



COMPREHENSIVE REGIONAL NEEDS ASSESSMENT

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

Due Date: February 1, 2020

Regional Team Coordinators:

	Name	Institution/School	Phone	Email
USD(s)	Renae Gardner	Colby Public Schools/ USD 315		rgardner@colbyeagles.org
Postsecondary Institution(s)	Christine Ellison	Colby Community College		chriss.ellison@colbycc.edu

Date: November 7, 2019

Regional Team: Colby/Goodland Workforce 1 Region

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

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)

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.

Regional Team Name: <u>Colby/ Goodland Workforce Region 1 Needs Assessment Team</u>		Date: <u>November 7, 2019</u>
Needs Assessment Lead Co-Coordinator:		Contact Information:
Secondary: Renae Gardner		rgardner@colbyeagles.org
Postsecondary: Christine Ellison		chriss.ellison@colbycc.edu

Comprehensive Regional Needs Assessment Team

Representative		Name	Institution and Position	Responsibility
C o - C o o r d i n a t o r s	Postsecondary Perkins Grant Coordinator	Christine Ellison	Colby Community College Controller	Provide communication, leadership, guidance, coordination of activities
	Secondary Perkins Grant Coordinator	Renaë Gardner	USD 315, Colby Public Schools College and Career Advocate	Provide communication, leadership and guidance
Teacher(s) - Secondary		Allison Polifka Candace Betz Jessica Leiker Kim Munk	Quinter Jr./Sr. High school computer/business teacher Quinter High school Agriculture teacher Colby Jr./Sr. Highschool STEM/CTE instructor Oakley CTE teacher	Student needs, career exploration process and preparation
Faculty - Postsecondary		Dr. Jennifer Martin, DVM	Colby Community College Director of Veterinary Nursing	Preparation for career/workforce; knowledge of necessary coursework to meet labor market needs and trends
Secondary Administration		Dr. Stephanie McNemar Toby Countryman	Colby High School Principal Quinter High School Principal	Insight on course offerings, student enrollment and needs
Postsecondary Administration		Brad Bennett Matt Pounds	Colby Community College Executive Vice President Northwest Kansas Technical College (NWKTC) Dean of Academic Advancement	Oversight for all academic and CTE programs, student enrollment, labor market trends, career placement

Specialized instructional support and paraprofessional(s)	Lisa Stithem	CCC Director of Student Support Services	Underserved students' needs
Representative(s) of Special Populations	Rev. Abby Casement	Pastor of UMC Colby & Atwood	Underserved students; special populations insight and awareness; community resources
Career Guidance and Academic Counselor(s)	Linda Nelson	CCC Director of Advising Center	Knowledge of CTE programs, career opportunities, and student needs for workforce success
Student(s)	Students participated	CCC A.D.N. Nursing Student Colby High School Health Science Student	Student needs and perspective
Community	Melanie Voss	Realtor and Business Owner	Labor market trends, employability skills, community needs
Business & Industry	Ericka Nelson Kayla Luera Brian McKinney Kyle Heineken Zach Lohr Emily Strange	Director, Gove County Economic Development NWKTC Director of Admissions and Outreach Midwest Energy Heineken Electric Lohr Electric Thomas County Health Department-health Educator	Labor market trends, employability skills, community needs
Workforce Development	Deb Scheibler/Deb Page	Kansas Workforce One	Job readiness, community resources, student needs
Parent(s)	Melanie Voss Linda Nelson	Realtor and Business Owner CCC Director of Advising Center	Be the voice of how families can be involved in the career exploration process
Other (Data Support, Admin Assistant, HR, Business Office, etc.)	Diana Wieland Angel Morrison	Colby High School Curriculum Director Colby Community College Sr. Director of Information Technology	Data Support, pathway approval, support CTE faculty with professional development, curriculum development Data Support

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>What does the law say?</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>What does the law mean?</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 above mentioned 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?

Strengths	Gaps
<p><u>Secondary: Law, Public Safety, Corrections and Security: Corrections, Security, Law and Law Enforcement Services Pathway (43.0199)</u> a high demand pathway in our region. The Kansas Department of Labor currently lists 113 job openings in corrections at the time of this assessment. According to O*Net, it is projected that there are 20 annual openings for Corrections Supervisors, 60 projected annual openings for detectives and criminal investigators (an upward trend since 2016), and 440 annual openings for Police and Sheriff Patrol officers (a 6% increase) in the state of Kansas.</p>	<p>Colby is the only secondary high school in our region that offers Corrections, Security and Law Enforcement Services. Exit points to be considered a completer in the Corrections, Security & Law Enforcement Pathway are needed. Student interest in Government and Public Administration Pathway is low.</p>
<p><u>Secondary: Education & Training: Teaching/ Training Pathway (13.0101):</u> According to the Kansas Career Navigator, Secondary School Teachers are listed as the second highest need for job openings in our local workforce region, with elementary teachers next at third, and education administrators tenth at the time of this assessment. According to the Kansas Department of Labor, there are a total of 340 current teaching positions open in Central and Western Kansas. 4 Preschool teachers, 47 Elementary school teachers, 2 Special Education Preschool teachers, 38 Special Education teachers, Kindergarten & Elementary, 13 Middle School teachers, 1 CTE Middle School opening, 35 Special Education Middle School teachers, 34 Secondary School Education teachers, 39 CTE teachers at the secondary level, and 127 Secondary Special Education teachers. The Kansas Department of Labor Projects that by the year 2026 there will be a total of 885 Teaching positions open in Central and Western Kansas.</p>	<p>Colby and Goodland are the only high schools in our Workforce region that offer Teaching and Training as a pathway. Family and Consumer Science (FACS) and Teachers for Teaching and Training Pathway are needed in our local region. Exit points to be considered a completer in Teaching and Training Pathway are needed.</p>
<p><u>Secondary: Government & Public Administration: Government and Public Administration Pathway (44.0401),</u> Jobs in this area are considered mid demand in our region. According to the Colby/Goodland Region 67 Labor Market data provided there are 38</p>	<p>Only one school in our region offers the Government and Public Administration Pathway. No concentrators reported in this pathway. Only 2% of the available jobs are being met.</p>

