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# COMPREHENSIVE REGIONAL NEEDS ASSESSMENT

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Carl D. Perkins V – Strengthening Career and Technical Education for the 21<sup>st</sup> Century Act

**Due Date: February 1, 2020**

**Regional Team Coordinators:**

	Name	Institution/School	Phone	Email
USD(s)	Jamie Manhart	USD 609 Southeast Kansas Education Service Center (Greenbush)		<a href="mailto:jamie.manhart@greenbush.org">jamie.manhart@greenbush.org</a>
Postsecondary Institution(s)	Amanda Strait	Cloud County Community College		<a href="mailto:astrait@cloud.edu">astrait@cloud.edu</a>

Date \_\_\_\_\_ Regional Team: Manhattan

***Secondary and postsecondary institutions shall not contract out the process of conducting the needs assessment.***

## Purpose

The purpose of this document is to provide a template to prepare the content of the regional needs assessment by:

- Explaining the purpose of the regional needs assessment
- Outlining the required components of the assessment
- Providing tools for identifying regional needs

By conducting regional needs assessment, the Regional Team will:

- Use evidence-based strategies to recognize needs of the regional industry
- Identify strengths and weaknesses of secondary and postsecondary CTE programs in the region
- Perform a root-cause analysis of gaps
- Make progress toward student success and employment

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## What is a comprehensive regional needs assessment?

A **needs assessment** is a systematic set of procedures used to determine needs, examine their nature and causes. A needs assessment is conducted to determine the needs of people – i.e., recipients of the services provided by an organization. In education, the recipients are students, parents and future employers. A comprehensive regional needs assessment consists of the following steps:

1. Identify participants on the Regional Needs Assessment Team (stakeholders)
2. Identify data sources to be analyzed. A list of required and allowable data sources is provided by the state.
3. Engage stakeholders in a review of focused data and analyze the data
4. Identify areas of growth and strengths (what is working)
5. Identify areas of opportunity (what is not working)

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## Why complete a comprehensive regional needs assessment?

The reauthorization of the Perkins Act through Perkins V requires that eligible recipients complete a regional needs assessment that must be included in the Perkins application. There are six components of the comprehensive regional needs assessment:

1. Evaluation of Regional Labor Market Data
2. Evaluation of student performance
3. Description of the CTE programs offered (size, scope, quality and aligned to in-demand industry sectors)
4. Evaluation of the progress toward implementing CTE programs and programs of study
5. Description of recruitment, retention and training for CTE educators.
6. Description of progress toward implementing equal access to CTE for all students, including special populations.

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## How often is a comprehensive regional needs assessment needed?

The needs assessment must be completed **every two years**, with a review of progress in the interim. The assessment must be **completed prior** to the completion of the grant application and submitted with the application. The regional needs assessment should be part of an **on-going** performance management cycle.

## Who should participate in the comprehensive regional needs assessment process?

Local recipients are required to engage a diverse body of participants who will plan and implement the regional needs assessment. The Regional Needs Assessment Team is comprised of local stakeholders who will develop, review and analyze assessment results to support cross-sector coordination. Perkins V requires, at a minimum, the following participants to engage in the initial needs assessment, local application development and on-going consultation [Sec.134 (d) and (e)]:

1. CTE program representatives at the secondary and postsecondary levels
    - Teachers
    - Faculty
    - Administrators
    - Career guidance counselors and advocates
    - Advisement professionals
  - Specialized instructional support specialists and paraprofessionals
  2. State or local workforce development board representatives
  3. Representatives from a range of local businesses and industries
  4. Parents and students
  5. Representatives of special populations
  6. Representatives from agencies serving at-risk, homeless and out-of-school youth.
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### Process:

1. Establish a Regional Needs Assessment Team
    - Perkins V requires the needs assessment to be completed in consultation with specific stakeholders. Page 4 of this document lists all required stakeholders. **All groups listed on page 4 must be a part of the Regional Needs Assessment Team.**
  2. Assign two co-coordinators for the Regional Team – one from secondary education and one from a postsecondary institution (Page 3 and 4)
  3. Gather, review and analyze data (state staff will provide required data sources and a list of optional resources).
  4. Convene the Regional Team to write the needs assessment (Each Team must **meet at least once** throughout this process).
  5. Complete the needs assessment Template
    - i. All steps and all parts are required
    - ii. Incomplete assessments will not be approved
    - iii. Add rows to tables as needed
    - iv. Include the data analysis documents (required)
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### Template:

The needs assessment Template outlines all of the required steps:

#### STEP 1: Analysis of Labor Market Information

**Part 1:** Utilize the Labor Market Analysis Tool (Excel)

**Part 2:** Use additional approved sources of data and compare the data to Part 1 findings.

**Part 3:** Bring the Regional Team together to discuss the findings from Parts 1 & 2

**Part 4:** Based on the input from local stakeholders, use this template to provide answers to the regional needs assessment questions

#### STEP 2: Analysis of Student Performance

#### STEP 3: Analysis of Programs

**Part 1:** Size, Scope and Quality

**Part 2:** Progress Toward Implementing Programs of Study

**Part 3:** Recruitment, Retention and Training of CTE Educators

**Part 4: Progress toward Improving Access and Equity**

**Career and Technical Education (CTE) Program Comprehensive Regional Needs Assessment Tool**

Use of Perkins V funding is based on the results of the comprehensive regional needs assessment. **Activities and expenditures** should not be included in a grant application if the eligible recipient **cannot** demonstrate a need based on the assessment.

**The needs assessment must be completed every two years with a review of progress in the interim. The assessment must be completed prior to completion of the grant application. Local applications will not be accepted without the corresponding regional needs assessment.**

<b>Regional Team</b>	
<b>Name:</b> _____ <b>Manhattan Region</b> <b>Date:</b> _____	
<b>Needs Assessment Lead Co-Coordinator:</b>	<b>Contact Information:</b>
<b>Secondary:</b> Jamie Manhart	<a href="mailto:jamie.manhart@greenbush.org">jamie.manhart@greenbush.org</a>
<b>Postsecondary:</b> Amanda Strait	<a href="mailto:astrait@cloud.edu">astrait@cloud.edu</a>

## Comprehensive Regional Needs Assessment Team

Representative		Name	Institution and Position	Responsibility
Co-Coordinators	Postsecondary Perkins Grant Coordinator	Amanda Strait	Cloud County Community College, Director of outreach	Co-Coordinators
	Secondary Perkins Grant Coordinator	Jamie Manhart	USD 609 Southeast Kansas Education Service Center CTE Coordinator	Co-Coordinator
Teacher(s) - Secondary		Jeanne Bruna	USD 364 Marysville, CTE Instructor	Teacher Perspective
Faculty - Postsecondary		Kristy Nyp	Manhattan Technical College Adjunct faculty	Faculty Perspective
Postsecondary Administration		Sarah Phillips	Manhattan Area Technical College Vice President of Student Success	Postsecondary Administrative Perspective
Secondary Administration		Mike Gross	USD 475 Geary County CTE Coordinator	Administrative Perspective
Postsecondary Administration		Cara Baker	Highland Community College Director Western Center	Postsecondary Administrative Perspective
Secondary Administration		Chris Holborn	USD 383 Manhattan Ogden CTE Coordinator	Secondary Perspective
Specialized Instructional Support		Lisa Torres Wigton	USD 475 Geary County Literacy Coach	Secondary Perspective
Special Populations		Aaron Estabrook	Flint Hills Job Corps Business and Community Liason	Information and Data reviewer
Career guidance / Academic Counseling		Monte Poersch	Cloud County Community College Academic Counselor	Postsecondary data reviewer
Career guidance / Academic Counseling		Mistie Knox	USD 224 Clifton-Clyde CTE Coord / Counselor	Secondary Perspective
Student			Cloud County Community College Student	Student Perspective
Student			Cloud County Community College Student	Student Perspective

Community	Chris Moddelmog	Smoky Hill Education Service	Reviewer of data and programs
Business and Industry	Philisha Stallbaumer	School-Business Educational Consortium	Information Reviewer and identifier of business and industry needs, wants and perspectives
Business and Industry	Paula Landoll-Smith	Landoll's Marysville, KS	Reviewer of data and information
Workforce Development	Jo Brunner	Worforce Services Supervisor	Data Presenter
Data support, admin	James Neff	USD 383 Manhattan/Ogden MTSS Coordinator	Data collection and formatting
Other (Data Support, Admin Assistant, HR, Business Office, etc.)	Nora Parker	Community Member	Native American Perspective

# STEP 1: Analysis of Labor Market Information

## Perkins V Section 134(c)(2)(B)(ii)

The local needs assessment shall include...

(B) A description of how career and technical education programs offered by the eligible recipient are—

- (ii) (I) aligned to State, regional, Tribal, or local in-demand industry sectors or occupations identified by the State workforce development board described in section 101 of the Workforce Innovation and Opportunity Act (29 U.S.C.3111) (referred to in this section as the ‘State board’) or local workforce development board, including career pathways, where appropriate; or
- (II) designed to meet local education or economic needs not identified by State boards or local workforce development boards.

