Building a High-quality Career Readiness Data Ecosystem

Advance CTE
November 5, 2021

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About Advance CTE

- Non-profit established in 1920 to represent the state and territory heads of secondary, postsecondary and adult career technical education (CTE) across the nation

- Through leadership, advocacy and partnerships, support an innovative, high-quality CTE system

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Objectives

- Discuss common **state-level data quality challenges**

- Understand the **six core elements** of a high-quality career readiness data ecosystem

- **Access tools** to evaluate and improve the quality of career readiness data

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Career Readiness Data Ecosystem

*The broad universe of **policies**, **technology**, **people** and **processes** that facilitate the collection, analysis, reporting and use of data to support learners along their career pathways*

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Ice Breaker

Why is high-quality data essential to an effective CTE and career preparation ecosystem?

Add your ideas to the chat or come off mute to share your thoughts

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Value of Data in CTE

Equity

Public transparency

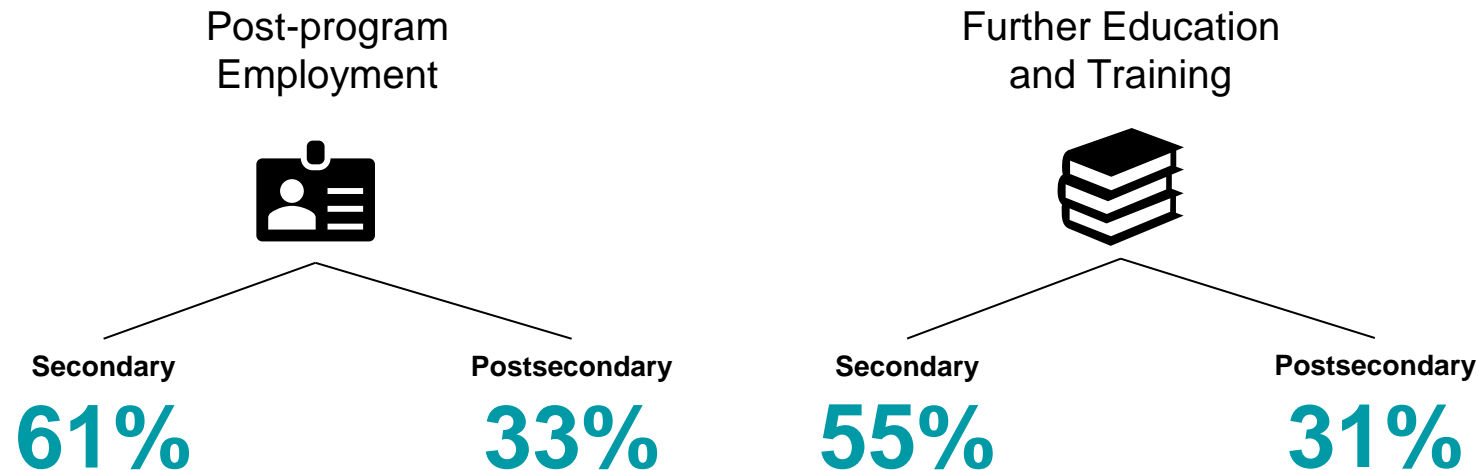Research and program evaluation

Continuous improvement

Accountability

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CTE Data Challenges

THE STATE OF
CAREER TECHNICAL
EDUCATION:
IMPROVING DATA QUALITY
& EFFECTIVENESS

Only **45 percent** of State CTE Directors say their CTE data systems **provide the information** they need at both the secondary and postsecondary levels

Challenge 1: States Are Relying on Self-Reported Measures

States using survey data to measure learner outcomes

Post-program
Employment

Further Education
and Training

Secondary
61%

Postsecondary
33%

Secondary
55%

Postsecondary
31%

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Challenge 2: Data Definitions Are Not Always Clear and Consistent

Secondary Industry-Recognized Credentials

96%
80%
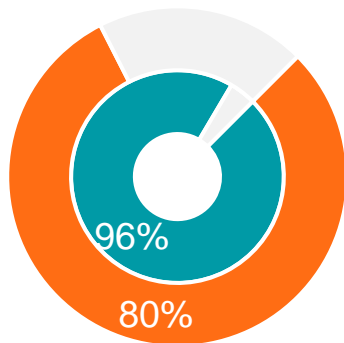
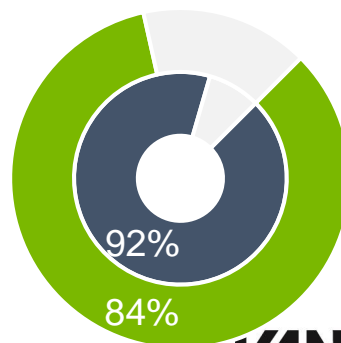### Postsecondary Industry-Recognized Credentials

