

CTE ON THE FRONTIER: RURAL STRATEGY GUIDE



CTE ON THE FRONTIER: RURAL CTE STRATEGY GUIDE

To help states meet the rural demand for high-quality Career Technical Education (CTE), Advance CTE — in partnership with the Council of Chief State School Officers and Education Strategy Group, through the New Skills for Youth (NSFY) initiative — launched the *CTE on the Frontier* initiative. Through interviews with state CTE leaders at both the secondary and postsecondary levels and with national partners, Advance CTE identified promising strategies to help states expand access to high-quality CTE pathways in rural areas. The initiative explores common challenges faced in rural areas across the nation, specifically:

- [Ensuring that all CTE pathways are of the highest quality;](#)
- [Connecting rural learners to the world of work;](#)
- [Providing diverse pathway options;](#) and
- [Strengthening the rural CTE teacher pipeline.](#)

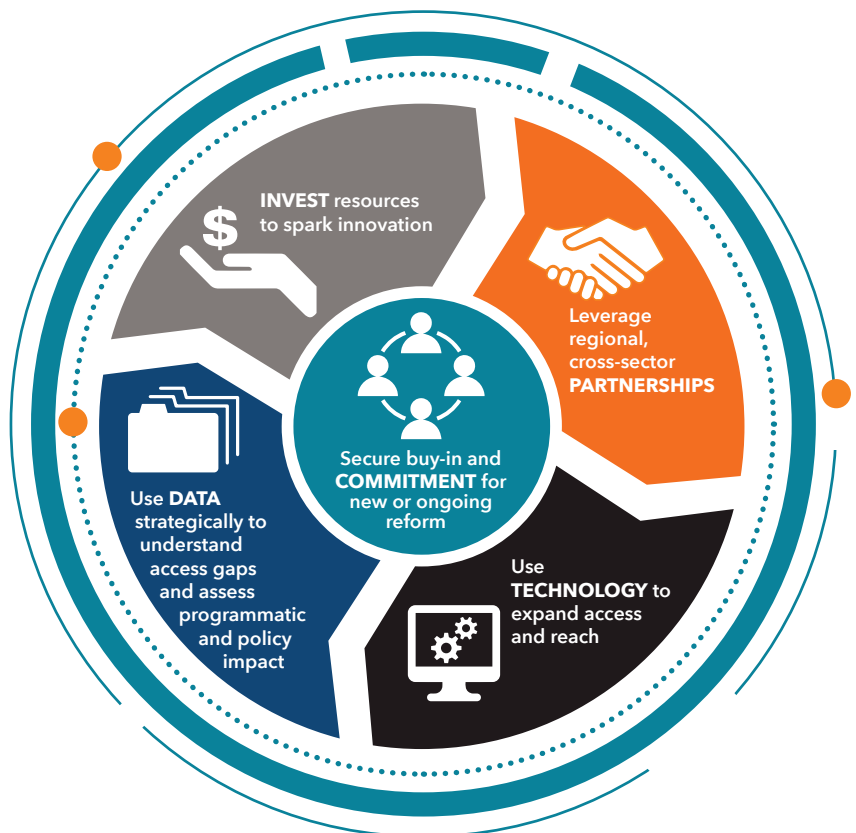
States are encouraged to review the four briefs to gain inspiration from what other states and communities have done to tackle this issue — and to learn from their successes and challenges along the way.

Throughout the research, five cross-cutting strategies emerged as core to any effort to expand CTE pathways in rural communities:

- Securing buy-in and **commitment** for new or ongoing reform — and its place within the statewide vision for CTE and career readiness — at the state and local levels;
- Using **data** strategically to understand access gaps and assess programmatic and policy impact;
- Leveraging regional, cross-sector **partnerships**;
- Using **technology** to expand access and reach; and
- **Investing** resources to spark innovation.

What follows is a series of questions for state leaders to use as they reflect on current efforts to expand access to high-quality CTE and career-focused pathways and experiences in rural communities and to identify future opportunities and actions. While many of the questions may be difficult to answer at this time, those unanswerable questions can provide a lot of direction for a state's next steps, including data to gather and partners to engage.