What Information Should Locals Collect: Labor Market Alignment	
<p><b>What does the law say?</b></p> <p>The needs assessment will include a description of how CTE programs offered by the eligible recipient align to state, regional, Tribal, or local in-demand industry sectors or occupations identified by the state workforce development board or local workforce development board, including career pathways, where appropriate. The needs assessment may also identify programs designed to meet local education or economic needs not identified by state boards or local workforce development boards.</p>	<p><b>What does the law mean?</b></p> <p>The law requires an analysis of how CTE programs are meeting workforce needs and provides eligible recipients with multiple ways to demonstrate labor market demand, from a combination of state and local sources.</p>

**Part 1:** Utilize the Labor Market Analysis Tool (Excel) provided by the state to assess the labor market in the region. The Excel Spreadsheet contains data for:

- Secondary Pathways
  - Postsecondary Programs
  - Additional Optional Data Resources
1. Kansas Department of Labor data and program data provided by the state must be used in the assessment.
  2. Regional Teams can use additional sources if they wish to supplement the labor data or provide additional evidence of regional needs.
  3. As each Team populates the fields in the spreadsheet, Excel will create a bubble chart which visually represents each one of the institution’s programs or industry demand for programs. *Please do not delete, rename or add columns in the spreadsheets, as all the data is necessary for the creation of the chart.*

**Part 2:** Use additional approved sources of data

**Part 3:** Bring the Regional Team together to discuss the findings from Parts 1 and 2

**Part 4:** Based on the input from local stakeholders, use this template to provide answers to the regional needs assessment questions

**Based on the information determined in the abovementioned process, describe the strengths and needs for the region in the following pages. Add rows as needed.**



## What programs and pathways in the region align with the labor market needs?

Note: The Manhattan Regional Committee has chosen to organize programs/pathways by CIP Code for reporting findings in the chart below.

Labor Market Data listed is based on the 2016-2018 Kansas Department of Labor Long-Term Occupational Projection Data.

Secondary Concentrator Data is based on the 2018 school year.

Postsecondary Concentrator Data is based on AY2017-2018 average.

Agriculture economic contribution data based on Kansas Dept of Ag IMPLAN – 2017 adjusted for 2019

The committee commented that many secondary-level schools do not have the instructors/resources to offer multiple pathways in a single Cluster (example: Agriculture Cluster has 8 pathways, Information Technology Cluster has 4 pathways, etc.). Schools often offer the pathway that exposes students to the widest variety of careers/courses within that Cluster. Several committee members commented that comparing labor market annual openings and Concentrators at the Cluster level (rather than pathway) would provide a different picture.

The committee commented that Secondary Concentrator numbers are likely skewed, due to schools reporting students in non-traditional pathway areas (when able) to benefit Perkins IV Core Indicator Results for 6S1 Non-traditional Participation and 6S2 Non-traditional Completion.

The workforce data from region II will support justifications for programs and pathways with additional thought given to discussions and data from resources. One important aspect of Region II will be the growth expected and the impact of this on the workforce and education.

The Manhattan metro is expected to experience similar growth, increasing by 55 percent over the same period. Both the Lawrence and Manhattan metro areas are projected to exceed a population of 200,000 for the first time in 2064. Combined, the Lawrence and Manhattan metro areas comprised 8.7 percent of the Kansas population in 2014 and are projected to increase to 11.6 percent by 2064  
CEDBR, Wichita State University

The projected growth will impact all industry and should play a role in the discussion of emphasis.

**NBAF** - Another factor which will play a major part in the area will be the opening of NBAF. The economic impact will be outreaching to all industries but impact BioScience and Animal Substantially. ▪ Direct economic impact, including revenue to development and construction firms: \$422 million. That includes \$169 million in pay for construction workers.

▪ Indirect impact, including sales, jobs and salaries at local businesses supplying equipment and supplies, plus “induced” impact — jobs at restaurants, grocery stores, banks and other businesses that serve construction workers and their families — \$257 million  
Read more here: <https://www.kansascity.com/news/local/article22704744.html#storylink=cpy>

### **Impact of NBAF**

NBAF's impact on our regional workforce will be significant not only because it will bring almost 400 jobs to Manhattan, but also because it is unique. It will contain highly specialized laboratories with biosafety levels (BSL) specified, and will be overseen by the Centers for Disease Control and Prevention. NBAF will contain BSL 2, 3 and 4 laboratories. The BSL 3 and 4 labs will work with the pathogens that require high containment and specialized procedures to avoid contamination of workers and/or the public. NBAF will also house the only BSL-4 Ag laboratory in the country with live large animal containment.

The combination of the increase of such facilities with an aging workforce of technicians, often not trained in critical environment applications of HVAC and other routine facility systems, creates an opportunity for the Manhattan Area Technical College program to share with other organizations. For example, there are 75 registered BSL-3 facilities within a 200-mile radius of Manhattan. There are a few hundred BSL-2 and BSL-1 facilities in the same region. The NBAF facility will be the 9<sup>th</sup> BSL-4 lab in the US, but the first US BSL-4 large animal lab. Again, the focus of MATC has been on how to support the work of Kansas State University with food science and veterinary/animal science priorities in terms of providing technical support that is essential for the commercial and public facilities to operate effectively.

MATC addressed the future need for bio-technicians at NBAF by building an A.A.S. biotechnology program that is blended and shareable. Additionally, the build-out of Risk Reduction Training within a mock BSL-3 environment targeted workers that are peripheral to the build-out and maintenance of the NBAF; they may not work in the building, but may be first-responders, HVAC technicians, construction workers, and other personnel that need knowledge of biosafety in order to interact with any BSL-3&4 laboratories

**Animal Science** – Anticipated high area of growth. National Bio and Agro defense facility opening May 2021, subsidiary businesses and facilities planned on opening in area.. Animal science corridor between Manhattan and Columbia Missouri. Between Columbia, Missouri, and Manhattan, Kansas, sits **the single largest concentration of animal health interests in the world**. More than **300 companies** supporting the Animal Health Industry call the KC Animal Health Corridor home.  
<http://kcanimalhealth.thinkkc.com/industry-leadership>

**Information Technology / Programming / Digital Media** -Another area to note will remain programming and software development. Secondary school in the area offer various pathways that lead to post secondary and entry level positions in IT / Technology related fields. The Kansas City Tech Job growth is expected to rise 10.7% (<https://www.bizjournals.com/kansascity/news/2019/10/09/kc-tech-council-annual-report-technology-jobs.html>). The Manhattan region also creates jobs in Information Technology with Fort Riley, Kansas State University, and CivicPlus (INC 5000 business). Many pathways including Programming and Software development, Digital Media, and Web and Digital support careers in Information Technology. MATC offers Information and Network Technology at the post secondary level.

**Agriculture** – According to the Dept of Agriculture, the contribution of Agriculture and related sectors have an output of \$46.9 billion and support 134, 057 jobs. Schools In region offer secondary pathways that support agriculture.

**Family and Consumer Science** - The committee also discussed the Family and Consumer Science workforce need. Although some data suggests the jobs and growth in this area exist as low pay it should be noted that growth in Social workers, Human Services Assistants, and Social and Community Services Managers exist and offer high pay positions. The continue need for high quality childcare and the economic impact of

childcare on all other sectors. Restaurant and Event Management and Travel and Tourism also consists of low pay positions but contribute as a whole to the economy of Kansas and provide many entry level positions.

Strengths	Gaps
<p><u>01 - Agriculture:</u> (Concentrator #s exceed Labor Market Needs):</p> <ul style="list-style-type: none"> <li>• 01.0201 Power, Structural &amp; Technical Systems (Secondary) 64 Annual Openings, 348 Concentrators. Pathway connects to Agriculture related positions.</li> <li>• 01.0304 Precision Agriculture Production (Postsecondary) 91 Annual Openings, 0 Concentrators. Relatively new program at Highland CC offer – new program</li> </ul>	<p><u>01 - Agriculture:</u></p> <ul style="list-style-type: none"> <li>• 01.9999 Comprehensive Agriculture Science (Secondary) No Data on Annual Openings, 46 Concentrators.</li> </ul> <p>(Concentrator #s not meeting Labor Market Needs):</p> <ul style="list-style-type: none"> <li>• 01.0101 Agribusiness Systems (Secondary) 80 Annual Openings, Less than 5 Concentrators.</li> <li>• 01.0401 Food Products &amp; Processing Systems (Secondary) 45 Annual Openings, 0 Concentrators.</li> <li>• 01.0901 Animal Science (Secondary) 231 Annual Openings, 9 Concentrators.</li> <li>• 01.1101 Plant Systems (Secondary) 534 Annual Openings, 32 Concentrators.</li> <li>• 03.0101 Natural Resources &amp; Environmental Services (Secondary) 103 Annual Openings, Less than 5 Concentrators.</li> <li>• 01.0102 Agribusiness Systems (Postsecondary) 79 Annual Openings, Less than 5 Concentrators.</li> <li>• 01.0301 Agriculture Production &amp; Services (Postsecondary) 91 Annual Openings, 11 Concentrators.</li> <li>• 01.0304 Precision Agriculture Production (Postsecondary) 91 Annual Openings, 0 Concentrators. Relatively new program at Highland CC offer – new program</li> <li>• 01.0308 Precision Agriculture (Postsecondary) 107 Annual Openings, 16 Concentrators.</li> <li>• 01.1004 Viticulture Certificate (Postsecondary) 114 Annual Openings, 0 Concentrators.</li> </ul>
<p><u>11 - Information Technology:</u></p> <ul style="list-style-type: none"> <li>• 11.0201 Programming &amp; Software Development (Secondary) 240 Annual Openings, 34 Concentrators.</li> <li>• 11.1001 Information Network Technology (Postsecondary) 145 Annual Openings, 32 Concentrators.</li> </ul>	<p><u>11 - Information Technology:</u></p> <p>(Concentrator #s not meeting Labor Market Needs):</p> <ul style="list-style-type: none"> <li>• 11.0301 Information Support &amp; Services (Secondary) 367 Annual Openings, Less than 5 Concentrators.</li> <li>• 11.0901 Network Systems (Secondary) 205 Annual Openings, 0 Concentrators.</li> <li>• 11.0201 Programming &amp; Software Development (Secondary) 240 Annual Openings, 34 Concentrators.</li> </ul>