73%
49%
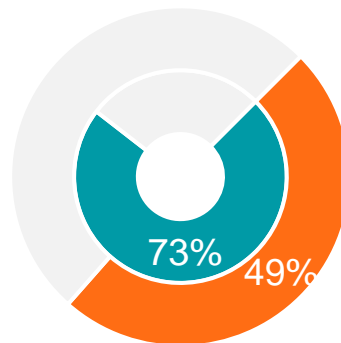
■ Have a state-identified list
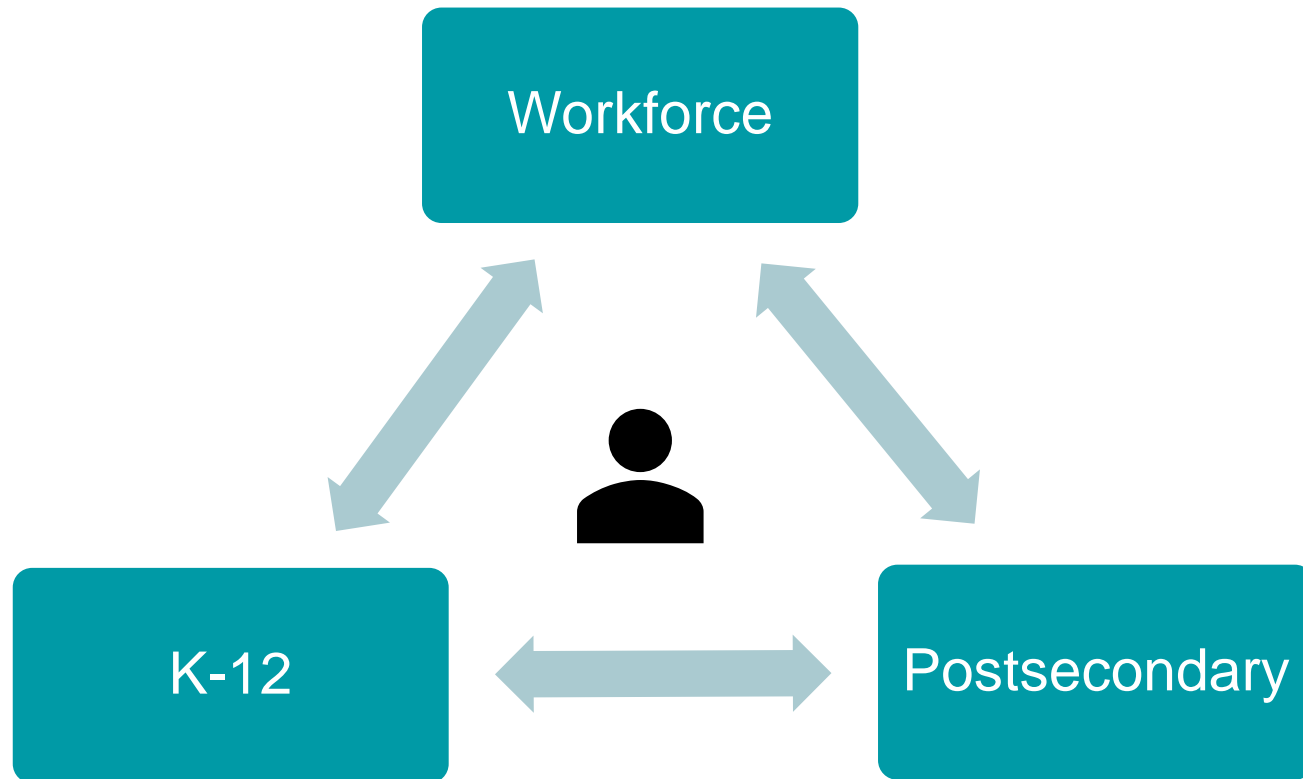
■ Collecting data