As state leaders work through these questions, it is critical to keep in mind that tackling this challenge will take a comprehensive, multi-faceted and cross-sector strategy. While activities and programs can make a difference, true reform at scale can happen only with intentionality and cohesion.



HOW TO USE THIS GUIDE: There are many approaches states can take to using this guide to assess and strengthen their rural CTE strategies, but to help state leaders make the most of this guide, here is a companion facilitation guide: <https://careertech.org/resource/cte-frontier-rural-strategy-guide>



SECURE BUY-IN AND COMMITMENT TO REFORM AT THE STATE AND LOCAL LEVELS

Change is never easy and requires not only a strong vision of where you want to go but also buy-in and support from the stakeholders who will actually be responsible for implementing the change. Building cross-sector will and commitment to reform is a critical first step to raising the quality of CTE pathways in any community, including rural areas.

Reflect

- Does your state have a statewide vision or strategic plan for CTE? How does expanding access to high-quality CTE pathways in rural communities align with or fit into this vision?
- On average, how do you evaluate the quality of your CTE pathways at the secondary and postsecondary levels in rural communities? What metrics are you using? Would other state leaders agree with your assessment? Local leaders? Business and industry? (See [this tool for core elements of quality programs of study](#).)
- On average, how do you evaluate the alignment of your CTE pathways in rural communities with labor market demand at the state and regional levels? Would other state leaders agree with your assessment? Local leaders? Business and industry?
- On average, to what extent do students have access to high-quality CTE pathways and work-based learning at the secondary and postsecondary levels in rural communities? What metrics are you using? Would other state leaders agree with your assessment? Local leaders? Business and industry?
- To what degree is expanding access to high-quality CTE pathways and experiences a priority in your state? Among state leaders? Among local practitioners? Among business and industry? Are there dedicated funds or programs focused on this outcome, including but not limited to federal Carl D. Perkins Career and Technical Education Act funds?
- Who are the key stakeholders who can affect and/or are affected by rural CTE (e.g., policymakers, education leaders and practitioners, employers, parents, students, etc.)? Is there an openness or understanding among those key stakeholders that rural CTE pathways may need to change to meet the needs of learners and the economy?