Strengths	Gaps
	<ul style="list-style-type: none"> <li>• 11.0901 Information Systems Technology (Postsecondary) 84 Annual Openings, 0 Concentrators.</li> <li>• 11.1006 Computer Support Technology (Postsecondary) 120 Annual Openings, 0 Concentrators.</li> <li>• 11.1001 Information Network Technology (Postsecondary) 145 Annual Openings, 32 Concentrators.</li> </ul> <p>(Concentrator #s exceed Labor Market Needs):</p> <ul style="list-style-type: none"> <li>• 11.1004 Web &amp; Digital Communications (Secondary) 20 Annual Openings, 628 Concentrators.</li> </ul>
<ul style="list-style-type: none"> <li>• 12.0504 Restaurant &amp; Event Management (Secondary) 4,681 Annual Openings, 330 Concentrators.</li> </ul>	<p><u>12 – Culinary, Entertainment, and Personal Services:</u> (Concentrator #s not meeting Labor Market Needs):</p> <ul style="list-style-type: none"> <li>• 12.0505 Culinary Arts (Postsecondary) 198 Annual Openings, 0 Concentrators.</li> </ul> <p>Data doesn't reflect correctly as Bellus Academy must not be included</p> <ul style="list-style-type: none"> <li>• 12.0401 Cosmetology (Postsecondary) 143 Annual Openings, 0 Concentrators .</li> </ul>
	<p><u>13 – Education:</u> (Concentrator #s not meeting the Labor Market Needs):</p> <ul style="list-style-type: none"> <li>• 13.0101 Teaching/Training (Secondary) 1,946 Annual Openings, 16 Concentrators. **Relatively new pathway at Manhattan High School</li> <li>• 13.1210 Early Childhood (Postsecondary) 87 Annual Openings, 0 Concentrators.</li> </ul>
<p><u>14 – Engineering; 15 – Engineering/Engineering-Related Technologies:</u></p> <ul style="list-style-type: none"> <li>• 14.1401 Biochemistry (Secondary) 4 Annual Openings, 11 Concentrator.</li> <li>• 14.0501 Biomedical (Secondary) 6 Annual Openings, 15 Concentrators.</li> <li>• 15.1302 Computer Drafting Design Technologies (Postsecondary) 30 Annual Openings, 37.5 Concentrators.</li> </ul>	<p><u>14 – Engineering; 15 – Engineering/Engineering-Related Technologies:</u> (Concentrator #s not meeting the Labor Market Needs):</p> <ul style="list-style-type: none"> <li>• 14.0101 Engineering &amp; Applied Mathematics (Secondary) 198 Annual Openings, 0 Concentrators. **new pathway at Junction City High School</li> <li>• 15.0000 Aviation Production (Secondary) 11 Annual Openings, New Pathway but not adopted in area.</li> <li>• 17.2071 Energy (Secondary) 45 Annual Openings, 0 Concentrators.</li> <li>• 15.0505 Solar Energy Technology (Postsecondary) 31 Annual Openings, 0 Concentrators.</li> <li>• 15.0613 Certified Production Technician (Postsecondary)</li> </ul>

Strengths	Gaps
	<p>5 Annual Openings, 0 Concentrators.            (Concentrator #s exceed Labor Market Needs):</p> <ul style="list-style-type: none"> <li>• 14.1401 Biochemistry (Secondary) 4 Annual Openings, 11 Concentrator.</li> <li>• 14.0501 Biomedical (Secondary) 6 Annual Openings, 15 Concentrators.</li> <li>• 15.1302 Computer Drafting Design Technologies (Postsecondary) 30 Annual Openings, 37.5 Concentrators.</li> </ul>
	<p><u>19 – Family &amp; Consumer Sciences/Human Services:</u>            (Concentrator #s not meeting the Labor Market Needs):</p> <ul style="list-style-type: none"> <li>• 19.0709 Early Childhood Development &amp; Services (Secondary) 250 Annual Openings, 15 Concentrators.</li> <li>• 19.0799 Family, Community &amp; Consumer Services (Secondary) 961 Annual Openings, 40 Concentrators.</li> <li>• 19.0999 (Fashion, Apparel, Interior Design (FAID) (Secondary) 40 Annual Openings, New Pathway.</li> <li>• 19.0708 Early Childhood (Postsecondary) 56 Annual Openings, 13 Concentrators.</li> <li>• 19.0709 Early Childhood Professional (Postsecondary) 243 Annual Openings. 0 Concentrators.</li> </ul>
	<p><u>22 – Legal Professions and Studies:</u>            (Concentrator #s not meeting the Labor Market Needs):</p> <ul style="list-style-type: none"> <li>• 22.0301 Legal Office Professional (Postsecondary) 37 Annual Openings, 0 Concentrators.</li> </ul>
	<p><u>31 – Parks, Recreation, Leisure, Fitness, and Kinesiology:</u>            (Concentrator #s not meeting the Labor Market Needs):</p> <ul style="list-style-type: none"> <li>• 31.0507 Physical Fitness Technician (Postsecondary) 123 Annual Openings, 0 Concentrators.</li> </ul>
	<p><u>41 – Biology/Biotechnology Technology/Technician</u></p> <ul style="list-style-type: none"> <li>• Emerging Field – no/limited data available Concentrator numbers do not currently exist 41.0101 – Biological Tech./Technician</li> </ul>

Strengths	Gaps
	<p><u>43 – Homeland Security, Law Enforcement, Firefighting &amp; Related Protective Services; 44 – Public Administration &amp; Social Service Professions:</u> (Concentrator #s not meeting the Labor Market Needs):</p> <ul style="list-style-type: none"> <li>• 43.0199 Corrections, Security, Law &amp; Law Enforcement Services (Secondary) 709 Annual Openings, Less than 5 Concentrators.</li> <li>• 43.0299 Emergency &amp; Fire Management Services (Secondary) 139 Annual Openings, 0 Concentrators.</li> <li>• 44.0401 Government &amp; Public Administration (Secondary) 157 Annual Openings, 0 Concentrators.</li> <li>• 43.0107 Criminal Justice (Postsecondary) 110 Annual Openings, 0 Concentrators.</li> <li>• 43.0109 Risk Management (Postsecondary) No Data.</li> <li>• 43.9999 Dispatch Technology – Emergency Communications (Postsecondary) 21 Annual Openings, 0 Concentrators.</li> </ul>
<ul style="list-style-type: none"> <li>• 46.0301 Electric Power &amp; Distribution (Postsecondary) 188 Annual Openings, 67 Concentrators</li> <li>• 46.0000 Construction &amp; Design (Secondary) 1,739 Annual Openings, 59 Concentrators.</li> <li>• 46.0201 Construction Technology (Postsecondary) 288 Annual Openings, 33.5 Concentrators.</li> </ul>	<p><u>46 – Construction Trades:</u> (Concentrator #s not meeting the Labor Market Needs):</p> <ul style="list-style-type: none"> <li>• 46.0302 Electrical Technology (Postsecondary) 234 annual Openings, 0 Concentrators</li> <li>• 46.0401 Building Technology (Postsecondary) 517 Annual Openings, 0 Concentrators</li> </ul>
<p><u>47 – Mechanic &amp; Repair Technologies/Technicians:</u></p> <ul style="list-style-type: none"> <li>• 47.0608 Mobile Equipment Maintenance (Secondary) 29 Annual Openings, 169 Concentrators</li> <li>• 47.0302 Heavy Diesel Construction Technology (Postsecondary) 39 Annual Openings, 28.50 Concentrators</li> <li>• 47.0201 HVAC (Postsecondary) 53 Annual Openings, 15Concentrators</li> <li>• 47.0704 Wind Energy (Postsecondary) 23 Annual Openings, 118 Concentrators</li> <li>• 47.0603 Automotive Collision Repair (Postsecondary) 41 Annual Openings, 17 Concentrators</li> <li>• 47.0604 Automotive Technology (Postsecondary) 122 Annual Openings, 30 Concentrators</li> </ul>	<p><u>47 – Mechanic &amp; Repair Technologies/Technicians:</u> (Concentrator #s not meeting the Labor Market Needs):</p> <ul style="list-style-type: none"> <li>• 47.0000 Aviation Maintenance (Secondary) 7 Annual Openings, 0 Concentrators New Pathway</li> <li>• 47.0303 Industrial Machine Mechanic (Postsecondary) 118 Annual Openings, 0 Concentrators</li> <li>• 47.0605 Locomotive Diesel Technician (Postsecondary) 37 Annual Openings, 0 Concentrators</li> <li>• 47.0613 Diesel Technology (Postsecondary) 152 Annual Openings, 0 Concentrators</li> </ul>