Secondary Work-based Learning

88%
63%
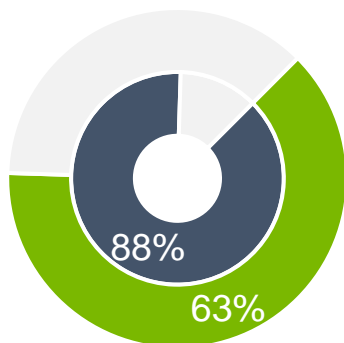
Dual/ Concurrent Enrollment

92%
84%

■ Have statewide definitions

■ Collecting data

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Challenge 3: Data Systems Are Not Sufficiently Aligned Across Sectors

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Degree of Alignment between CTE Data Systems and…

Secondary data systems	24% / 25% / 20% / 18% / 14%	
Postsecondary data systems	6% / 22% / 27% / 18% / 27%	
Workforce data systems	2% / 16% / 24% / 22% / 37%	

0% 25% 50% 75% 100%

■ Fully aligned ■ Mostly aligned ■ Somewhat aligned ■ Minimally aligned ■ Not at all aligned

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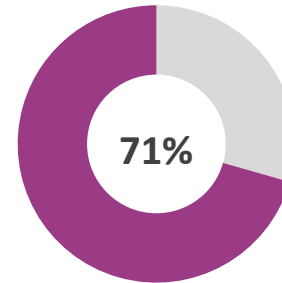State Leaders Connecting Learning to Work
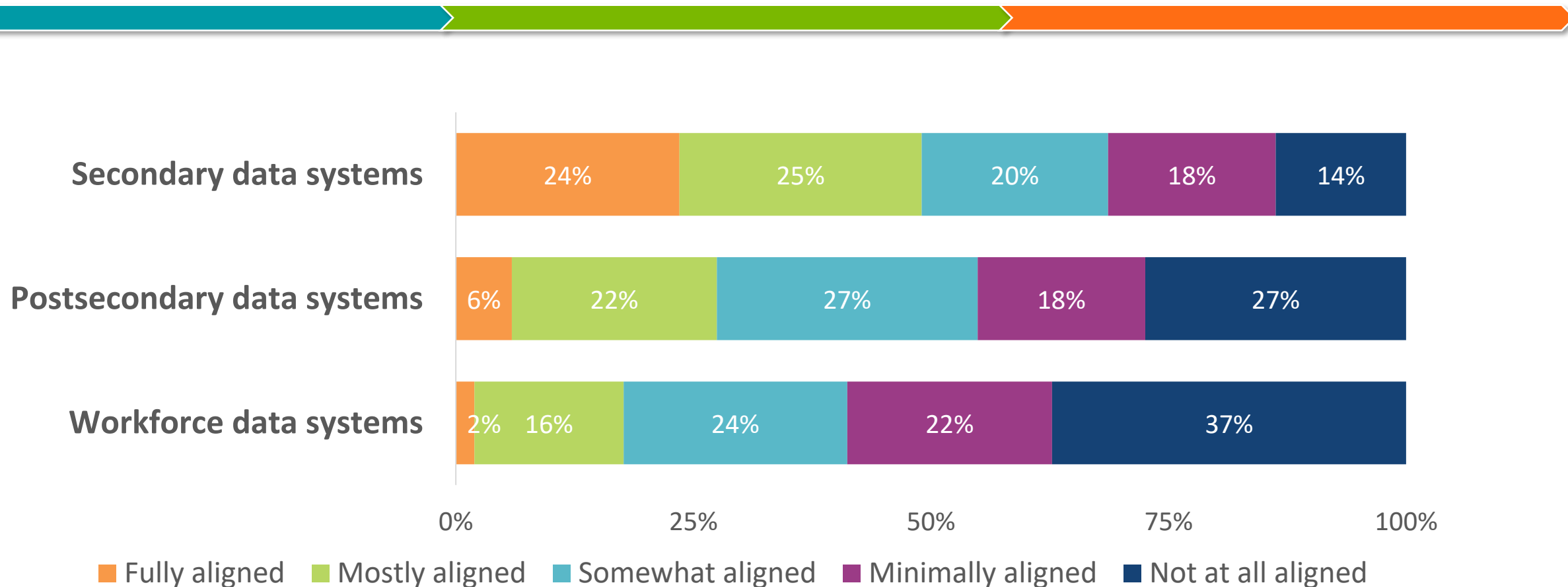
Barriers to Cross-Sector Alignment

