strengthening the alignment and rigor of career pathways across the partner agencies and institutions in a more streamlined fashion.

Data became an early priority for the Dallas, Texas, team as they became aware of the misalignment among different LMI sources that each of the institutions and partners were using across the region and even within Dallas ISD. As a first step, the team convened all major institutions involved in the work to level set on the data sources each institution was using. The group reached consensus to move forward with one tool and data source for the shared LMI system, which all organizations involved agreed to use moving forward. From there, the partners continued to engage around what their unified LMI system would need, such as identifying common questions regarding the factors of an entry-level job.

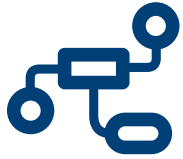
The team is now working with area employers to validate the labor market data to ensure that the list of top high-wage, high-demand industries and jobs is aligned with the actual need within the community. From there, the larger focus will be on ensuring that all career pathways at secondary and postsecondary institutions, including new Career Institutes being launched by Dallas ISD, are aligned with those high-wage, high-demand jobs.

Note:  
Dallas ISD = Dallas Independent Schools District

Source: 2020–2021 New Skills Snapshot: Dallas



# Unique Economic Circumstances Add a Layer of Challenge

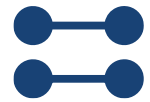


- The “**Colorado Paradox**” – Colorado is one of the most highly educated states in the country, but graduation rates from Colorado’s high schools are below national averages.
- **Boston**’s public universities and community colleges can be overlooked in a city with top national and global research universities.
  - Boston has a high rate of underemployment, i.e., 4-year college graduates working in fields that do not require a 4-year degree.
- **Columbus** is growing quickly, while many parts of rural Ohio are aging and losing population.

Source: RTI analysis of *NSrn* site LMI analyses and interviews with LMI analysts



# Earnings Potential, Projected Growth, and Employer Demand Do Not Always Align



Sites are grappling with the challenge of high-demand, low-wage professions and how to address them

- Is there a career trajectory for entry-level health care jobs, such as certified nursing assistant, that can lead to high-wage work in the same field?
- Hospitality, restaurants, and cosmetology have high demand for workers but no clear trajectory to a family-sustaining wage.

# Strengths and limitations of LMI analysis in pathways work

Strengths	Limitations
<p>Opportunities are clearly identified and definitions are relatively consistent across sites</p> <p>Criteria for quality jobs is consistent and focused on future growth, with family-sustaining wages and attainable education credentials</p> <p>Levels of collaboration and sharing are increasing among stakeholders</p>	<p>Staff capacity and institutional mechanisms for sharing and translating LMI data into pathways decisions is under development</p> <p>LMI remains high-level</p> <p>Many sites have not updated data since the initial grant application</p>



# NSrn Sites' Challenges with LMI Reflect National Trends

A 2023 study on the use of LMI in higher education found:

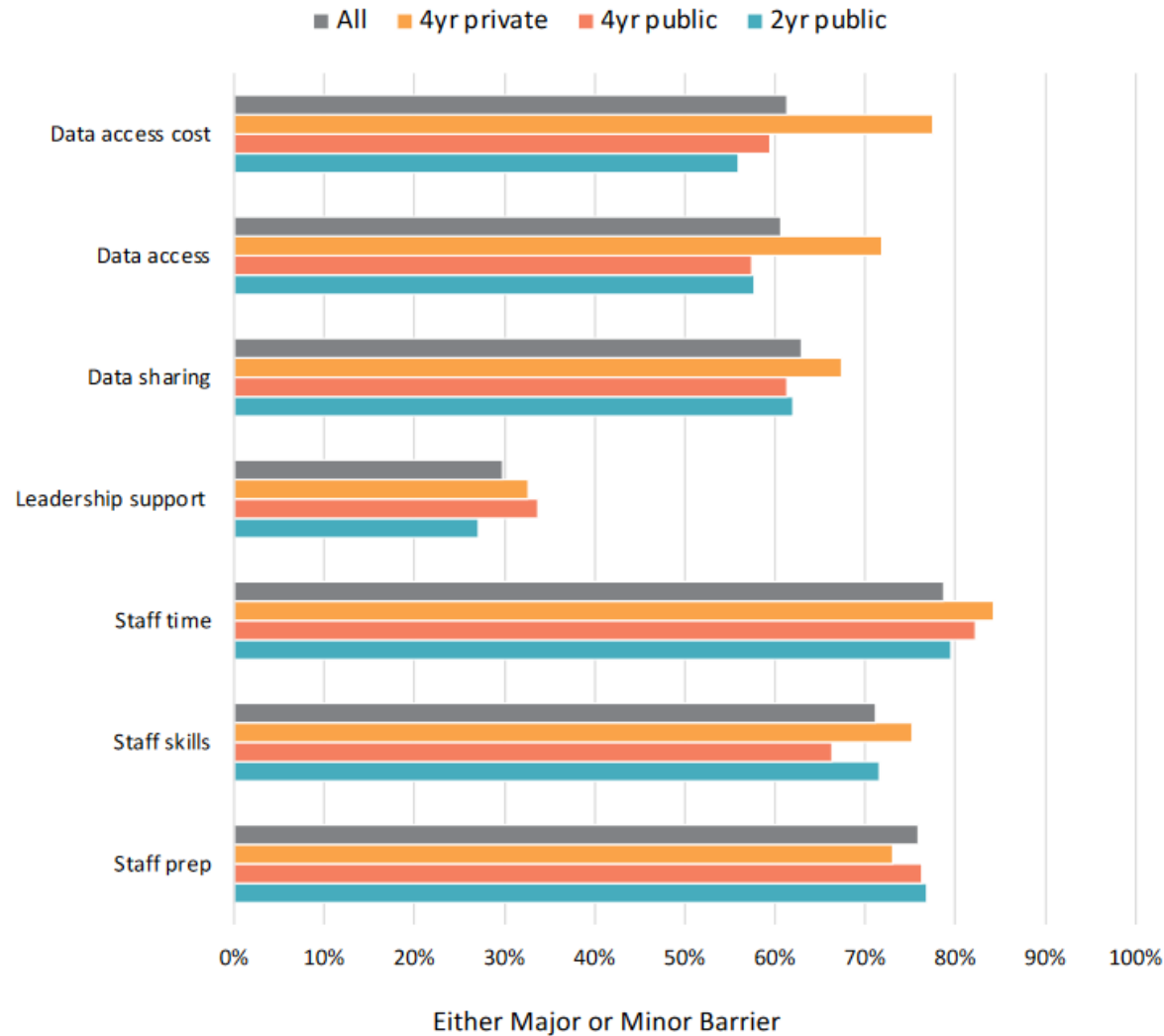
- Around 90% of institutions use a mix of federal, state, and/or regional labor data
- Data is generally considered high quality, but barriers include internal capacity and sharing findings within institutions
- Perkins V new requirements drive local needs assessments, including LMI

Source: Van Noy et al. (2023). *How colleges and universities are using labor market information: A national snapshot*. Education and Employment Research Center, Rutgers University.

<https://smlr.rutgers.edu/sites/default/files/Documents/Centers/EERC/How%20Colleges%20and%20Universities%20are%20Using%20LMI%20Final%20-%20EERC%20-%20July%202023.pdf>

# NSrn Sites' Experiences with LMI Reflect National Trends

Barriers to Expanding Institutional LMA Usage as a Percentage of Respondents



Source: Van Noy et al. (2023). *How colleges and universities are using labor market information: A national snapshot*. Education and Employment Research Center, Rutgers University.

<https://smlr.rutgers.edu/sites/default/files/Documents/Centers/ERC/How%20Colleges%20and%20Universities%20are%20Using%20LMI%20Final%20-%20EERC%20-%20July%202023.pdf>

# Recommendations for Strengthening Use of LMI



- Explore data and analyses that will support the identification of priority occupations and skills within employment sectors.
- Consider student interests and needs.
- Clarify use of stackable credentials and pathways for careers that will lead to a family-sustaining wage job in the future.
- Share findings!



# Table Discussions



## With your table, please reflect on the following questions:

1. What unexpected or surprising information have you learned from analyzing or learning about LMI for your site?
2. What changes did you make to your pathway systems based on LMI?
3. What impact, if any, has LMI had on your team in reaching your equity goals?
4. What would you like to know or have more readily available to make better decisions using LMI?







# Group Discussion and Conclusions



Thank you!

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