Strengths	Gaps
<p><u>48 – Precision Production:</u></p> <ul style="list-style-type: none"> <li>48.0508 Welding Technology (Postsecondary) 178 Annual Openings, 57 Concentrators</li> </ul>	<p><u>48 – Precision Production:</u> (Concentrator #s not meeting the Labor Market Needs):</p> <ul style="list-style-type: none"> <li>48.0000 Manufacturing (Secondary) 2,283 Annual Openings, Less than 5 Concentrators</li> <li>48.0501 Machine Technology (Postsecondary) 237 Annual Openings, 0 Concentrators</li> <li>48.0703 Cabinet/Millwork (Postsecondary) 49 Annual Openings, 0 Concentrators</li> <li>49.0199 Unmanned Aircraft Systems (Postsecondary) No Data</li> <li>49.0202 Commercial &amp; Heavy Construction (Postsecondary) 277 Annual Openings, 0 Concentrators</li> <li>49.0205 Commercial Truck Driving (Postsecondary) 629 Annual Openings, 0 Concentrators</li> </ul>
<p><u>50 – Visual &amp; Performing Arts:</u></p> <ul style="list-style-type: none"> <li>09.0702 Digital Media 107 Annual Openings, 55 Concentrators</li> </ul>	<p>(Concentrator #s not meeting the Labor Market Needs):</p> <ul style="list-style-type: none"> <li>50.0406 Commercial Photography (Postsecondary) 9 Annual Openings, 0 Concentrators</li> </ul> <p>(Concentrator #s exceed Labor Market Needs):</p> <ul style="list-style-type: none"> <li>50.0499 Graphic Design (Secondary) 42 Annual Openings, 71 Concentrators</li> </ul>
<p><u>51 – Health Professions &amp; Related Programs:</u></p> <ul style="list-style-type: none"> <li>51.0602 Dental Hygiene (Postsecondary) 34 Annual Openings, 19 Concentrators.</li> <li>51.9999 Health Science (Secondary) 2,194 Annual Openings, 96 Concentrators.</li> <li>51.1004 Medical Laboratory Technology (Postsecondary) 17 Annual Openings, 16 Concentrators</li> <li>51.3801 Associate Degree Nursing (Postsecondary) 339 Annual Openings, 108 Concentrators</li> <li>51.3902 Nursing Aide (Postsecondary) 582 Annual Openings, 338 Concentrators</li> <li>51.1009 Phlebotomy (Postsecondary) 25 Annual Openings, 16 Concentrators.</li> <li>51.2603 Medication Aide (Postsecondary) 28 Annual Openings, 12 Concentrators.</li> <li>51.3901 Practical Nursing (Postsecondary) 110 Annual Openings, 28 Concentrators.</li> </ul>	<p><u>51 – Health Professions &amp; Related Programs:</u> (Concentrator #s not meeting the Labor Market Needs):</p> <ul style="list-style-type: none"> <li>51.0713 Medical Coding (Postsecondary) 115 Annual Openings, 0 Concentrators</li> <li>51.0716 Medical Office Specialist (Postsecondary) 158 Annual Openings, 0 Concentrators</li> <li>51.0710 – Medical Assistant/Specialist Not currently offered at MATC (suspended)</li> <li>51.0801 Medical Office Assistant (Postsecondary) 86 Annual Openings, 0 Concentrators</li> <li>51.2602 Home Health Aide (HHA) (Postsecondary) 756 Annual Openings</li> <li>51.0907 Radiation Therapy (Postsecondary) 27 Annual Openings, 0 Concentrators.</li> <li>51.0908 Respiratory Therapy (Postsecondary) 17 Annual Openings, 0 Concentrators.</li> <li>51.0909 Surgical Technology (Postsecondary) 15 Annual Openings, 0 Concentrators.</li> </ul>

Strengths	Gaps
	<ul style="list-style-type: none"> <li>• 51.0910 Diagnostic Medical Sonography (Postsecondary) 8 Annual Openings, 0 Concentrators.</li> <li>• 51.0911 Radiological Technology (Postsecondary) 25 Annual Openings, 0 Concentrators.</li> <li>• 51.0920 Magnetic Resonance (Postsecondary) 3 Annual Openings, 0 Concentrators.</li> <li>• 51.0904 Emergency Medical Technician (Postsecondary) 40 Annual Openings, 0 Concentrators</li> </ul> <p>(Concentrator #s exceed Labor Market Needs):</p> <ul style="list-style-type: none"> <li>• 51.0806 Physical Therapist Assistant 5 Annual Openings, 0 Concentrators</li> <li>• 51.0810 EMT: Basic (Postsecondary) 0 Annual Openings, 6 Concentrators</li> </ul>
<p><u>52 – Business, Management, Marketing &amp; Related Support Services:</u></p> <ul style="list-style-type: none"> <li>• 52.0801 Business Finance (Secondary) 1,300 Annual Openings, 54 Concentrators</li> <li>• 52.0401 Business Administration (Postsecondary) 790 Annual Openings, 33 Concentrators</li> </ul>	<p>(Concentrator #s not meeting the Labor Market Needs):</p> <ul style="list-style-type: none"> <li>• 52.0799 Business Management &amp; Entrepreneurship (Secondary) 1,460 Annual Openings, 6 Concentrators</li> <li>• 52.0901 Travel &amp; Tourism (Secondary) 1,050 Annual Openings, 0 Concentrators</li> <li>• 52.1402 Marketing (Secondary) 4,150 Annual Openings, 0 Concentrators (new pathway for MHS &amp; JCHS)</li> <li>• 52.0203 Certified Logistics Technician (Postsecondary) 34 Annual Openings, 0 Concentrators</li> <li>• 52.0302 Accounting (Postsecondary) 357 Annual Openings, 10 Concentrators</li> </ul>



**According to the data analysis, what programs/pathways (if any) are not offered but are needed in the region?**

Program	Evidence from Kansas Labor Market Data	Evidence from Regional Sources
01.0401 Food Products & Processing Systems (Secondary)	45 Openings, 0 Concentrators	Note: Students in secondary pathways of power, structural, & technical systems and comprehensive agriculture science in the secondary level contain more concentrators than demand.
01.0304 Precision Agriculture Production (Postsecondary)	91 Openings, 0 Concentrators	Relatively new program at Highland Community College (assumed Concentrators exist with new data)
01.1004 Viticulture Certificate (Postsecondary)	114 Openings, 0 Concentrators	
11.0901 Network Systems (Secondary)	205 Openings, 0 Concentrators	
11.0901 Information Systems Technology (Postsecondary)	84 Annual Openings, 0 Concentrators	

Program	Evidence from Kansas Labor Market Data	Evidence from Regional Sources
11.1006 Computer Support Technology (Postsecondary)	120 Openings, 0 Concentrators	
12.0505 Culinary Arts (Postsecondary)	198 Openings, 0 Concentrators	
12.0401 Cosmetology (Postsecondary)	143 Openings, 0 Concentrators	Data doesn't reflect graduates from Bellus Academy
13.1210 Early Childhood (Postsecondary)	87 Openings, 0 Concentrators	
14.0101 Engineering & Applied Mathematics (Secondary)	198 Openings, 0 Concentrators	** New pathway at Junction City High School
15.0000 Aviation Production (Secondary)	11 Openings, 0 Concentrators	Postsecondary - Potential partnership with WSU & MATC in the future to expand aviation offerings in this region

Program	Evidence from Kansas Labor Market Data	Evidence from Regional Sources
17.2071 Energy (Secondary)	45 Openings, 0 Concentrators	
15.0505 Solar Energy Technology (Postsecondary)	31 Openings, 0 Concentrators	
19.0999 Fashion, Apparel, Interior Design (FAID) (Secondary)	40 Openings, 0 Concentrators (New Pathway)	Though this pathway is New and not currently offered in the Manhattan region, the average entry-level wage is \$19,850. There may be little support for starting a new program that leads to a low-wage with only 40 openings annually. Schools may want to establish strong business partners and/or research local needs & wages further before implementing. The connection to a strong post-secondary program in the College of Human Ecology at K-State provides guaranteed admittance into the program.
22.0301 Legal Office Professional (Postsecondary)	37 Openings, 0 Concentrators	
31.0507 Physical Fitness Technician (Postsecondary)	123 Openings, 0 Concentrators	

Program	Evidence from Kansas Labor Market Data	Evidence from Regional Sources
43.0203 – Fire Science/Fire Fighting (Postsecondary)	28 Annual Openings, 0 Concentrators.	Potential partnership by request of, and with, the City of Manhattan, MATC is working to develop a Fire Science Pathway to meet the needs of the Manhattan region; potentially effective 2021.
43.0299 Emergency & Fire Management Services (Secondary) . .	139 Annual Openings, 0 Concentrators.	
44.0401 Government & Public Administration (Secondary)	157 Annual Openings, 0 Concentrators.	
43.0107 Criminal Justice (Postsecondary)	110 Annual Openings, 0 Concentrators	
43.0109 Risk Management (Postsecondary)	No Data.	
43.9999 Dispatch Technology – Emergency Communications (Postsecondary)	21 Annual Openings, 0 Concentrators	