<p>annual openings in this field. Secondary: The communities in our Workforce one region have public offices that offer careers in Government and Public administration such as politicians, municipal clerks, postmasters, policy analysts etc. that are crucial to the viability of our communities.</p>	
<p>Secondary: Information Technology: See Appendix at end. Web & Digital Communications (11.1004) According to the data source https://kansasregents.org/CTE based on the 2016-2017 Kansas Department of Labor Long Term projection data, this field is considered to be high wage. There were 0 total openings projected, with an entry level wage of 42,320, however Projections Central labor data for Kansas indicates growth through 2026 of 33% for Computer and Information Research Scientists, 30% for Information Security Analysts, 29% for Software Developers working on Applications, and 15% for Web Developers.</p>	<p>A large number of students enroll in Web & Digital Communications with few job openings in our region to support them. No concentrators in Information Support and Services, or Network Systems reported within our region, despite the need for employment in these two areas. Projections Central is projecting declines in job openings for computer programmers of nearly 10%. The Information Services Pathways reflects a slight need for concentrators and completers. Web and Digital communication skills are often needed as a part of a skill set in small communities, as businesses often times are unable to contract for these services due to location or funding.</p>
<p>Secondary: Arts, A/V Technology & Communications: Digital Media (09.0702) Graphic Design (50.0499) According to the data source https://kansasregents.org/CTE based on the 2016-2017 Kansas Department of Labor Long Term projection data, 6 annual openings at what is considered a high wage entry level salary are projected in the field of Graphic Design, and 9 annual openings in the field of Digital Media. The Graphic Design Pathway has a large number of concentrators and completers reported, indicating a strong CTE program with high student interest. According to O*net, the projected employment for Graphic Designers in the State of Kansas is listed as 230 annual openings. Nationwide however, Graphic Designers are in high demand with projected annual openings of 30, 300, a 3% increase. In the field of digital media, O*net lists camera operators, television, video and film crews hold steady from 2016 to 2026 with 110 annual openings in the State of Kansas, and projects an 8% increase nationally in this field with projected job openings at 3, 200. Audio and film technicians project an 5% increase over the next 10 years according to O*net, with a projected 40 annual openings in Kansas.</p>	<p>Based on the data provided to the Goodland/Colby Region 6 Perkins workgroup, it appears there is an over abundance of concentrators and completers in this field for our Region. Although locally, graphic designers, and careers within the digital media field are not in high demand, stakeholder input and advisement indicate that this data could be skewed as some employees in this field can be employed by a national company and still work in our region, due to technology advances and web based solutions. Stakeholder feedback indicated small companies need employees with these competencies to fill a need within our local businesses where specialty positions are not readily available.</p>

<p><u>Secondary: Manufacturing:</u> Manufacturing (48.0000) This is considered a high wage/high demand field in our region. According to the Kansas Department of Labor Long-term Occupational projection data total annual openings are 466, with an entry level wage of 24, 614. According to Kansas Career Navigator, Industrial Machinery Mechanics are rank in the top 10 of high wage high demand professions in our local region. Some students in our region gain a portion of these skills through the Ag Mechanics program.</p>	<p>Secondary: Very low number of students in the manufacturing pathway, with only 6% of the available job needs being addressed. Less than five completer/concentrators reported for our region in 2018 in this pathway Very few secondary schools in our region offer the manufacturing pathway to date. Geographic barriers include limited locations for technical programs within the facilities. Loss of instructional time as a result, due to travel times. This has a detrimental effect on contact time in the classroom or shop/lab.</p>
<p><u>Secondary: Architecture & Construction:</u> Construction & Design (46.0000) is considered a high demand career field in our region, and can be classified as high wage with entry level salary listing of 26, 396 according to the Kansas Department of Labor Statistics. This resource also lists the annual total openings for positions in this field at 480. O*net projects a 7% increase in the state of Kansas for construction laborers, a 7% increase for construction managers, and a 10% increase in construction and building inspectors.</p>	<p>This pathway reflects a need for concentrators and completers to meet regional needs, as in 2018, 27 were reported. Our local program sizes are not meeting the demands for this high-wage field. Stakeholder input reveals a high need for employment in this area.</p>
<p><u>Secondary: Health Science:</u> Health Science (51.9999) According to the Kansas Department of Labor Long-term Occupational Projection Data for the Colby/Goodland region, Health Science can be classified as a high wage and high demand career field. In our region 576 annual openings are projected. According to Kansas Career Navigator, Registered Nurses are the number 1 high wage and high demand job in our area. The Health Science Pathway is offered by 6 school districts within our Region. Local hospitals and clinics partner with school districts within our Region for job shadowing and On-The-Job training experiences for secondary students, and are active guest speakers and career fair participants to continue to grow interest in this pathway and to create awareness about the need for employment in this field for our region. Stakeholder input emphasized a high need for mental health providers in the Western Kansas region, as currently for ex. children psychiatric inpatient services is approximately a 250 mile drive for care. Certifications such as CNA and OSHA 10 made available to students</p>	<p>The Health Science Pathway in the Colby/Goodland Region reflects a need for concentrators and completers. A consideration worth mentioning, within our region several school districts recently added the Health Science pathway and their concentrator/completer status is in the initial development stages and will potentially grow in time. The mean wage of Kansas healthcare practitioners and technical occupations is the lowest in the country, cited the Bureau of Labor Statistics, which could detract students from pursuing employment in our state.</p>

<p>through this pathway strengthen student interest and provide avenues to become a completer, as well as to meet local entry level employment needs, while continuing education in this field.</p>	
<p><u>Secondary: Marketing:</u> Marketing (52.1402) Classified by the Kansas Department of Labor as a high demand area within our region, as a projected 1, 044 annual openings are listed. O*net projects a significant percentage increase from 2016 to 2026 of +23% in the state of Kansas, allowing for 700 projected annual openings for research analysts and marketing specialists. Although Marketing positions are considered low wage, O*net projects Marketing managers to earn a median high wage, and projects a +14% increase in openings in Kansas over the next ten years.</p>	<p>Very few schools within our region offer the Marketing Pathway. Marketing concepts are included in other Business Pathways, however there is minimal ability to increase the number of concentrators/completers in this Pathway and meet the high demands of the industry with few schools offering this Pathway. Only 2% of our regional needs are currently being met within this pathway.</p>
<p><u>Secondary: Finance:</u> Business Finance (52.0801) Kansas Career Navigator lists Accountants and Auditors, as well as Financial managers among the top 10 high wage high demand needs within our region. According to the Kansas Department of Labor, Business Finance is classified as high demand, with a projected 1, 044 total openings.</p>	<p>The percentage of needs being met is 2% with the secondary cluster. This reflects a need for more concentrators/completers in this pathway. In 2018, the low number of 7 concentrators/completers were reported. Multiple entry and exit points, credentials and end of pathway assessments is a noted gap among the stakeholders in our region.</p>
<p><u>Secondary: Business Management & Administration:</u> Business Entrepreneurship & Management (52.0799) According to the data provided our region from the Kansas Department of Labor, this career field can be classified as high wage/ high demand, with projected total annual openings of 254.</p>	<p>3% of the needs in our region are currently being met. Gap needing addressed is the low number of reported concentrators and completers within this pathway to meet the demands of our local workforce.</p>
<p><u>Secondary: Engineering:</u> Cartography/Geospatial/Spatial Math (15.1102) Engineering & Applied Mathematics (14.0101) Energy (17.2071) Cartography/Geospatial/Spatial Math, Engineering & Applied Mathematics and the Energy Pathways are offered by very few secondary schools in our region, therefore reporting data is minimal. According to the Kansas Labor Market Data, these are all considered high wage occupational fields, with low demand. O*Net indicates between a +4-6% increase in projected annual openings, with Electrical Engineering Technicians (90) as well as Mechanical Engineering</p>	<p>At the Post-secondary level, often times with the increased emphasis and awareness of B.S. degrees, two year college programs, such as the Engineering Technology Program offered at NWKTC in Goodland Kansas can be overlooked. The Energy Pathway is relatively new to our region, with 0 concentrators being reported in 2018. The 2019 U.S. Energy & Employment Report indicates that the majority (56%) of Energy Efficiency employees worked at construction firms in 2018 installing or servicing Energy Efficiency goods or performing Energy Efficiency related services, and 1-5 workers in the Energy Efficiency</p>