SECURE BUY-IN AND COMMITMENT TO REFORM AT THE STATE AND LOCAL LEVELS *continued*

Look Ahead

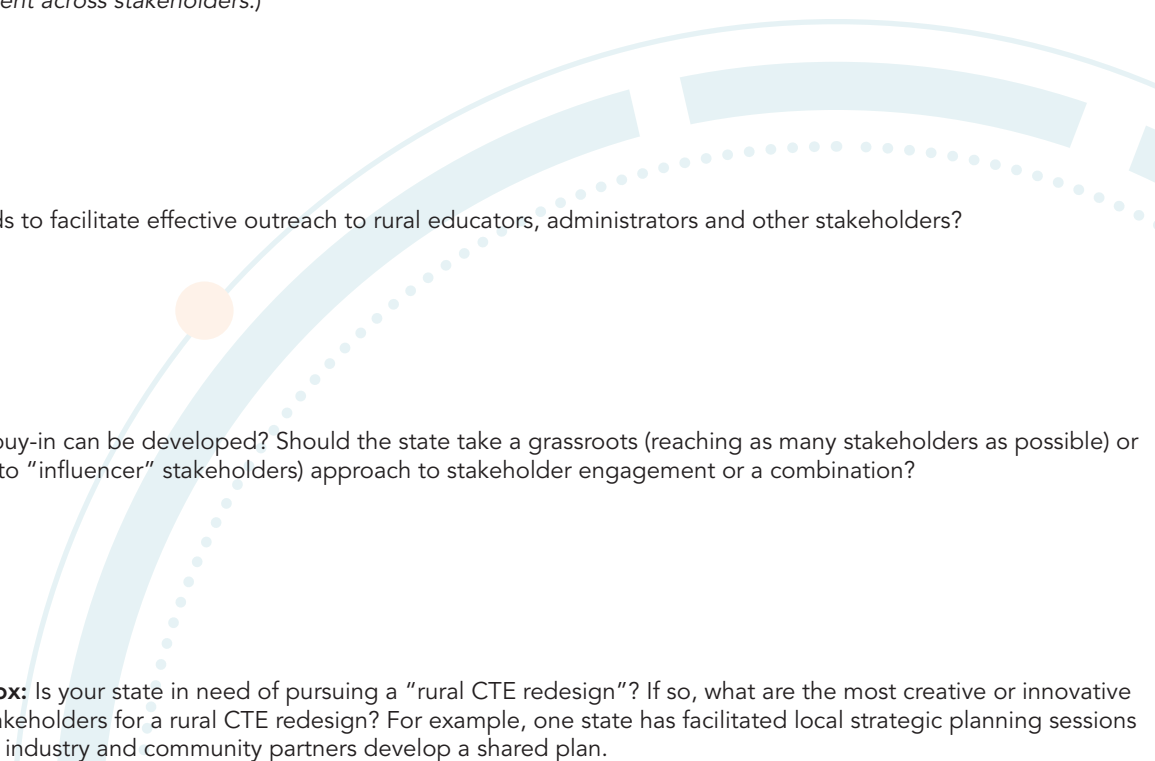
- What state-level partners will support your rural strategy (e.g., other agencies, industry associations, etc.)?

 - Who are your CTE champions within and for the rural communities? Who or what are the biggest barriers to expanding access to quality CTE pathways in rural areas?

 - What communications and outreach are needed to engage the various stakeholders, such as local administrators, educators, community members and employers in rural communities? And should the communications and outreach come from the state, institutions, districts or other ambassadors? (See [this stakeholder engagement tool](#) for steps to building an engagement plan and differentiating engagement across stakeholders.)

 - Are there adequate funds to facilitate effective outreach to rural educators, administrators and other stakeholders?

 - What opportunities for buy-in can be developed? Should the state take a grassroots (reaching as many stakeholders as possible) or grasstops (reaching out to “influencer” stakeholders) approach to stakeholder engagement or a combination?

 - **Thinking outside the box:** Is your state in need of pursuing a “rural CTE redesign”? If so, what are the most creative or innovative ways to engage local stakeholders for a rural CTE redesign? For example, one state has facilitated local strategic planning sessions during which education, industry and community partners develop a shared plan.
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USE DATA STRATEGICALLY TO UNDERSTAND ACCESS GAPS AND ASSESS PROGRAMMATIC AND POLICY IMPACT

Before you can design or execute your strategy, you need to understand the scope of the challenge, the extent of the access gaps, and the degree of quality and relevancy in your CTE pathways. You also need to identify what success looks like — and develop the data collection and feedback loops that will tell you when you are making progress or need to course correct.

Reflect

- What labor market information (LMI) do you have and need around high-demand, high-wage and/or high-skill sectors? What are the most strategic ways to share regional LMI with local districts and institutions so they can use it as well?
- What learner-level data do you have and need with respect to participation and success in CTE pathways and work-based learning? Are there any agencies you can partner with to strengthen your data?
- What limitations do confidentiality and small data sets in rural districts present, and what are options for work-arounds?
- Does your teacher workforce align with your high-demand sectors and economic outlook?
- Are there any populations, for example tribal students or students with disabilities, who are particularly underserved in terms of quality CTE pathways and work-based learning? How are data used to monitor their access to and success in CTE pathways and work-based learning?
- How are you using data to evaluate the reach and impact of any efforts to expand access to high-quality CTE pathways or monitor the alignment between programs and LMI?