Program	Evidence from Kansas Labor Market Data	Evidence from Regional Sources
46.0302 Electrical Technology (Postsecondary)	234 Openings, 0 Concentrators	
46.0401 Building Technology (Postsecondary)	517 Openings, 33.5 Concentrators	
47.0000 Aviation Maintenance (Secondary)	7 Openings, 0 Concentrators (New Pathway)	Though this pathway is not offered in the Manhattan region the openings are relatively low.
47.0605 Locomotive Diesel Technician (Postsecondary)	37 Openings, 0 Concentrators	
47.0613 Diesel Technology (Postsecondary)	152 Openings, 0 Concentrators	
48.0501 Machine Technology (Postsecondary)	237 Openings, 0 Concentrators	

Program	Evidence from Kansas Labor Market Data	Evidence from Regional Sources
48.0703 Cabinet/Millwork (Postsecondary)	49 Openings, 0 Concentrators	
49.0202 Commercial & Heavy Construction (Postsecondary)	277 Openings, 0 Concentrators	
49.0205 Commercial Truck Driving (Postsecondary)	629 Openings, 0 Concentrators	
50.0406 Commercial Photography (Postsecondary)	9 Openings, 0 Concentrators	Relatively low number of openings..
51.0806 Physical Therapist Assistant	5 Annual Openings, 0 Concentrators	Low number of openings to justify a program but continually evaluate the demand of all occupational and therapy technicians and assistants
51.0904 Emergency Medical Technician (Postsecondary)	40 Annual Openings, 0 Concentrators	MATC currently offers (51.0810?), however, a potential degree pathway for Para medicine/advanced EMT program is being explored.

Program	Evidence from Kansas Labor Market Data	Evidence from Regional Sources
51.1004 Medical Laboratory Technology (Postsecondary)	17 Openings, 0 Concentrators	

**What programs/Pathways are offered in the region, but are not supported with the local labor data?**

Program/Pathway	Reason for offering these Programs/Pathways	Kansas Labor Market Data or Local Labor Data Source
01.0201 Power, Structural & Technical Systems (Secondary)	Pathway coursework leads to wide variety of careers. Many schools (especially small/rural) utilize this pathway to teach welding, construction, etc. in addition to agriculture. See Kansas Labor Market Data (next column) for details on Construction & Manufacturing needs.	Kansas Labor Market Data shows 64 Total Annual Openings, with 348 Secondary Concentrators. Courses included in pathway would feed into various pathways including agribusiness (80 openings), agriculture production and services (91 openings), and especially construction and design (1,739 openings). Trailer manufacturing provides many jobs in the region in welding.
01.9999 Comprehensive Agriculture Science	Pathway coursework touches on a wide variety of agriculture topics. Good option for small/rural schools without resources to offer multiple pathways. Horticulture and plant and soil sciences courses in the comprehensive pathway and it supports the plant systems pathway. Our region had 32 concentrators and 534 openings. Plant systems data could also support this pathway. Schools also offer horticulture and plant and plant and soil sciences courses which support the plant systems pathway.	Kansas Labor Market Data had no information for this pathway. This pathway again supports all careers in agriculture including agribusiness (80 openings), Food Products & Processing systems (45 openings), Animal Science (231 openings), natural resources & environmental science (103 openings).

Program/Pathway	Reason for offering these Programs/Pathways	Kansas Labor Market Data or Local Labor Data Source
11.1004 Web & Digital Communications	Pathway is the most logical sequence to offer students experience in various technology applications along with a little computer programming at the high school level. Most small schools do not have the resources to offer networking or various other programming pathways. web & digital communications support's marketing by using digital media. Courses in the Web and Digital Communication Pathway cover basic skills that are in demand in a variety of occupations outside of web and digital communications	Kansas Labor Market Data shows 20 Total Annual Openings, with 628 Secondary Concentrators. This pathway produces students that would continue in Information support & services (367 openings), network systems (205 openings), programming & Software Development (240 openings), and information network technology ( 145 openings). Total of 957 openings in just secondary pathways alone.
09.0702 Digital Media	Pathway does not meet labor needs but considered low wage. Noted that digital media feeds into various careers including marketing and business along with technical writing which indicated by advisory committee is high demand in the area.	Relatively low wage represents starting salary and does not reflect jobs in marketing and business.
12.0504 Restaurant & Events Management (Secondary) 12.0401 Cosmetology (Postsecondary) 12.0505 Culinary Arts (Postsecondary)	<p>Labor Market Data shows a high-demand for all three areas that is not being met:</p> <ul style="list-style-type: none"> <li>• Restaurant &amp; Event Management = 4,681 openings annually, 330 Concentrators</li> <li>• Cosmetology = 143 openings annually, Need more information.</li> <li>• Culinary Arts = 198 openings annually, 0 Concentrators</li> </ul> <p>The current population growth and expected growth is producing a large demand.</p>	<p>Though there is high-demand for these areas, it was noted that the Average Entry-Level wage is low:</p> <ul style="list-style-type: none"> <li>• Restaurant &amp; Event Management = \$17,332</li> <li>• Cosmetology = \$17,208</li> <li>• Culinary Arts = \$20,307</li> </ul> <p>Manhattan area is growing and the area being a college and military hub increases the amount of food service and tourism.</p> <p>Schools may want to establish/maintain strong business partners and stay current on local needs &amp; wages.</p>
14.0501 Biomedical (Secondary) 14.1401 Biochemistry (Secondary)	Two pathways that show low openings however students pursuing these fields would follow through to high wage and high demand fields. Most students would pursue post – secondary education in all fields and levels of biology research and chemistry. Noted	<p>Kansas Labor Market Data shows 10 Total Annual Openings for the two pathways with 26 concentrators.</p> <p>With the location of Manhattan in the Animal Science corridor and proximity to programs at Kansas State University and Manhattan Area Technical College</p>



Program/Pathway	Reason for offering these Programs/Pathways	Kansas Labor Market Data or Local Labor Data Source
	some schools cannot offer Health Science due to staffing.	which support the NBAF project and various subsidiary businesses that support research the field is expected to explode in the area.
15.0613 Certified Production Technician (Postsecondary)	<p>Washburn Tech offers the CPT program at Ft. Riley to those transitioning out of the military. Program Concentrators are typically moving back home to various locations across the country where they will seek employment.</p> <p>The program is also a precursor to Advanced Systems Technology (Industrial Machine Mechanic).</p>	<p>Kansas Labor Market Data shows 5 Total Annual Openings and 60.50 Concentrators for Certified Production Technicians.</p> <p>Committee members noted that many companies hire employees first, then send them to get the certifications they want. The annual demand may not be an accurate projection due to many students already having employment.</p> <p>The CPT program is a precursor to Advanced Systems Technology (Industrial Machine Mechanic). The Kansas Department of Labor projects there will be more than 5,000 AST jobs available in the state in the next decade.</p>
15.1302 Computer Drafting Design Technologies (Postsecondary)	Drafting careers would support building trades and the concentrators is close to the annual openings. Students may continue education at Kansas State University in architecture and/or engineering field.	30 Annual Openings, 37.5 Concentrators show a close fit with openings which varies from year to year.
19.0708 Early Childhood (Postsecondary) 19.0709 Early Childhood Professional (Postsecondary)	Labor Market Data shows a high-demand for these areas that's not being met: Early Childhood: 56 openings annually, 13 Concentrators; Early Childhood Professional: 243 openings annually, 19.50 Concentrators. Students are the secondary level in early childhood and family, community, & consumer services would also support jobs in these fields.	<p>Though there is high-demand for these areas, it was noted that the Average Entry-Level wage is low:</p> <ul style="list-style-type: none"> <li>• Early Childhood: \$21,367</li> <li>• Early Childhood Professional: \$17,520</li> </ul>

Program/Pathway	Reason for offering these Programs/Pathways	Kansas Labor Market Data or Local Labor Data Source
19.099 (Fashion, Apparel, Interior Design) FAID (secondary)	Note: New pathway that encompasses a wide assortment of career and skill sets that encompass design, technology skills, and high demand jobs in retail in entry positions. As pathway builds with completers expected concentrators will surpass openings.	Connection with Kansas State University for entry to into the school of human ecology if secondary course work in completed. Pathway will need to be revisited as concentrator data is acquired.
41.0101 – Biotechnology (Postsecondary) Ties to: 14.0501 Biomedical (Secondary) 14.1401 Biochemistry (Secondary)	Two pathways that show low openings however students pursuing these fields would follow through to high wage and high demand fields. Most students would pursue post – secondary education in all fields and levels of biology research and chemistry.	<p>Kansas Labor Market Data shows 10 Total Annual Openings for the two pathways with 26 concentrators.</p> <p>This is an emerging field for postsecondary institutions, therefore no current labor data exists.</p> <p>With the location of Manhattan in the Animal Science corridor and proximity to programs at Kansas State University and Manhattan Area Technical College which support the NBAF project and various subsidiary businesses that support research the field is expected to explode in the area.</p> <p>Please also refer back to Impact of NBAF.</p>
47.0608 Mobile Equipment Maintenance (Secondary)	Noted by advisory committee that annual openings doesn't reflect need for technicians in the area. Students in pathway would also fill gap for all mechanic & repair technologies and technicians of post secondary programs with high annual openings.	Data shows 29 annual openings with 169 concentrators. Recent agreements with Manhattan Area technical college will shift the concentrators to post secondary pathways all with high annual openings.
50.0499 Graphic Design (Secondary)	Skills within the pathway transcend multiple occupations. Students learn visual representation of ideas. Skills benefit Marketing careers. Kansas Labor Market Data shows 4,150 annual openings in Marketing with very low to no concentrators.	Kansas Labor Market data shows 42 annual openings in Graphic Design with 71 Concentrators. However, there are a large number of Marketing openings annually (4,150). Schools may want to establish/maintain strong business partners and ensure students understand labor market sectors & needs.