<p>Technicians (40). Through local partnerships with NWKTC, secondary schools in our region have the option to introduce Engineering Technology to students with an interest in this profession as a junior/senior year option, advancing their degree through the CTE Excel option. The Engineering Technology Program offered at NWKTC in Goodland KS, graduates students with an AAS degree, has a 99% job placement rate, with an average salary of 61, 710 after 5 years. Through CTE Excel initiative courses within the Energy Pathway are available to HS students in our region for dual credit, with the ability to obtain certifications through this program, as well as apprenticeships for training. The 2019 US Energy & Employment Report indicates substantial and continued growth in this career field adding 659 jobs (4%) since last year. The largest number of these employees work in other energy efficiency products and services firms. The expectations for 2019 from Energy Efficiency Employers is an anticipated growth in employment of 8%.</p>	<p>sector worked in professional and business services, which may affect the job openings data provided in terms of demand in this field.</p>
<p><u>Secondary: Agricultural, Food, and Natural Resources:</u> Agribusiness Systems (01.0101) Comprehensive Agriculture Science (01.9999) Animal Science (1.0901) Biotechnology in Agriculture (26.1201) Food Products & Processing Systems (01.0401) Natural Res. & Environmental Systems (03.0101) Plant Systems (01.1101) Power, Structure & Technical Systems (01.0201) Provided in many of the secondary schools within our region, with new pathway additions to district schools this coming academic year. The Kansas Department of Labor Long-Term Occupational data classifies the Plant Systems pathway as mid wage/mid demand, with 152 annual openings, indicating a need in our local region. Although data was not specific to Agribusiness systems, a projected 113 total openings was cited by the Kansas Department of Labor. High wage classifications were assigned to the Food Products & Processing Systems, Power Structural, & Technical as well as the Natural Res. & Environmental Pathways. A high demand was also cited by the Kansas Department of</p>	<p>Secondary schools have difficulty finding and retaining teachers for courses within the pathways of the Agricultural, Food, and Natural Resources field. Outdated equipment and lack of funding to make upgrades to meet industry standards hinders student development in courses within the Agriculture, Food and Natural Resources field. Scheduling conflicts in smaller secondary schools in our region requires the schools to offer courses in rotations which can hinder enrollment numbers within the pathway as well. The needs in this field are not accurately represented in the provided as they are listed in different categories. The Power, Structure and Technical Systems pathway (CIP 01.02.01) fulfills many of the Manufacturing needs, yet is not given credit for this. (e.g. welding, 48.0508) Secondary and postsecondary schools may not always be aware of the labor market needs within the Agricultural, Food, and Natural Resources Pathway due to lack of reporting of available jobs within the region. Oftentimes, position openings are found by word-of-mouth. A gap is noted in the Animal Science Pathway, as only 1% of the local needs are being met, indicating a need for more completers and concentrators in this area. The same is noted for the Food Products & Processing systems as 0% of</p>

<p>Labor within the Animal Science Pathway. According to the Kansas Career Navigator, Farmers, Ranchers and other Agricultural Managers are among the top 10 (6th) of the high wage, high demand occupations in our region. According to O*net, there is a bright outlook for careers in the following; Farm labor contractors, Animal Scientists, Nonfarm Animal Caretakers, Environmental Engineering Technicians, Environmental Science and Protection Technicians including Health; Hazardous Materials Removal Workers, Pest Control workers, Reuse and Recyclable Materials Collectors, Geological and Petroleum Technicians, Biological Technicians, Soil and Plant Scientists, Tree Trimmers and Pruners and Agriculture Equipment Operators. O*Net Online also projects an increase demand for careers in the following areas of Agriculture; Buyers and Purchasing agents, Farm products, Farm and Ranch Managers, Environmental Engineering Technicians; Environmental Engineers; Environmental Science and Protection Technicians, Including Health; Hazardous Materials Removal Workers; Refuse and Recyclable Materials Collectors; Water/Wastewater Engineers, Agricultural Technicians, First-Line Supervisors of Agricultural Crop and Horticultural Workers, First-Line Supervisors of Logging Workers, Forest and Conservation Technicians; Forest and Conservation Workers; Geological Sample Test Technicians; Geophysical Data Technicians; Natural Sciences Managers; Water Resource Specialists; Zoologists and Wildlife Biologists Plant Systems - Soil and Plant Scientists</p>	<p>the current needs are being met. There is an overabundance of concentrators and completers in the Power, Structure & Technical as reported in 2018. Regional stakeholder feedback indicated that power, structure & technical skill sets are needed within many of the local agriculture jobs in our region. Our region identifies a gap in the manner in which only one pathway can be reported to KSDE in CTE pathways, most agriculture students could be, or have obtained concentrator/completer status in two or more areas.</p>
<p><u>Secondary: Hospitality & Tourism:</u> Restaurant & Event Management (12.0504) Travel & Tourism (52.0901) Both of these pathways have a large number of annual projected openings according to the Kansas Department of Labor Data provided for our region. 1,002 annual openings in Restaurant & Event Management, and 312 annual openings in Travel and Tourism. These Pathways are both classified as high demand fields.</p>	<p>Within our region, a need is reflected for concentrators/completers in the Restaurant & Event Management as well as the Travel & Tourism pathways, however occupations within this field are classified as low wage. According to the data provided to our local region at this time only 1% of the needs are being met within the Restaurant & Event Management, and 2% within the Travel & Tourism. It was noted by Workforce Development personnel and stakeholder members that this field has a lot of turnover, due to a starting low wage.</p>