Separate data systems or inconsistent definitions

88%
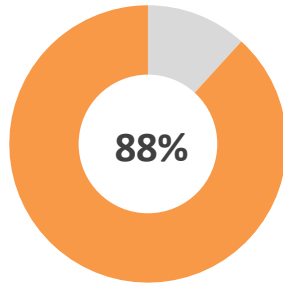
Legal or privacy barriers

71%

Lack of capacity

41%
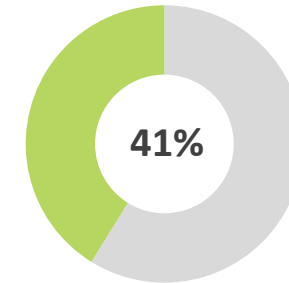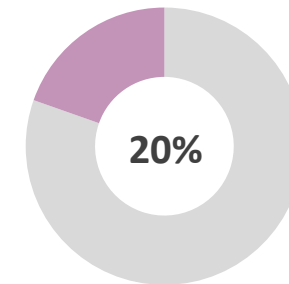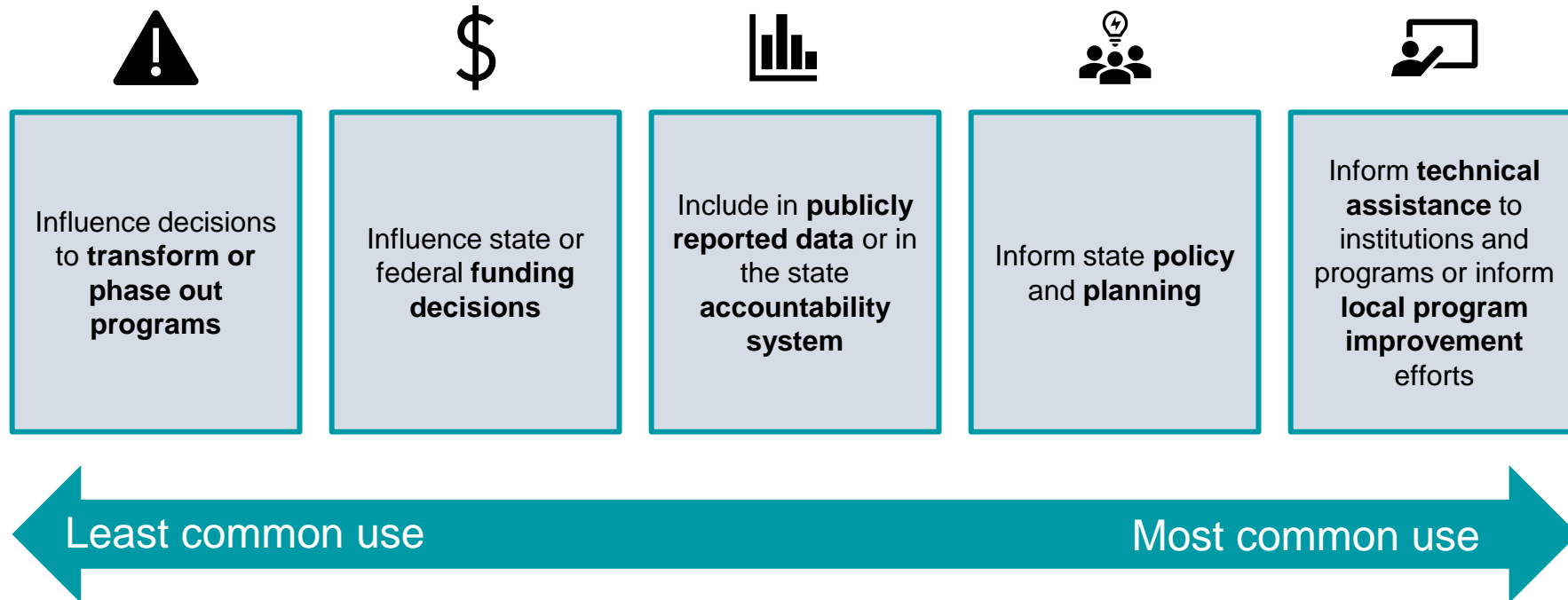
Political barriers