<b>Program/Pathway</b>	<b>Reason for offering these Programs/Pathways</b>	<b>Kansas Labor Market Data or Local Labor Data Source</b>
51.0810 EMT Basic (Postsecondary)	Fire Departments require EMT certification.	Kansas Labor Market data had no data on openings, with 38.5 Concentrators. Committee questioned if this was an old CIP Code. Unable to make a determination w/o data on demand.
51.0904 Emergency Medical Technician (Postsecondary) - Basic	Fire Departments require EMT certification.	Kansas Labor Market data shows 0 annual openings with 6 concentrators but doesn't reflect requirement for jobs in law and public safety as a necessary component.

## STEP 2: Analysis of Student Performance

### Perkins V Section 134(c)(2)(A)

*The local needs assessment shall include...*

*(A) An evaluation of the performance of the students served by the eligible recipient with respect to State determined and local levels of performance established pursuant to section 113, including an evaluation of performance for special populations\*\* and each subgroup described in section 1111(h)(1)(C)(ii) of the Elementary and Secondary Education Act of 1965.*

### What Information Should Locals Collect: Student Performance Data

#### What does the law say?

The needs assessment will include an evaluation of the performance of the students served by the local eligible recipient with respect to state-determined and local performance levels, including an evaluation of performance for special populations.\*\*

#### What does the law mean?

The needs assessment must contain an evaluation of CTE concentrators' performance on the core performance indicators. While eligible recipients already are required to do this as part of their local plans under Perkins IV, the evaluation now includes special populations.\*\*

\*\* Because the disaggregated data on special population subgroups is not available at this time, the needs assessment's student performance analysis will be based on the overall performance of secondary students and program-level performance of postsecondary students. Each subsequent assessment (every two years) will include an evaluation of performance for each subgroup and each special population for both secondary and postsecondary institutions.

Each secondary and postsecondary institution will receive their student performance data based on the data submitted to the state. Program-level data is only available for postsecondary institutions. Secondary schools can pull Pathway-specific data from Pathways system for their assessment. The Regional Needs Assessment Team must meet and evaluate the student performance strengths, gaps, and goals for improvement based on the data **for the entire region.**

### Postsecondary Performance

#### **1P1 – Postsecondary Retention and Placement**

The percentage of CTE concentrators who, during the second quarter after program completion, remain enrolled in postsecondary education, are in advanced training, military service, or a service program that receives assistance under title I of the National and Community Service Act of 1990 (42 U.S.C. 12511 et seq.), are volunteers as described in section 5(a) of the Peace Corps Act (22 U.S.C. 2504(a)), or are placed or retained in employment.

#### **2P1 – Earned Recognized Postsecondary Credential**

The percentage of CTE concentrators who receive a recognized postsecondary credential during participation in or within 1 year of program completion.

#### **3P1 – Nontraditional Participation**

The percentage of CTE concentrators in career and technical education programs and programs of study that lead to non-traditional fields.

## **Secondary Performance**

### **1S1 – Four-year Graduation Cohort Rate**

The percentage of CTE concentrators who graduate high school, as measured by the four-year adjusted cohort graduation rate (defined in section 8101 of the Elementary and Secondary Education Act of 1965).

### **2S1 – Academic Proficiency in Reading/Language Arts**

CTE concentrator proficiency in the challenging state academic standards adopted by the state under section 1111(b)(1) of the Elementary and Secondary Education Act of 1965, as measured by the academic assessments in reading/language arts as described in section 1111(b)(2) of such Act.

### **2S2 – Academic Proficiency in Mathematics**

CTE concentrator proficiency in the challenging state academic standards adopted by the state under section 1111(b)(1) of the Elementary and Secondary Education Act of 1965, as measured by the academic assessments in mathematics as described in section 1111(b)(2) of such Act.

### **2S3 – Academic Proficiency in Science**

CTE concentrator proficiency in the challenging state academic standards adopted by the state under section 1111(b)(1) of the Elementary and Secondary Education Act of 1965, as measured by the academic assessments in science as described in section 1111(b)(2) of such Act.

### **3S1 – Post-Program Placement**

The percentage of CTE concentrators who, in the second quarter after exiting from secondary education, are in postsecondary education or advanced training, military service or a service program that receives assistance under title I of the National and Community Service Act of 1990 (42 U.S.C. 12511 et seq.), are volunteers as described in section 5(a) of the Peace Corps Act (22 U.S.C. 2504(a)), or are employed.

### **4S2 – Program Quality – Attained Postsecondary Credits**

The percentage of CTE concentrators graduating from high school having attained postsecondary credits in the relevant career and technical education program or program of study earned through a dual or concurrent enrollment or another credit transfer agreement.

### **5S1 – Nontraditional Program Concentration**

The percentage of CTE concentrators in career and technical education programs and programs of study that lead to non-traditional fields.

**Complete the tables on the following pages. Add rows as needed.**

## STEP 3: Analysis of Programs

### Part 1: Size, Scope and Quality

#### Perkins V Section 134(c)(2)(B)(i)

*The local needs assessment shall include*

- (B) A description of how career and technical education programs offered by the eligible recipient are—*
- (i) sufficient in size, scope and quality to meet the needs of all students served by the eligible recipient; and...*

What Information Should Locals Collect: Size, Scope & Quality	
<p><b>What does the law say?</b></p> <p>The needs assessment will include a description of how CTE programs offered by the local eligible recipient are sufficient in size, scope, and quality to meet the needs of all students served by the eligible recipient.</p>	<p><b>What does the law mean?</b></p> <p>The provision maintains the size, scope and quality requirements in Perkins IV, but instead requires that this description be addressed through the needs assessment (which is part of the local application in Perkins V) instead of in the local plan in Perkins IV. The state has the responsibility to establish the definition of these three requirements.</p>

### State Definitions:

#### Size:

Program size reflects an appropriate number of students in order to be effective and meet local business and industry demand as determined by the regional needs assessment. The program size will account for physical parameters and limitations of the program.

#### Scope:

As specified in K.S.A. 71-1802, CTE programs must:

- be designed to prepare individuals for gainful employment in current or emerging technical occupations requiring other than a baccalaureate or advanced degree
- lead to technical skill proficiency, an industry-recognized credential, a certificate or an associate degree
- be delivered by an eligible institution

In addition, CTE state-approved programs of study/Pathways relate to high-skill, high-wage, or in-demand careers aligned with the economic and workforce development needs in the state or region by:

- Linking programs across learning levels through articulation agreements, dual credit opportunities, aligned curriculum, etc.
- Aligning programs with business and industry needs and local economic indicators
- Providing multiple entry and exit points to programs of study
- Emphasizing development of essential workplace skills through applied academics
- Providing workplace learning opportunities to all students, including special populations

## Definitions Continued:

### **Quality:**

Program quality is the measure of how successfully each program addresses academic performance, workplace standards, competencies, and skills necessary for success within their program of study.

The Kansas State Department of Education has established the following secondary quality measures for CTE programs:

- Eligible recipients reach local targets based on state and federal Core Indicators of Performance.
- Local recipients use local labor market data to identify CTE Pathways' alignment to projected employment demand.
- Professional development is provided to faculty and staff to enhance student learning and ensure the implementation of high-quality CTE Pathways.
- CTE Pathways are reviewed based on advisory council's input and local business and industry projections.
- CTE Pathways include at least one articulation agreement and industry credentialing, where appropriate.
- All students are provided with equitable access to CTE programs of study via Individual Plans of Study (IPS) implementation.
- Equipment and technology encourage student attainment of relevant, rigorous technical skills.

The Kansas Board of Regents has established the following postsecondary quality measures for CTE programs:

- Eligible recipients negotiate local targets based on state and federal Core Indicators of Performance.
- Local recipients demonstrate the need for CTE programs by presenting labor market data and economic development projections that indicate current or projected employment demand.
- Professional development is provided to faculty and staff to enhance student learning and ensure the implementation of high-quality CTE programs.
- CTE programs of study are systematically reviewed based on advisory council's input and local business and industry projections.
- CTE programs participate in program alignment and provide industry credentialing.
- All students are provided with equitable access to CTE programs of study.