<p>Secondary: Human Services: Early Childhood Development & Services (19.0709) Family, Community & Consumer Services (19.0799) Pathways within the Human Services Cluster are considered mid to high demand areas, with projected openings in our region of 55 in Early Childhood & Development Services, as well as 198 annual openings in Family, Community & Consumer Services according to the Kansas Department of Labor Long-term Occupational Projection data. O*Net projects a +10% increase in the need for Pre-School teachers with projected annual openings of 270 in the State of Kansas, and a +8% increase in the need for childcare workers with annual openings estimated at 1,630.</p>	<p>The Early Childhood Pathway indicates a gap in the number of concentrators and completers in our region; 8-9% of the needs are being met in the Human Services area at this time. FACS teachers are needed in our region. End of the Pathway assessments and certifications are limited. With the emphasis by the Kansas State Board of Education on Kindergarten Readiness, there is a high gap in training for daycare and preschool providers. Colby Grade School teachers (stakeholder) report an increase over the past 4 years from 4% to 20% of children entering Kindergarten without having access to, or participating in preschool opportunities. Our local regional needs assessment team identified a lack of childcare steadily increasing within our communities.</p>
<p>Postsecondary Program: 52.0201 Business Management and Administration, 52.0305, Accounting Management, and 52.0401 Business Technology: comprises the courses for the business program. The Business department has a very strong and active advisory board comprised of a retired business faculty member, several local business owners as well as several other business people with strong ties to the local, regional, and state areas. Business faculty attend professional development at least once per academic year and sometimes twice a year. Members of The Kansas Board of Regents (KBOR) Labor Data for Needs Assessment (https://kansasregents.org/CTE) for the Colby and Goodland Workforce Center Region identifies business as a program with large numbers of total job openings and that these programs were excluded from the graphic representation. This program will be discussed with regional stakeholders.</p>	<p>The College has incurred challenges with faculty turnover in the business department which has impacted student enrollment. The college administration, as well as the current business faculty, are analyzing this situation. There are such astringent qualified teaching requirements by the Higher Learning Commission, it is very difficult to find an individual in Northwest Kansas who is qualified to teach in the department.</p>
<p>Postsecondary Program: 47.0701 used to be classified as 14.9999 Other Engineering. This program offers an Associate in Applied Science (AAS) in Sustainable/Renewable Energy along with two technical certificates, Solar Photovoltaic (C.I.P.15.0505) and Small Wind Technology</p>	<p>These three programs (AAS and two certificates) have experienced significant enrollment growth of 300% over the past three years. With this growth, comes the constant need for additional tangible supplies and equipment. The program also relies on employers/energy specialists to be actively involved with the boot camps, which provide hands-on</p>

<p>(C.I.P. 15.1704). Employment of wind turbine service technicians is projected to grow 57% from 2018 to 2028, much faster than the average for all occupations. Because wind electricity generation is expected to grow rapidly over the coming decade, additional technicians will be needed to install and maintain new turbines. Job prospects are expected to be excellent. According to the Bureau of Labor Statistics, the median annual wage for wind turbine technicians was \$54,370 in May 2018. These programs are not listed on the KBOR Labor Data for Needs Assessment for Colby and Goodland Workforce Center Region (https://kansasregents.org/CTE) but have qualified for Carl Perkins funding for the past few years.</p>	<p>learning experiences. This program depends heavily on grant funding because of the need for additional equipment, some of which is very costly.</p>
<p>Postsecondary Program: 51.3801 Registered Nursing (Associate Degree in Nursing or A.D.N.): Reflects a high wage and high demand on the KBOR Labor Data for Needs Assessment for Colby and Goodland Workforce Center Region (https://kansasregents.org/CTE). The information states that we had 54 students for only 26 state wide openings. The Nursing program director believes that there were many more opening than this number reflects. Our job placement for registered nurses is 98%-100% and most of them find employment in western Kansas. Students who enroll in the registered nursing program must have their practical nursing license (L.P.N.) to be considered.</p>	<p>The CCC Nursing department hires instructors with master's degrees and bachelor degrees. Due to the Colby Community College Master Agreement it is difficult for instructor salaries to compete with workforce salaries, it is difficult to maintain long-term employment with the nursing faculty. CCC has expanded partnerships with area hospitals in an effort to improve wages and flexibility between the entities. With medical related programs, new technology in equipment and resources is a constant need so the students can be workforce ready.</p>
<p>Postsecondary Program: C.I.P.51.3901 Licensed Practical Nursing (L.P.N.): Reflects a low demand but medium to high wage on the KBOR Labor Data for Needs Assessment for Colby and Goodland Workforce Center Region(https://kansasregents.org/CTE). This labor data information states that there were only 26 openings in the state for the 54 students in the college program. Many students complete the practical nursing program to enter the Associate Degree in Nursing program. 47 practical nurses applied to the A.D.N. program but only 27 met the criteria. The Bureau of Labor Statistics (https://www.bls.gov/ooh/healthcare/licensed-practical-and-licensed-vocational-nurses.htm) states that employment of licensed practical and licensed vocational nurses is projected to grow 12% from 2018 to 2028.</p>	<p>The Nursing department hires instructors with master's degrees and bachelor degrees. Because instructor salaries cannot complete with workforce salaries, it is difficult to maintain long-term employment with the Nursing faculty. There has been relatively high turnover with the nursing faculty. The college administration is evaluating all root causes. With medical related programs, new technology in equipment and resources is a constant need so the students can be workforce ready.</p>

<p>As the baby-boom population ages, the overall need for healthcare services is expected to increase. LPNs will be needed in residential care facilities and in home health environments to care for older patients. The Bureau of Labor Statistics listed the median annual wage for licensed practical and licensed vocational nurses was \$46,240 in May 2018. Our job placement rate is 98% to 100%. L.P.N.s are a quick, cost-effective solution to meet the need for nurses in the U.S.</p>	
<p><u>Postsecondary Program: C.I.P. 51.0801 Medical Assistant:</u></p> <p>Entry level wages reflect \$23,021 with 15 openings in Colby and Goodland Workforce Center Region. Use this link to view complete data: (https://kansasregents.org/CTE).</p> <p>Employment of medical assistants is projected to grow 23 percent from 2018 to 2028, much faster than the average for all occupations. The growth of the aging baby-boom population will continue to increase demand for preventive medical services, which are often provided by physicians. As a result, physicians will hire more assistants to perform routine administrative and clinical duties, allowing the physicians to see more patients.</p> <p>An increasing number of group practices, clinics, and other healthcare facilities will also need support workers, particularly medical assistants, to complete both administrative and clinical duties. Medical assistants work mostly in primary care, a steadily growing sector of the healthcare industry.</p> <p>https://www.bls.gov/ooh/healthcare/medical-assistants.htm#tab-6</p>	<p>The Medical Assistant program enrollment remains positive, instructor remains the same for consistency with MAERB standards, yet we do see a lack of consistency with third-party testing passage rates. Enrollment trends show an influx of out-of-state student-athletes some bring with them a focus on athletics and transitioning on to the universities.</p>
<p><u>Postsecondary Program: C.I.P. 01.0104, Beef and Farm/Farm and Ranch Management:</u></p> <p>Reflects a low wage but high demand on the KBOR Labor Data for Needs Assessment for Colby and Goodland Workforce Center Region</p>	<p>A lack of indoor facilities and bigger barns are gaps for growing the Beef/Farm and Ranch Management programs.</p>

(<https://kansasregents.org/CTE>). In the November 13, 2019 PowerPoint slides from the Kansas State Department of Education, beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming is in the top ten for employment in Kansas. The beef cattle ranching and farming industry has an employment of 42,801 and contributes \$8.3 billion to the Kansas economy. Agriculture and agriculture related industries support 245,539 jobs or 12.7% of the entire workforce in Kansas. The Beef program director stays current with the workforce with her strong advisory board.