35%
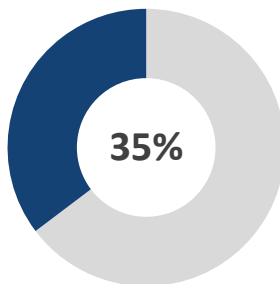
Cost of collecting or matching data

33%
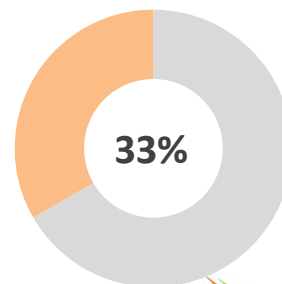
Lack of will from other state agencies

20%

Challenge 4: States Are Hesitant to Use Their Data for High-stakes Decisionmaking

⚠️

Influence decisions to **transform or phase out programs**

$

Influence state or federal **funding decisions**

Include in **publicly reported data** or in the state **accountability system**

Inform state **policy** and **planning**

Inform **technical assistance** to institutions and programs or inform **local program improvement** efforts

← Least common use   Most common use →

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CTE Data Quality Workgroup

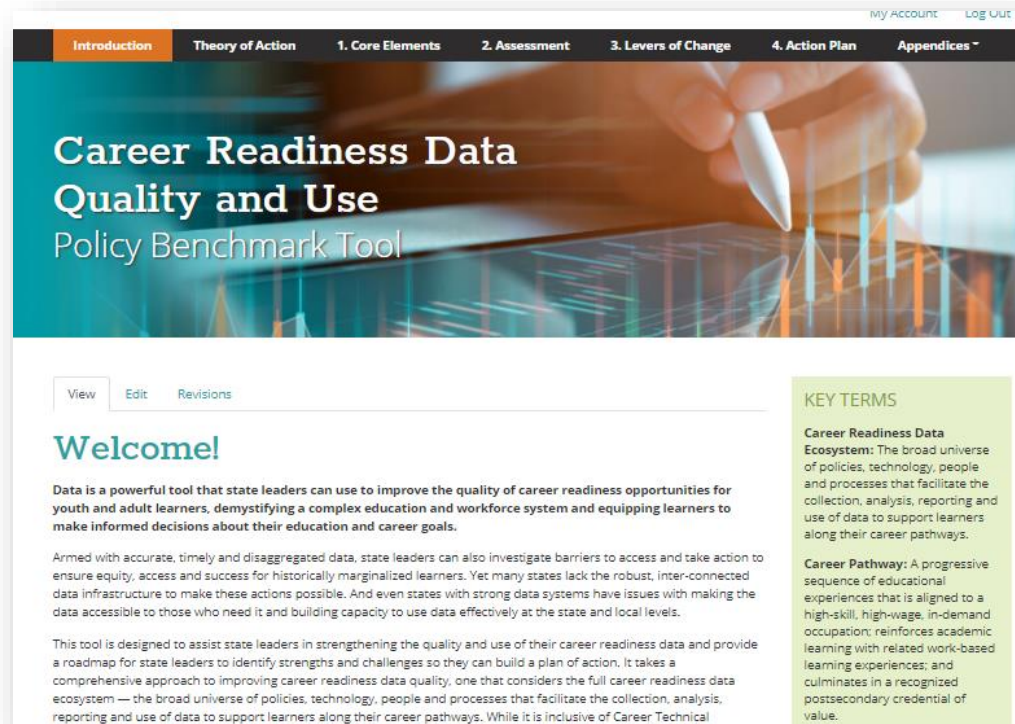| Research	Ideation	Refinement	Pilot Testing	Launch
Feb – April 2020	**April 2020**	**April – Sept 2020**	**Oct – Nov 2020**	**Feb 2021**
• Key informant interviews and landscape analysis	• Workgroup kickoff and initial brainstorming meeting • Workgroup members included 26 participants from 10 states and nine national organizations	• Review and refinement from workgroup members and project partners	• Pilot testing with five states	• Developed policy benchmark tool microsite • Launched in February along with case studies and resource repository

Policy Benchmark Tool Microsite

- Roadmap
- Needs assessment
- Action planning tool
- Case studies
- Resource repository

https://dataquality.careertech.org/

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Core Elements of a High-Quality Career Readiness Data Ecosystem

1. Data is collected consistently and accurately

2. Processes and protocols are in place to ensure effective data governance

3. Data systems, policies and practices are fully aligned across agencies and learner levels

4. Information is relevant, timely and disaggregated

5. Practitioners and the public are equipped to understand and leverage data

6. Information is used effectively to promote quality and equity in career pathways

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Data is collected consistently and accurately

✓ Data is reliable and collected consistently around the state, across different career pathway programs and across institutions.