**Complete the table on the following pages. Add rows as needed.**

## How do schools and colleges in the region determine that programs...

Question	Answer	Areas for Improvement
<p><b>Are of sufficient size</b></p>	<ul style="list-style-type: none"> <li>• Advisory Committee Feedback</li> <li>• Local Business/Industry Feedback, such as projected job openings. Some schools utilize Business Roundtables.</li> <li>• Completer Rates</li> <li>• Follow-Up Data</li> <li>• Limit on Class Size</li> <li>• Teacher/Pupil Ratio</li> <li>• Sufficient enrollment in Introductory-level class to have students prepared to continue on to Technical &amp; Application-level (Secondary)</li> <li>• Sending secondary students to postsecondary for coursework</li> <li>• Compare CTE enrollment to overall school enrollment</li> <li>• Pathway Advisory meetings/feedback</li> <li>• Student Interest</li> <li>• Analysis of IPS activities</li> <li>• Available clinical/training site placements available in local area (healthcare program)</li> <li>• Demand and proper faculty/student ratios required for external healthcare program accreditation.</li> </ul>	<ul style="list-style-type: none"> <li>• Some schools don't have a specific measure or don't address/monitor program size</li> <li>• Small, rural schools have enrollment limitations (i.e. not enough students to meet size demands of industry)</li> <li>• Many comments relate "size" to school issues (i.e. class size, teacher/pupil ratio, student interest), rather than the Perkins definition of "size" as having an "appropriate number of students in order to be effective <b>and</b> meet local business and industry demand". Additional training on the meaning of "program size" may be beneficial as it relates to meeting business/industry needs.</li> <li>• Postsecondary Health Programs: Clinical sites for student training dictates enrollment numbers, so expansion is difficult.</li> <li>• Limited capital funding to assist with necessary facility expansion.</li> </ul>
<p><b>Relate to real-world work environment (Scope)</b></p>	<ul style="list-style-type: none"> <li>• Advisory Committee feedback</li> <li>• Business/Industry feedback, including Business Roundtables</li> <li>• Collaboration with Community</li> <li>• Consult with Professionals and postsecondary students</li> <li>• Project-Based Learning Activities</li> <li>• Students complete work for others outside the classroom</li> <li>• CTE pathways follow Kansas State Standards</li> <li>• Skill sets taught in technical/application level courses align with real-world work environments</li> <li>• Utilize walk-through, evaluation data, teacher lesson plans</li> <li>• Curriculum mapping and meeting with Pathway Advisors</li> <li>• Internships, OJT, Certifications, Volunteer work outside of school day</li> <li>• Industry standards and Accreditation standards</li> <li>• Faculty current in field.</li> </ul>	<ul style="list-style-type: none"> <li>• Some schools are still offering traditional programs.</li> <li>• Adequate funding to stay current with technology and equipment advances in industry</li> </ul>



Question	Answer	Areas for Improvement
<p><b>Help students advance to future education (Scope)</b></p>	<ul style="list-style-type: none"> <li>• Completer/Follow-Up Questionnaire</li> <li>• Offer real-world skills necessary for students to advance to future education/career</li> <li>• Pathway Analysis</li> <li>• Students/employers report back readiness of the students</li> <li>• Certifications</li> <li>• College Enrollment, Students completing post-secondary curriculum</li> <li>• Communication with postsecondary schools</li> <li>• Conversations with graduates</li> <li>• Success/Effectiveness Rating from KSDE</li> <li>• Student meetings with Academic Advisors</li> <li>• Data from Student Services Transition Specialist and Institutional Research</li> </ul>	<ul style="list-style-type: none"> <li>• Some schools struggle with Follow-Up data (finding students &amp; getting responses) to know if students advanced to future education.</li> </ul>
<p><b>Are of high quality</b></p>	<ul style="list-style-type: none"> <li>• Rubric is utilized</li> <li>• Students meeting/exceeding competencies</li> <li>• Students passing end of course and pathway assessments, obtaining credentials, certifications.</li> <li>• Student obtaining employment.</li> <li>• Feedback from Business/Industry, including Business Roundtables. Employer surveys.</li> <li>• Feedback from Advisory Committee, Pathway Committee</li> <li>• Feedback from students &amp; teachers. Graduate surveys.</li> <li>• Instructors review pathways &amp; KSDE updates annually</li> <li>• Comparing course outlines to state standards</li> <li>• Generating a list of soft skills taught in CTE programs</li> <li>• Supervision of instruction &amp; programs.</li> <li>• ACT WorkKeys data</li> <li>• Students who are successful in postsecondary and/or career</li> <li>• Instructors attending workshops to stay relevant</li> <li>• Having teachers skills in their area of study</li> <li>• Providing students with tools &amp; equipment similar to those used in the real world to ensure workplace standards are met.</li> <li>• Accreditation</li> </ul>	
<p><b>Should be offered in the region</b></p>	<ul style="list-style-type: none"> <li>• Advisory Committee Feedback.</li> <li>• Consultation with local Business/Industry. Business Roundtables.</li> <li>• Reviewing Job Ads and State Reports. Review of Labor Market Data.</li> </ul>	<ul style="list-style-type: none"> <li>• Some schools may not have determining factors in place.</li> <li>• Facility and equipment limitations inhibit additional and advanced educational offerings.</li> </ul>

Question	Answer	Areas for Improvement
	<ul style="list-style-type: none"> <li>• Teacher Experience. Available Personnel.</li> <li>• Student Interest. Data from Career Cruising/Xello, IPS.</li> <li>• Student enrollment numbers.</li> <li>• Facility space available to support program.</li> <li>• Consultation with Administration.</li> <li>• Consultation with local community/technical college.</li> <li>• Consultation with other area districts to see if there are opportunities to share students/programs.</li> <li>• Small schools try to maximize resources by offering pathways that lead to multiple careers (example: teaching welding in the Power, Structural, Technical pathway).</li> <li>• Schools ability to offer the program.</li> </ul>	

## STEP 3: Analysis of Programs

### Part 2: Progress toward Implementing Programs of Study

#### Perkins V Section 134(c)(2)(C)

*The local needs assessment shall include*

*(C) An evaluation of progress toward the implementation of career and technical education programs and programs of study.*

What Information Should Locals Collect: Progress towards Implementing CTE Programs/Programs of Study	
<b>What does the law say?</b> The needs assessment will include an evaluation of progress toward the implementation of CTE programs and programs of study.	<b>What does the law mean?</b> This evaluation should be both a backward and forward-looking review of the programs and programs of study offered. In addition to meeting the size, scope and quality, this requirement addresses current and future plans to support the implementation of programs and programs of study.

#### Federal Definition:

##### Perkins V Sec. 2(41)

##### Program Of Study:

The term ‘program of study’ means a coordinated, nonduplicative sequence of academic and technical content at the secondary and postsecondary level that—

- (A) incorporates challenging state academic standards, including those adopted by a State under section 1111(b)(1) of the Elementary and Secondary Education Act of 1965;
- (B) addresses both academic and technical knowledge and skills, including employability skills;
- (C) is aligned with the needs of industries in the economy of the State, region, Tribal community, or local area;
- (D) progresses in specificity (beginning with all aspects of an industry or career cluster and leading to more occupation-specific instruction);
- (E) has multiple entry and exit points that incorporate credentialing; and
- (F) culminates in the attainment of a recognized postsecondary credential.

**Complete the table on the next page. Add rows as needed.**

## How do schools and colleges in the region implement programs of study?

Implementation Process	Strengths	Needs/Gaps
<ul style="list-style-type: none"> <li>• Have students complete Career Interest Inventory.</li> <li>• Discuss internally, form committee and involve administration in process.</li> <li>• Conduct Needs Assessment.</li> <li>• Review enrollment needs.</li> <li>• Review required/approved courses for program. Develop Curriculum Framework.</li> <li>• Determine courses relevant to local industry &amp; business needs. Review Employment Outlook.</li> <li>• Seek Advisory Committee input when setting goals for pathway.</li> <li>• Ensure teacher availability and/or hire teacher.</li> <li>• Review training &amp; equipment needs to offer program. Send teachers to CTE workshops.</li> <li>• Create Articulation Agreements.</li> <li>• Create Program of Study.</li> <li>• Periodically review to ensure Program of Study is still relevant.</li> <li>• Ensure offerings fit into MATC's Mission.</li> <li>• Seek Advisory Committee input when setting goals for, and developing pathway.</li> <li>• Program Reviews and approval process               <ul style="list-style-type: none"> <li>a. Review market data &amp; outreach from community</li> <li>b. Review upcoming community needs</li> <li>c. Program approval through internal governance committee structure, Board of Directors and KBOR</li> <li>d. Program Accreditation approval through HLC and any third party required accreditations, and Federal Government if seeing Financial Aid eligible status</li> </ul> </li> </ul>	<p>Collectively, the region has identified many worthwhile steps taken to implement a program of study. Few schools may be following all of the steps listed. Process could be shared amongst region as a Best Practice.</p>	<p>Some schools report creating a program of study based on courses already offered (i.e. out of simplicity).</p>

## STEP 3: Analysis of Programs

### Part 3: Recruitment, Retention and Training of CTE Educators

#### Perkins V Section 134(c)(2)(D)

*The local needs assessment shall include...*

*(D) A description of how the eligible recipient will improve recruitment, retention, and training of career and technical education teachers, faculty, specialized instructional support personnel, paraprofessionals, and career guidance and academic counselors, including individuals in groups underrepresented in such professions.*

#### What Information Should Locals Collect: Recruitment, Retention and Training of Faculty and Staff

##### What does the law say?

The needs assessment will include a description of how the eligible recipient will improve recruitment, retention, and training of CTE teachers, faculty, specialized instructional support personnel, paraprofessionals, and career guidance and academic counselors, including individuals in groups underrepresented in such professions.