USE DATA STRATEGICALLY TO UNDERSTAND ACCESS GAPS AND ASSESS PROGRAMMATIC AND POLICY IMPACT *continued*

Look Ahead

- How is the state using LMI to prioritize CTE pathways at the regional level? How is the state using student enrollment data to reconcile participation vs. workforce demand?
 - Do local districts and institutions have access to LMI to make decisions about programs? Do they know how to use it? How does or can the state support local use of LMI through professional development or other resources? What other factors are districts and institutions using to make program decisions? Are those factors relevant?
 - Do learners have access to information about the education and career opportunities in their community? How are they being supported to make informed decisions about their career pathways?
 - What mechanisms can or should be put in place to evaluate the reach and impact of efforts to expand access to high-quality CTE pathways? What metrics do or will you use to measure success?
 - **Thinking outside the box:** Is there a data source outside of your state CTE office that could be used to inform program design? For example, one state is using state data on commuting patterns to examine which labor markets students from rural districts are traveling to for work to get a picture of the fuller range of career opportunities that may be available beyond the boundaries of a particular community.
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LEVERAGE REGIONAL, CROSS-SECTOR PARTNERSHIPS

Partnerships are key to any strategy, especially in communities with fewer resources where strategic partnerships can maximize limited capacity. Any state-supported strategy to increase CTE pathways in rural communities must promote and advance regional partnerships — whether through resources, policy, technical assistance, or a combination of the three.


Reflect

- What *structures* (e.g., regional consortia, co-located campuses, open-enrollment districts, area technical centers, etc.) are currently in place to foster regional collaboration among and across K-12, postsecondary and workforce development/industry?
- What cross-sector *partnerships* (e.g., industry, secondary-postsecondary, economic development, community-based organizations, etc.) are currently in place to foster regional collaboration among and across K-12, postsecondary and workforce development/industry?
- To what extent do these structures/partnerships facilitate economies of scale in terms of:
 - Access to in-demand, high-quality CTE courses and pathways?
 - Human capital (e.g., qualified instructors, industry partners)?
 - Facilities or equipment?
 - Seamless secondary-postsecondary pathways for learners (e.g., dual/concurrent credit)?
 - Other?
- In which communities are cross-sector structures or partnerships leading to successful outcomes, such as participation in CTE pathways and work-based learning? How can or does the state elevate those communities finding success as examples for others?



LEVERAGE REGIONAL, CROSS-SECTOR PARTNERSHIPS *continued*

Look Ahead

- What is the state's role in supporting or incentivizing cross-sector structures or partnerships? What existing policies or funding streams support such efforts?
 - What regions would most benefit from additional collaboration? How can the state support such collaboration through technical assistance, resources or other supports?
 - How is the state supporting the engagement and recruitment of state or local industry partners, such as workforce investment boards, economic development regions or local chambers?
 - What partners or networks (e.g., trade associations, health care providers, etc.) are already in place in rural areas but are not currently being leveraged?
 - How are your state agencies/CTE departments structured to facilitate regional partnerships (e.g., staff are assigned to regions or assigned partnerships with regional employers)?
 - **Thinking outside the box:** How would you design truly cross-sector, regional CTE pathways in an ideal world?
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USE TECHNOLOGY TO EXPAND ACCESS AND REACH

Given the sheer distance between many schools, institutions and places of business, technology is increasingly a must-have in connecting learners with a diversity of experiences and coursework. But any investment in technology — whether hardware, software or high-speed internet — needs to be made with intentionality and must still lead to quality experiences for learners.