Postsecondary Program: 01.0307 Horse Husbandry/Equine Science and Management:

Reflects a low wage but high demand on the KBOR Labor Data for Needs Assessment for Colby and Goodland Workforce Center Region. <https://kansasregents.org/CTE>). As referenced in the Kansas AgGrowth from the Kansas agriculture.ks.gov/docs/default-source/ag-growth-summit/January-2018-documents/equine-sector.pdf., no data exists in the state today to identify the number of horses. However, horses remain an important part of the animal industry in Kansas. Horses serve many purposes from pleasure to work. The Kansas horse industry is a vast industry representing many different types and uses of horses. Kansas has a long-standing history with horses, as they were a major component of the cattle ranching infrastructure in the state. In an economic analysis, Kansas equine sales have a total direct output of approximately \$16.4 million and support 100 jobs in the state. With the addition of horse stables and training, horse breeding, horse shows, horse feeding, farriers, veterinarians and pharmaceutical use and other industry sectors, the economic contributions to the Kansas economy greatly shadows that of just equine sales alone. Some of the strengths of the current Equine program are the excellent hands-on experiences in managing a large horse operation. The students' experiences range from first aid/nutrition to foal/reproductions to business/instructing lessons to training horses. The college's program is unique with such diverse learning opportunities. The advisory board provides guidance with internships and employment skills and opportunities. The board has also provided

There are several critical/pertinent areas of the equine industry that is currently lacking in the curriculum. Discussions are underway about starting courses in riding therapies and therapies for horses (massage). Another weakness is the facilities or lack of facilities. There are very limited indoor areas for training and working with horses. The foaling areas have been improved and cameras installed this year with Carl Perkins IV funding. Kansas weather is unpredictable and can inhibit learning activities. An indoor arena would benefit the Equine program as well as the Beef and Farm and Ranch Management. The lack of facilities prevents an increase in student enrollment.

<p>support and assistance with the implementation of course revisions/curriculum adjustments. They provide exit interviews with the graduating students. Their input allows the program director to know if the program is meeting the needs for the workforce.</p>	
<p>Postsecondary Program: 51.0806 Physical Therapy Assistant (P.T.A.): Reflects low demand but high wage on the KBOR Labor Data for Needs Assessment for Colby and Goodland Workforce Center Region (https://kansasregents.org/CTE). However, according to the Bureau of Labor Statistics (https://www.bls.gov/ooh/healthcare/physical-therapist-assistants-and-aides.htm), overall employment of physical therapist assistants is projected to grow 26 percent from 2018 to 2028, much faster than the average for all occupations. Demand for physical therapy is expected to increase in response to the healthcare needs of an older population and individuals with chronic conditions, such as diabetes and obesity. Some program graduates seek full-time employment while others may only want part-time employment. The Colby Community College P.T.A. program meets the labor market needs locally, regionally, and nationally. The program has an excellent reputation for the quality of the program graduate. (See Size & scope for additional information on program & students). The P.T.A. program is accredited through the Commission on Accreditation in Physical Therapy Education (CAPTE).</p>	<p>The Physical Therapy Assistant (P.T.A.) program has very few gaps or weaknesses. The accreditation agency monitoring the P.T.A. programs is the Commission on Accreditation in Physical Therapy Education. Student applications come from all over the United States because of the excellent reputation of this program. For the graduation class of 2018, 70% of the graduates had employment upon graduating. Because of the hours required by students for licensure, the P.T.A. program starts in August and ends in August of the following year. By the end of August, 91% of the students had successfully passed their board examinations. Students graduate with their other classmates in May but do not actually complete the program until August of the same year. Student have up to two years to retake the licensing examination if they fail on the first attempt. The college subscribes to the Federation of State Boards in Physical Therapy which tracks students who have taken their licensing exams. This agency provides reports to the college on students who have taken their board exams every six months, annually, and four years. Students who do not pass the licensing exam on the first try will have to pay a fee of \$650 for any future tests. It could be prohibitive for some students and students may have to work at a different profession to earn the money for the P.T.A. licensing exam.</p>
<p>Postsecondary Program: 51.0808 Veterinary Health Technician (Veterinary Nursing): Reflects low wage and low demand on the KBOR Labor Data for Needs Assessment for Colby and Goodland Workforce Center Region (https://kansasregents.org/CTE). However, based on the Bureau of Labor Statistics (https://www.bls.gov/ooh/healthcare/veterinary-technologists-and-technicians.htm), the Employment of veterinary technologists and technicians is projected to grow 19% from 2018 to 2028. The Bureau of Labor Statistics lists the median pay at \$34,420 per year or \$16.55 per hour.</p>	<p>The Veterinary Nursing program is offered in two formats, on-campus and distance learning. One of the frustrations is that salaries are low in rural Kansas and higher in larger urban areas (Topeka, Wichita, etc.) The eastern part of Kansas pays better as well as other states so this limits how many students want to stay in a rural area. Salaries are usually higher outside of Kansas as the average starting salary of the distance learning students who live out of state, are higher than that of on-campus students who are mostly from Kansas. Kansas veterinarians would like the on-campus program to be larger and be able to graduate more students. Due to space limitations, the on-campus enrollment numbers cannot be increased. However, the distance learning students</p>

	<p>are known for their skills and being work-ready when they graduate. These students are required to work with veterinary hospitals to complete the hands-on skills required by the American Veterinary Medical Association. The program does offer on-campus weekend mentorships one time during the fall to assist students who may not have access to certain animal species in their geographical area. With all medical related programs, new technology in equipment and resources requires significant funding every year. CCC's program director does an excellent job with some older outdated equipment but relies on grant funding to ensure the students are workforce ready.</p>
<p>Postsecondary Programs: C.I.P. 47.0603 Automotive Collision and Repair, C.I.P. 47.0604 Automotive Technology, and C.I.P. 47.0605 Diesel Technology:</p> <p>Reflects a low wage but high demand on the KBOR Labor Data for Needs Assessment for Colby and Goodland Workforce Center Region. https://kansasregents.org/CTE). Programs vary according to data: Collision & Repair - 9 openings with entry level wage \$28,194 Auto Tech - 64 openings with entry level wage \$29,047 Diesel Technology - 83 openings with entry level wage \$28,236</p> <p>Newly released Collision Repair Education Foundation and I-CAR research polling more than 675 shops validates the ASE's Foundation's plan. It confirms employers can live with entry-level techs trained to do a few things well.</p> <p>Employment of automotive service technicians and mechanics is projected to show little or no change from 2018 to 2028.</p> <p>The number of vehicles in use is expected to continue to rise. More entry-level service technicians will be needed to perform basic maintenance and repair, such as replacing brake pads and changing oil, on these vehicles. New technologies, however, such as electric vehicles, may limit future demand for automotive service technicians and</p>	<p>The automotive collision and repair program has one instructor for a two-year program, instructor in this combined position for second year. As a result of a diverse curriculum we continue to work towards re-accreditation with (ASE) Automotive Service Excellence. Technicians learn on live work ranging from restoration to collision and repair on newer cars. Enrollment trends show ongoing low enrollment, as a result the institution is looking at junior-senior option along with investigating the pros and cons of a one-year program.</p> <p>The Automotive Technology program has two instructors for a two-year program, one instructor in the position for 20+ years and the other for at least a handful of years. As a result, the program meets (ASE) accreditation requirements. Technicians learn on live work ranging from maintenance, overhauling engines, and transmission repair. Enrollment is low, instructors targeting a large high school in western Kansas along with investigating junior-senior option to attract more students to the profession.</p> <p>The Diesel Technology program has 3 instructors for a two-year program plus a parts man to help with live work projects. All three instructors are former graduates of the program. This program continues to be (ASE) Automotive Service Excellence accredited. Technicians learn on live work ranging from tractors to semis. Enrollment trends show consistency with strong enrollment, retention rates remain high. Space along with access to funding to bring in the best of industry standards is considered as limitations to enrollment growth.</p>

mechanics because these vehicles will be more reliable and thus require less frequent maintenance and repair.