✓ Processes and protocols are in place to validate career readiness data.

✓ Stakeholders are aware of what the data represents, how it will be used and its limitations.

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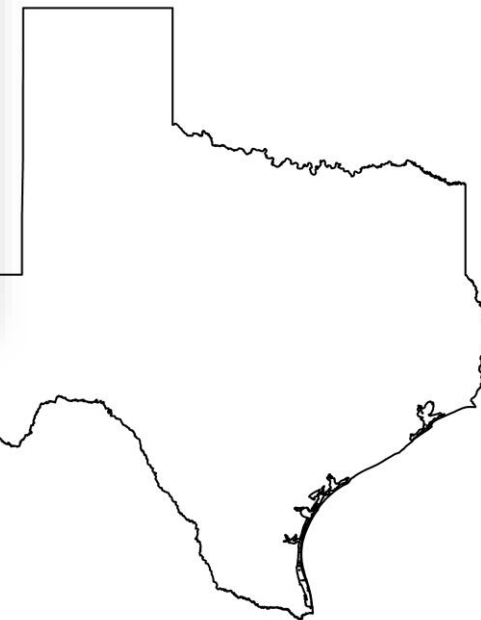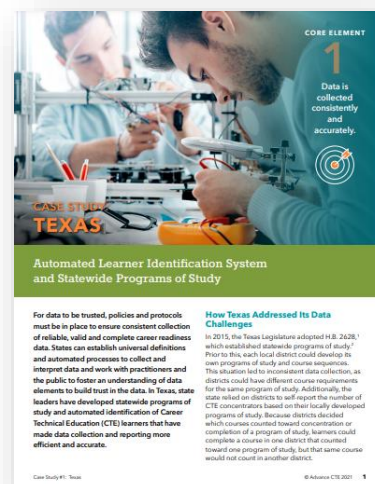
# Processes and protocols are in place to ensure effective data governance

- ✓ Roles and responsibilities for collecting, validating and reporting data are clearly laid out in statute and/or policy.

- ✓ Decisions related to the collection and use of career readiness data are coordinated across agencies and responsive to stakeholder needs.

- ✓ State agencies are sufficiently staffed and funded, and structures are in place to withstand personnel and political transitions.

- ✓ Measures are in place to protect the privacy of learner records.

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Data systems, policies and practices are fully aligned across agencies and learner levels

- ✓ Learner-level records are reliably linked across agencies and among states, as appropriate.

- ✓ The collection and reporting of career readiness data are coordinated and, to the extent possible, aligned across programs, agencies and learner levels.

- ✓ State agencies use common indicators and business rules for measuring career readiness and align their goals and performance targets.
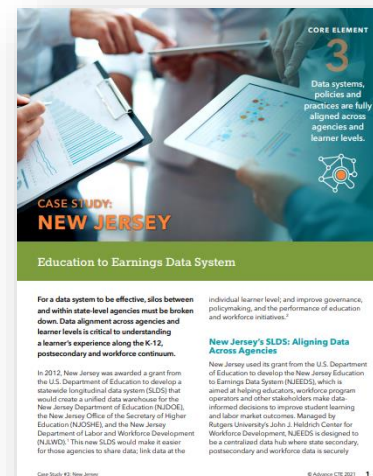
Information is relevant, timely and disaggregated

✓ All information is contextualized to provide a clear understanding of the career readiness system.

✓ Reports and dashboards are differentiated by user depending on their need and understanding of the data.

✓ Information is made available in a timely manner.

✓ Data is disaggregated by population, institution and career pathway and available to relevant users.

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# Practitioners and the public are equipped to understand and leverage data

✓ Public reports are accessible and easy to understand.

✓ Professional development and technical assistance are provided to practitioners to build data literacy and help them leverage the data.

✓ A statewide career readiness communications strategy is in place that leverages career readiness indicators to tell a story of impact.

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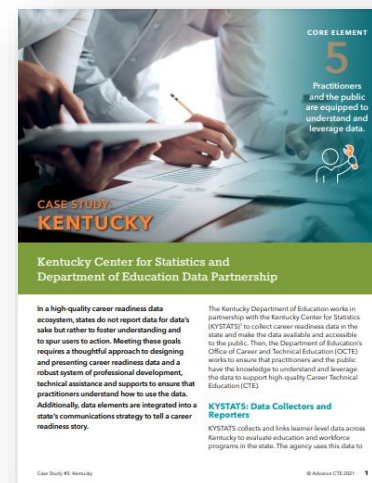
# Information is used effectively to promote quality and equity in career pathways

✓ Career pathway approval and renewal processes are data driven.