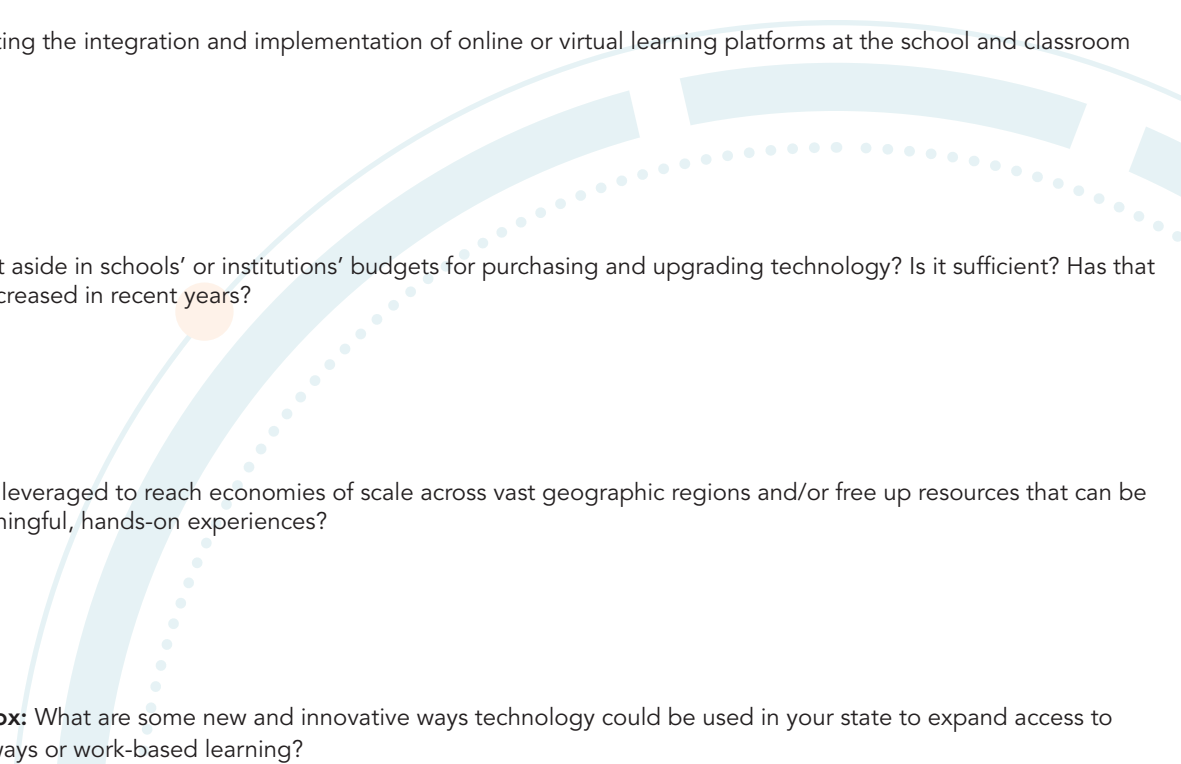
Reflect

- Has your state done an audit of its broadband access and/or of the technology necessary for online or virtual learning opportunities? What were the findings? How was this information shared, and what actions were taken?
- Does your state invest in or support broadband or other technologies at the secondary or postsecondary level? Do your CTE programs have equal access to these opportunities statewide?
- What kind of online or virtual learning opportunities (e.g., blended learning, virtual professional networks, real-time streaming of classrooms, etc.) are made available or are allowed in local schools and institutions?
 - Are these opportunities more likely or less likely to be used in rural communities?
 - Are there any data on the quality and outcomes of these opportunities?
- What are the most impressive examples of how technology is opening access in your state to CTE courses, CTE pathways or work-based learning?
- For those communities with limited broadband access, what interim strategies are being deployed to mitigate this gap?



USE TECHNOLOGY TO EXPAND ACCESS AND REACH *continued*

Look Ahead

- Based on current gaps in CTE course, CTE pathway or work-based learning offerings, how can online or virtual learning opportunities best supplement career pathways? Or where can those opportunities be directed to address the most critical gaps?
 - What are the limitations of online or virtual learning opportunities when considering the hands-on nature of CTE?
 - How do you evaluate the quality and impact of online or virtual learning opportunities, whether nationally, state or locally developed?
 - How is the state supporting the integration and implementation of online or virtual learning platforms at the school and classroom levels?
 - How much funding is set aside in schools' or institutions' budgets for purchasing and upgrading technology? Is it sufficient? Has that amount increased or decreased in recent years?
 - How can technology be leveraged to reach economies of scale across vast geographic regions and/or free up resources that can be redirected to more meaningful, hands-on experiences?
 - **Thinking outside the box:** What are some new and innovative ways technology could be used in your state to expand access to CTE courses, CTE pathways or work-based learning?
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INVEST RESOURCES TO SPARK INNOVATION

While money is not the only component of your strategy, ensuring that all learners have access to high-quality CTE pathways will inevitably require some resources, financial or otherwise. Before putting new resources on the table, however, you should explore existing assets and funding streams and consider how those can be best leveraged by and for rural communities.