<https://www.bls.gov/ooh/installation-maintenance-and-repair/automotive-service-technicians-and-mechanics.htm#tab-6>

Although most diesel service technicians and mechanics learn on the job after a high school education, employers are increasingly preferring applicants who have completed post secondary training programs in diesel engine repair. In addition, industry certification may be important.

Employment of diesel service technicians and mechanics is projected to grow 5 percent from 2018 to 2028, about as fast as the average for all occupations.

As more freight is shipped across the country, additional diesel-powered trucks will be needed to carry freight wherever trains and pipelines are not available or economical. In addition, diesel cars and light trucks are becoming more popular, and more diesel technicians will be needed to maintain and repair these vehicles.

<https://www.bls.gov/ooh/installation-maintenance-and-repair/diesel-service-technicians-and-mechanics.htm#tab-6>

Postsecondary Program: C.I.P. 46.0201 Carpentry

Entry level wages reflect \$34.706 with 69 openings in Colby and Goodland Workforce Center Region. Use this link to view complete data: (<https://kansasregents.org/CTE>).

The carpentry program has 1 instructor for a two-year program utilizing (KBOR) Kansas Board of Regents’s alignment guide for Carpentry. Students learn and apply their skills while working on a new housing project. NCCER curriculum implemented in support of industry standards. Enrollment includes full-time and on occasion a junior-senior option student, yet trends continue to reflect low numbers.

<p>Employment of carpenters is projected to grow 8 percent from 2018 to 2028, faster than the average for all occupations. Population growth should result in more new-home construction—one of the largest segment employing carpenters—which will require many new workers. The construction of factories and power plants is also expected to result in some new job opportunities in the next ten years.</p> <p>https://www.bls.gov/ooh/construction-and-extraction/carpenters.htm#tab-6</p>	
<p>Postsecondary Program: C.I.P. 10.0303 Computer Graphics Technology:</p> <p>Entry level wages reflect \$00.00 with 0 openings in Colby and Goodland Workforce Center Region. Use this link to view complete data: (https://kansasregents.org/CTE). Despite this being a small sample group, the need for highly capable computer literate technicians is reflective of the world we live in.</p> <p>The Bureau of Labor Statistics (BLS) projects the job outlook for this position is expected to have little to no official growth between now and 2024, at only 1 percent a year. But this statistic doesn't tell the whole story. Some types of graphic designers working in traditional industries like publishing and printing are expected to have fewer job opportunities. Graphic designers in computer and related fields are expected to have job growth of 24 to 26 percent in the next few years, according to the Bureau of Labor Statistics.</p>	<p>The computer graphics technology program has one instructor for a two-year program and continuity has been maintained with the same instructor for 5 years. The curriculum was revised in 2019. Technicians learn on live work producing work for local area businesses. Enrollment trends show low enrollment numbers, in 2019-2020 program added junior-senior option producing one additional student.</p>
<p>Postsecondary Program: 12.0401 Cosmetology</p> <p>Entry level wages reflect \$29,467 with 29 openings in Colby and Goodland Workforce Center Region. Use this link to view complete data: (https://kansasregents.org/CTE). This one year program provides</p>	<p>The cosmetology program has one instructor for a one-year program, instructor in this position for several years provides consistency and the program is in alignment with state board regulations. Technicians apply their skills on live work, learning both social and technical skills. Enrollment includes both full-time students and junior-senior options</p>

<p>entrepreneurship opportunities as well as employment in established businesses.</p> <p>Employment of barbers, hair stylists, and cosmetologists is projected to grow 8 percent from 2018 to 2028, faster than the average for all occupations. Population growth will lead to greater demand for hair care services.</p> <p>https://www.bls.gov/ooh/personal-care-and-service/barbers-hairstylists-and-cosmetologists.htm</p>	<p>students, trends show both solid enrollment and low enrollment. The regulations for contact hours results in students being forced to take online general education courses or take them in direct instructor format either prior to or after program year.</p>
<p>Postsecondary Program: C.I.P. 43.0106 Crime Scene Investigation (CSI):</p> <p>The closest match to Crime Scene Investigation program is Criminal Justice with entry level wages reflect \$32,588 with 20 openings in Colby and Goodland Workforce Center Region. Use this link to view complete data: (https://kansasregents.org/CTE).</p>	<p>The crime scene investigation (CSI) program operates with two instructors in a two-year program. Turnover of instructors has impacted the program, most recently the same two instructors are in place for two years. Students apply their skills using simulated crime scenes, crime scene mobile unit, as well as during visits to law enforcement agencies. Enrollment trend is strong, yet retention for second year is low. One possibility is student-athletes come to the program with a dual purpose, one is following their dream and participating in their sport with the intention to move on to the university. The other is searching for a career with diverse options.</p>
<p>Postsecondary Program: C.I.P. 46.0302 Electrical Technology</p> <p>Entry level wages reflect \$35,689 with 55 openings in Colby and Goodland Workforce Center Region. Use this link to view complete data: (https://kansasregents.org/CTE).</p> <p>Employment of electricians is projected to grow 10 percent from 2018 to 2028, faster than the average for all occupations. Homes and businesses continue to require wiring, and electricians will be needed to install the necessary components.</p> <p>https://www.bls.gov/ooh/construction-and-extraction/electricians.htm</p>	<p>The electrical technology program operates with 2 instructors in a two-year program, one instructor retired at end of 2018-2019. With change brings opportunity, the program partnered with (NC3) National Coalition of Certification Centers and Greenlee to bring in new industry recognized certifications. NCCER is also an important part of the curriculum. Technicians apply their skills in live work situations throughout are community. Enrollment trends remain strong with full-time students. Facility upgrades and new equipment to comply with certification testing are expensive initially, ongoing expenses and upgrades require additional financial planning to ensure program offers the latest and greatest industry standards preparation.</p>

Postsecondary Program: C.I.P. 15.0201 Engineering Technology

Entry level wages reflect \$31,621 with 5 openings in Colby and Goodland Workforce Center Region. Use this link to view complete data: (<https://kansasregents.org/CTE>). This data differs from institutional data in that graduates of the program receive no less than a handful of job offers resulting in an average salary exceeding \$50,000 average.