✓ State- and local-level decisionmakers regularly reflect and act upon data to inform policy and improve equity, access and quality.

✓ State and local leaders regularly identify and respond to opportunity gaps by race/ethnicity, gender and special population status to ensure equitable access to and success in career pathways.

✓ Local practitioners have access to real-time data that they use to target interventions.
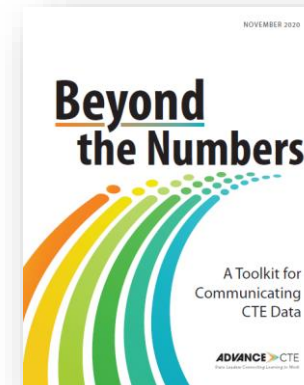
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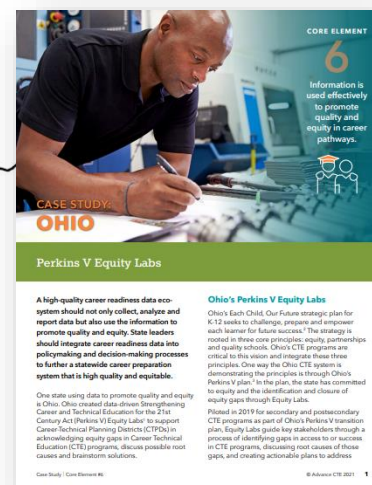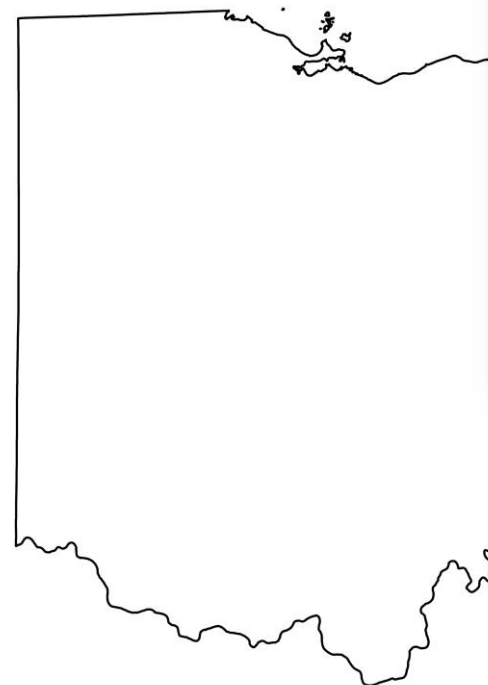
State Levers of Change

Resources
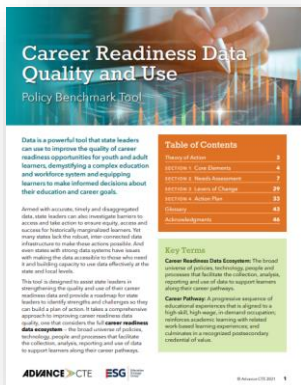
Career Readiness Data Quality and Use Policy Benchmark Tool

https://dataquality.careertech.org/

The State of CTE: Improving Data Quality and Effectiveness

https://careertech.org/resource/state-cte-improving-data-quality-effectiveness

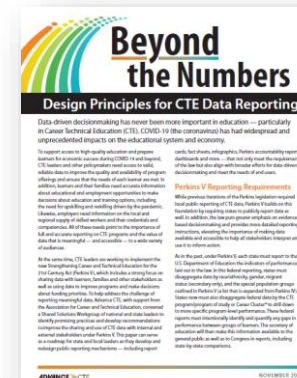**Beyond the Numbers: A Toolkit for Communicating CTE Data**

https://careertech.org/resource/beyond-numbers-toolkit-communicating-CTE-data

Career Readiness Metrics Framework: A Continuum of Actionable Measures of Career Development and Readiness

https://careertech.org/resource/career-readiness-metrics-framework

Beyond the Numbers: Design Principles for CTE Data Reporting

https://careertech.org/resource/beyond-numbers-design-principles-CTE-data-reporting

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Questions?

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Thank You

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