Reflect

- What state and federal funding opportunities are available to support rural communities? (See this [cheat sheet](#) for federal funding opportunities with state examples.)
- How has the state invested state or federal funds to incubate innovation in rural communities?
- How are you measuring the impact and reach of these investments? How are you scaling successes? What are three success stories resulting from such investments?
- What federal or state funds are available to support CTE pathways or work-based learning that are not being used?
- What policies or supports are in place to recruit or prepare industry experts to transition into the classroom?
- What policies or supports are in place to re-train or re-certify existing teachers so they can transition into high-demand, high-quality CTE pathways?



INVEST RESOURCES TO SPARK INNOVATION *continued*

Look Ahead

- How can or will you level the playing field to help rural districts and institutions apply for competitive funds?
 - Is there any untapped infrastructure that can support expanded CTE pathways (e.g., health care or other industrial facilities, community colleges, evening or weekend classes, etc.)?
 - How are or can philanthropy or industry partners bring additional resources to the table — financial or otherwise?
 - Where can investments have the most bang for their buck, e.g., recruiting teachers, transportation stipends, supporting work-based learning coordinators or career advisers?
 - Are there any regional investments that are or can be made to support economies of scale?
 - **Thinking outside the box:** Aside from funding, how can other resources be leveraged to support innovation in rural areas? What equipment, facilities, faculty, technology, etc. can be shared to maximize impact?
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CTE ON THE FRONTIER RESOURCES:

Catalyzing Local Efforts to Improve Program Quality: <https://careertech.org/resource/cte-frontier-program-quality>

Providing Learners Access to Diverse Career Pathways: <https://careertech.org/resource/cte-frontier-providing-access-diverse-pathways>

Connecting Rural Learners with the World of Work: <https://careertech.org/resource/cte-frontier-world-work>

Leveraging Federal Policy to Strengthen Rural CTE: <https://careertech.org/resource/cte-frontier-leveraging-federal-policy-strengthen-rural-cte>

Strengthening the Rural CTE Teacher Pipeline: <https://careertech.org/resource/cte-frontier-strengthening-rural-teacher-pipeline>

Rural CTE Strategy Facilitation Guide: <https://careertech.org/resource/cte-frontier-rural-strategy-guide>

ADDITIONAL RESOURCES:

Advance CTE's CTE Program of Study Approval Benchmark Tool:
<https://careertech.org/resource/program-approval-policy-benchmark-tool>

New Skills for Youth's Career Readiness Stakeholder Engagement Tool:
<https://careertech.org/resource/career-readiness-stakeholder-engagement-tool>

The School Superintendents' Association's (AASA) *Leveling the Playing Field for Rural Students*:
http://www.aasa.org/uploadedFiles/Policy_and_Advocacy/Resources/AASA_Rural_Equity_Report_FINAL.pdf

Advance Research's *How Technology Can Boost Productivity in Rural School Systems*:
<http://www.bscpcenter.org/resources/publications/HowTechnologyCanBoostProductivityinRuralSchoolSystems.pdf>

The School Technology Needs Assessment:
<https://www.fi.ncsu.edu/wp-content/uploads/2013/05/School-Technology-Needs-Assesment-STNA.pdf>

The Foundation for Blended and Online Learning's *Digital Learning Strategies for Rural America*:
<http://www.blendedandonlinelearning.org/wp-content/uploads/2018/03/FBOL-Digital-Learning-Strategies-for-Rural-America-March-2018-web.pdf>

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