The Bureau of Labor Statistics (BLS) projects that the number of S&E jobs will grow by 853,600 between 2016 and 2026, a growth rate (1.1% CAGR) that is somewhat faster than that of the overall workforce (0.7%). In addition, BLS projects that 5.179 million scientists and engineers will be needed due to labor force exits and occupational transfers (referred to collectively as occupational separations). BLS projects the total number of openings in S&E due to growth, labor force exits, and occupational transfers between 2016 and 2026 to be 6.033 million, including 3.477 million in the computer occupations and 1.265 million in the engineering occupations.

<https://www.everycrsreport.com/reports/R43061.html>

The engineering technology program operates with 2 instructors in a two-year program, instructor experience benefits this program. Engineering Technology revised their program guide with implementation starting in 2019-2020. Enrollment trends show upward swing after implementation of junior-senior option starting fall 2019. Technicians receive multiple job offers each year. To remain current with industry standards it requires ongoing professional development, upgrading of equipment, and investment of time and energy. Compensation in high wage and high demand job preparation forces instructors to make financial decisions each year.

Postsecondary Program: C.I.P.11.0202 Mobile Apps & Gaming

Entry level wages reflect NO DATA openings in Colby and Goodland Workforce Center Region. Use this link to view complete data: (<https://kansasregents.org/CTE>).

Employment of computer and information technology occupations is projected to grow 12 percent from 2018 to 2028, much faster than the average for all occupations. These occupations are projected to add about 546,200 new jobs. Demand for these workers will stem from greater emphasis on cloud computing, the collection and storage of big data, and information security.

The mobile apps & gaming program operates with 2 instructors in a two-year program, same instructors since starting the program. The program is changing CIP Codes to become Cloud Computing & App Development. This change brings with it (AWS) Amazon Web Services certifications. Technicians apply skills, such as programming, to develop Apple Store Apps as well as live work with remote customers. Enrollment trends for low enrollment, strategies to find interested students includes CTE course offerings, investigating junior-senior options, and going online as part of a partnership with another two year institution. Connecting those with the required level of interest and commitment with awareness of program details continues to be a challenge. Is this a technical program suitable for online delivery,

<p>https://www.bls.gov/ooh/computer-and-information-technology/home.htm</p> <p>A little tweak in the quote—“<i>Release or Die</i>”—and it stands true in today’s ever-evolving mobile app development world, where 2.5 and 1.8 million apps exist on the Google Play Store and the Apple App Store respectively. The apps on the Apple Store alone, are expected to increase by 181.1% by 2020.</p> <p>In 2020, an estimated 1 million computer programming-related jobs in the US are expected to be unfilled. Many tech organizations are now turning to non-traditional applicants and internal training to fill these gaps. ... However, only 8% of STEM graduates have a degree in Computer Science. Full Scale at https://fullscale.io/talent-shortage-software-developers/</p>	<p>establishing a strong video conferencing support system may well open doors for new enrollments.</p>
<p>Postsecondary Program: C.I.P 01.0308 Precision Agriculture</p> <p>Entry level wages reflect \$43,623 with 127 openings in Colby and Goodland Workforce Center Region. Use this link to view complete data: (https://kansasregents.org/CTE).</p> <p>FFA.org states: Here are our predicted top five careers in agriculture in 2020.</p> <ul style="list-style-type: none"> ● Drone Technologists. Show farmers how to increase yields and reduce crop damage using sensors, robotics and images from the air. ... ● Hydrologists. ... ● Agriculture Communicators. ... ● Food Scientists. ... ● Precision Agriculture Technologists. <p>https://www.ffa.org/career-success/predictions-top-5-agriculture-careers-in-2020/</p>	<p>The Precision Agriculture program operates with two instructors in a two-year program, one instructor started the program and the other is in his second year as an instructor (who is also our VP of IT). The combination of two-year programming along with operating a school farm results in time management struggles as a result of seasonal work, summer demands, and extending learning beyond the walls of the classroom. Institution is investigating the benefits of a third instructor to offset demands of farm, outreach with area schools, maintaining and establishing new partnerships, and division of course content. The high tech nature of the program presents a challenge when hiring instructor(s). Compensation for preparing technicians for high wage and high demand jobs may well require increased compensation rates for instructors if institutions want full benefits of professional development , lessons learned via firsthand teaching experience, and institutional knowledge.</p> <p>The program is investigating two tracts for second-year students, precision tech or farm tech. This change brings with it the opportunity to fulfill the career pathways based from analysis of student profiles since implementing the program. This program connects well with our region and industry partners, empowering program instructors to</p>

	<p>maximize dollars for the program as a result of consumable supplies being donated. Enrollment trends continue to show growth with high placement rates with multiple options.</p>
<p>Postsecondary Program: C.I.P 51.0908 Respiratory Therapy</p> <p>Entry level wages reflect \$44,489 with 6 openings in Colby and Goodland Workforce Center Region. Use this link to view complete data: (https://kansasregents.org/CTE). Employment of respiratory therapists is projected to grow 21 percent from 2018 to 2028, much faster than the average for all occupations. Growth in the middle-aged and elderly population will lead to an increased incidence of respiratory conditions such as chronic obstructive pulmonary disease (COPD) and pneumonia. These respiratory disorders can permanently damage the lungs or restrict lung function. https://www.bls.gov/ooh/healthcare/respiratory-therapists.htm</p>	<p>The Respiratory Therapy program operates with 2 instructors in a two-year program. Instructors remain consistent over the previous handful of years, yet recently one instructor indicated they will be leaving at the end of year to accept a position with a hospital. Compensation for preparing high wage and high demand technicians may well require additional compensation if institutions want to maximize full benefits of professional development, lessons learned via firsthand teaching experience, and institutional knowledge. This program works within CoARC standards to ensure quality, onsite visit completed now awaiting final accreditation notice. Technicians participate in clinical work to apply their new skills in real world situations. Enrollment trends are inconsistent, low for a few years but most recently strong in 2019-2020.</p>
<p>Postsecondary Program: C.I.P 15.0614 Welding Technology</p> <p>Entry level wages reflect \$30,992 with 38 openings in Colby and Goodland Workforce Center Region. Use this link to view complete data: (https://kansasregents.org/CTE). According to the American Welding Society, the welding shortage will reach a deficit of 400,000 workers by 2024. Older welders are reaching retirement age, and younger welders aren't replacing them fast enough. In fact, the average age of a welder is 55, and fewer than 20 percent are under the age of 35.</p>	<p>The Welding Technology program operates with three instructors in a two-year program. Two instructors in their same positions for three years and one in first year. Starting in 2019-2020, the new location in Gove County is primarily for junior-senior option students from five area high schools. Along with this addition, the program partnered with the National Coalition of Certification Centers (NC3) and Lincoln Electric to add industry recognized credentials. Upgrades to resources plus professional development brings with it increased emphasis on industry standards across welding and fabrication techniques. Enrollment trends include both full-time and now junior-senior option students. Ongoing upgrades will require additional professional development, potentially adding American Welding Society (AWS) certifications for instructors, and academic resources to support large group activities and presentation of new lesson objectives. Another concern is compensation for preparing high wage and high demand technicians when instructors are faced with financial decisions yearly.</p>