##### What does the law mean?

Eligible recipients must evaluate their current and future recruitment, retention and professional development needs. This may require analysis of teacher or other professional shortage.

Complete the table on the next page. Add rows as needed.

## How do schools and colleges in the region recruit, retain and train CTE educators?

Process	Strengths	Needs/Gaps
<ul style="list-style-type: none"> <li>• Advertise, institutional webpages and other faculty job boards.</li> <li>• Utilize Kansasteachingjobs.com</li> <li>• Attend College &amp; Career Fairs</li> <li>• Seek candidates from industry, provide them with avenues to pursue certifications.</li> <li>• Send emails to Advisory Board to announce the openings.</li> <li>• Interview</li> <li>• Provide Professional Development</li> <li>• Work with postsecondary schools</li> </ul>	<ul style="list-style-type: none"> <li>• Utilize multiple strategies to advertise positions.</li> <li>• Network with resources who may know of a candidate (postsecondary schools, Advisory Committee members, etc.)</li> <li>• Provide new hires training/PD necessary to meet any gaps.</li> <li>• Benefits (i.e. paid time off, insurance, retirement, etc.)</li> <li>• Strong partnerships with secondary institutions and business &amp; industry</li> </ul>	<ul style="list-style-type: none"> <li>• Difficult to recruit new teachers to rural area.</li> <li>• Industry pays better than schools can offer. Hard to provide a competitive salary.</li> <li>• Teacher shortage for all content areas.</li> <li>• Some schools do not have a process in place, aside from traditional application/hiring process.</li> <li>• Lack ability to offer incentives to teachers.</li> <li>• Additional staff could provide additional support to faculty</li> </ul>

## STEP 3: Analysis of Programs

### Part 4: Progress toward Improving Access and Equity

#### Perkins Section 134(c)(2)(E)

*The local needs assessment shall include...*

*(E) A description of progress toward implementation of equal access to high-quality career and technical education courses and programs of study for all students, including—*

*(i) strategies to overcome barriers that result in lower rates of access to, or performance gaps in, the courses and programs for special populations;*

*(ii) providing programs that are designed to enable special populations to meet the local levels of performance; and*

*(iii) providing activities to prepare special populations for high-skill, high-wage, or in-demand industry sectors or occupations in competitive, integrated settings that will lead to self-sufficiency.*

#### What Information Should Locals Collect: Progress Towards Improving Access & Equity

##### What does the law say?

The needs assessment shall include a description of:

- Progress toward implementation of equal access to high-quality CTE courses and programs of study, for all students including strategies to overcome barriers that result in lower rates of access to, or performance gaps in, the courses and programs for special populations;
- How they are providing programs that are designed to enable special populations to meet the local levels of performance; and
- How they are providing activities to prepare special populations for high-skill, high-wage, or in-demand industry sectors or occupations in competitive, integrated settings that will lead to self-sufficiency.

##### What does the law mean?

This requirement is focused on supports for special populations. States assist locals in directing resources or supports to close performance gaps and remove barriers and to provide supports necessary to address different barriers and different populations.

#### Perkins V Sec. 2(48)

SPECIAL POPULATIONS.-- The term “special populations” means--

(A) individuals with disabilities;

(B) individuals from economically disadvantaged families, including low-income youth and adults;

(C) individuals preparing for non-traditional fields;

(D) single parents, including single pregnant women;

(E) out-of-workforce individuals;

(F) English learners;

(G) homeless individuals described in section 725 of the McKinney-Vento Homeless Assistance Act (42 U.S.C. 11434a);

(H) youth who are in, or have aged out of, the foster care system; and

(I) youth with a parent who—

(i) is a member of the armed forces (as such term is defined in section 101(a)(4) of title 10, United States Code); and

(ii) is on active duty (as such term is defined in section 101(d)(1) of such title.

Complete the table on the following page. Add rows as needed.

## How do schools and colleges ensure access and equity for all students, especially special populations?

Strengths	Gaps	Strategies for Improvement
<p><u>Individuals with Disabilities:</u></p> <ul style="list-style-type: none"> <li>• Secondary CTE teachers participate in IEP &amp; Section 504 meetings and implement accommodations.</li> <li>• Postsecondary provides accommodations.</li> <li>• Institutions have an ADA Coordinator position.</li> <li>• Accommodation Specialist coordinates necessary accommodations</li> <li>• Canvas LMS W3C compliant – built in accessibility checkers that flag issues</li> </ul>	<ul style="list-style-type: none"> <li>• Postsecondary – students have to self-report disabilities. School may not be aware of students to meet needs.</li> <li>• Videos – ensuring appropriately accessible with closed captions</li> <li>• PDFs – accessible with screen readers</li> </ul>	<ul style="list-style-type: none"> <li>• Attend training and focus on Non Traditional and Special Populations.</li> <li>• Track numbers and analyze areas where growth is needed.</li> <li>• In process of ensuring all content is accessible</li> </ul>
<p><u>Individuals from Economically Disadvantaged Families:</u></p> <ul style="list-style-type: none"> <li>• Continue to work to lower cost of concurrent course work and promote Excel in CTE courses.</li> <li>• Financial Assistance – VA, WIOA, Heartland Works, KPOP, scholarships offered</li> <li>• Professional closet to provide needed interview/business attire</li> <li>• Food Pantry available to aid those with limited access to sustenance</li> </ul>	<ul style="list-style-type: none"> <li>• No childcare provided</li> <li>• Minimal evening course offerings</li> </ul> <p>Nothing specific to single parents</p>	



Strengths	Gaps	Strategies for Improvement
<p><u>Individuals preparing for Non-traditional Fields:</u></p> <ul style="list-style-type: none"> <li>• Non-trad reps are included on advisory committees, speak with students</li> <li>• Actively encourage Non-Trad to work as representatives for recruiting fairs and enrollment.</li> <li>• Recruitment materials/strategies</li> <li>• Marketing targets non-traditional students</li> <li>• Sponsoring local schools</li> </ul>		
<p><u>Single parents, including single pregnant women:</u></p> <ul style="list-style-type: none"> <li>• Secondary exploring early childhood programs at new high school with in-house day care at Junction City High School</li> </ul>	<ul style="list-style-type: none"> <li>• Providing low cost child care onsite</li> </ul>	
<p><u>Out-of-work individuals:</u></p> <ul style="list-style-type: none"> <li>• Postsecondary offers variety of program lengths &amp; times (1/2 day, full day, etc.). Out of work individuals can complete short term program and be ready to enter high-demand career field.</li> <li>• Partnerships with business &amp; industry to provide training</li> </ul>		

Strengths	Gaps	Strategies for Improvement
<p><u>English Learners:</u></p> <ul style="list-style-type: none"> <li>• Assess new students for English Proficiency.</li> <li>• Qualify students for ELL Programs.</li> <li>• Interpret international transcripts to ensure students are provided the credits they are entitled to.</li> <li>• Employ bilingual staff to interpret/translate.</li> <li>• Adult Learning Center provides ESL courses</li> <li>• Canvas LMS allows students to change the default language</li> </ul>		
<p><u>Homeless Individuals:</u></p> <ul style="list-style-type: none"> <li>• Some schools have dedicated staff/programs to provide assistance to homeless students, including partnering with community organizations.</li> <li>• Food Pantry</li> <li>•</li> </ul>	<ul style="list-style-type: none"> <li>• It can be difficult to identify these students. Committee commented that it's common for students &amp; their families to co-habitat with extended families, which meets the definition for homeless, but may not be disclosed to school.</li> </ul>	
<p><u>Youth who are in, or have aged out of, the foster system:</u></p> <ul style="list-style-type: none"> <li>• Many schools in the region have staff dedicated to working with students in foster care.</li> <li>• Tracking required</li> <li>• AO-K, proviso, and TANFF available for students</li> </ul> <p>Tuition assistance/waivers for those in foster care, and up to age 26 for those aged out of the foster care system</p>		<ul style="list-style-type: none"> <li>•</li> </ul>

Strengths	Gaps	Strategies for Improvement
<p><u>Youth with a parent who is a member of the armed forces and is on active duty:</u></p> <p>Postsecondary institutions have staff dedicated to meeting the needs of military students (example: Washburn Center for Student Success Office of Military Student Success). Student Veterans Association student organization available</p>	<p><u>Youth with a parent who is a member of the armed forces and is on active duty:</u></p> <ul style="list-style-type: none"> <li>This special populations category is new for Perkins V. Committee did not have data/strategies to address this population.</li> </ul>	<p><u>Youth with a parent who is a member of the armed forces and is on active duty:</u></p> <ul style="list-style-type: none"> <li>It appears that schools may need additional training on how to meet the needs of this special populations category.</li> </ul>