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
Secondary: Currently only 2 secondary schools in our Region offer Teaching/Training as a pathway	428 Annual Openings, with an entry level annual wage of \$20, 398. #2 Secondary School Teachers, #3 Elementary School Teachers, #10 Education Administrators	Cited from the 2016-2017 Kansas Department of Labor Long-Term Occupational Projection Data. Kansas Career Navigator https://kscareernav.gov
Secondary: Currently only 1 secondary school who offers Corrections, Security & Law Enforcement Services as a Pathway in our region.	113 Annual job openings, with an entry level annual wage of \$25,260 Law Enforcement	Cited from the 2016-2017 Kansas Department of Labor Long-Term Occupational Projection Data. Indicated as a need on the local training demand occupation list.
Information Support and Services Network Systems Web & Digital Communications	63 open jobs, no concentrators 19 open jobs, no concentrators	Projections Central: Forecasting America’s Industry and Occupational Employment website (https://support.projectionscentral.com/) helps people with career choices and business decisions shows growth in several of these career fields Projections Central Data (https://support.projectionscentral.com/) Projections Central sees a growth of 200 jobs in Kansas for Web Developers (primarily focusing on Web Design side of the program)
Secondary level - Mobile Equipment Maintenance and Repair. Post-secondary-Climate Control Systems-Heating and Air systems with some skills as a plumber and electrician to support comprehensive installations and maintenance.	174 Annual Openings Construction & Design data reflects a significant need with a solid wage.	Indicated as a need on the local training demand occupation list. Gove County is a local area requesting adding on to their welding technology program to meet the high needs of our region.

Postsecondary Program: 51.0801 Medical Technician Assistant: Hospital and labor market data both validate the addition of this program.	Labor Market data reflects both a need for technicians - KBOR assisted Northwest Technical College in identifying this data (will add at a later date)	Goodland Regional Medical Center asked Northwest Technical College to consider a collaborative effort to establish a Med Tech program.
Mental Health Care Providers and facilities.		Children's Psychiatric Unit for the western region has closed acute care within the last month. Nearest acute care setting is Wichita, or Kansas City area.
Radiology field is not represented in this area.		Nearest training and educational program is 110 miles away.

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
Secondary: Government and Public Administration (1 school in our Region)	38 total annual openings, considered a mid demand field in our region	Cited from the 2016-2017 Kansas Department of Labor Long-Term Occupational Projection Data

<p>Secondary: Web & Digital Communications, Graphic Design</p>	<p>Interest of students Services provided to community and schools through these pathways High Wage jobs after graduating</p>	<p>See Appendix at the end of this document</p>
<p>Post-secondary Program 11.0202 Mobile Apps & Gaming Development: Technical program offered by NWKTC. The curriculum involves iOS system and applications plus web development applications.</p>	<p>Programming and game development are areas of interest for a group of students with an interest in computer science. Northwest Kansas Technical College is in the process of changing Mobile Apps & Gaming to Cloud Computing & App Development with implementation starting in Fall 2020.</p>	<p>Local - Same as KLMD KLMD - Web Development or Programming each have opportunities for AAS degree candidates, yet a BS degree is preferred.</p>
<p>Secondary - Cartography/Geo Spatial/Mathematics, Energy Pathway</p>	<p>Post secondary connection with the Precision Agriculture at Northwest Kansas Technical College and the GIS program at Fort Hays State University, as well as Post secondary agreements with the Wind and Solar Program at CCC.</p>	<p>The Cartography/Geo Spatial/Mathematics pathway is not identified as a need as part of the 16-17 labor market data. The Energy Pathway is not identified as part of the 16-17 labor market data.</p>
<p>Comprehensive Agriculture Science (CIP 01.9999)</p>	<p>Agricultural jobs are in high demand in this region and are a part of the culture of many rural communities. Local demand combined with training opportunities geared towards the needs of local employers encourages students to stay in the region following graduation. Student interest during the career development process, and Individual Plans of study are reflecting the need to offer these programs. KSDE allows only one pathway to be selected and reported upon, therefore Comprehensive Agriculture offers the diverse skill set, essential to our local business and industry needs.</p>	<p>High need according to the Kansas Labor Gove County Job Analysis, as well as the local Workforce 1 data provided.</p>

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.

Based on the secondary and postsecondary performance data, what are the region's strengths in student performance?

Strengths	How are these strengths being sustained in the region?	Local Example
<p>1S1: Secondary- graduation rate above state indicated goal</p>	<p>Our regional CTE concentrator graduation rate exceeds the state indicated goal due to several efforts being prioritized such as; secondary schools implementing Individual Plans of Study for each student, mapping course selection, career exploration and emphasizing the end goal of high school graduation, aligning CTE course curriculum with business and industry and emphasizing the relevance of the course work to the student, their future plans, and student CTSO's and work based learning to increase student engagement.</p>	<p>Over the past three years, CTE concentrator graduation rate has been at 98% or above, which is above the state indicated goal.</p>
<p>2S1, 2S2, 2S3:Secondary- Our overall Secondary Regional Performance levels were at or above state averages in all indicators except for 2S1, 2S2 and 2S3 in Math and Science in 2017.</p>	<p>Our Regional CTE programs support the integration of academic skills and collaborate with academic program teachers to integrate math, science and literary components into our CTE programs of study, allowing CTE students at the secondary level to meet rigorous academic standards. Supportive services in place at the Secondary level in our region that address the needs of all students, to include but not be limited to ESOL, 504, IEP and other services.</p>	<p>Increase in Science Proficiency from 21% to 37% from 2017-2018.</p>
<p>3S1 Secondary: Placement of concentrators who exited at or above state core indicator goal.</p>	<p>Academic Advising incorporated through student Individual Plans of Study at the secondary level leading to a post secondary placement. College representatives and business and industry partners visit local secondary schools in our region to make postsecondary connections with students. Career awareness and exploration opportunities for students in our local regions that include guest speakers, career fairs, college and business and industry tours and conferences, job shadowing and other work based learning options such as internships or on-the-job training experiences.</p>	<p>In the past 3 years, 90% or above of CTE concentrators exited with a post secondary plan in place.</p>

4S2 Secondary: In our Region 78%-81% of concentrators who exited attained post secondary credit, well above state averages.

Our relationships and articulation agreements with local postsecondary institutions in our region provide opportunities for CTE students to participate in accelerated learning programs and gain postsecondary credit such as dual credit as part of their CTE program of study. Our local secondary and postsecondary institutions provide CTE participants with access to industry recognized certifications leading toward a recognized postsecondary credential. Kansas Legislature provided funding for CTE Excel (SB 155) courses in order for CCC and NWKTC to be made available to High School Students.

Secondary schools in our region offer options such as a NWKTC Satellite so that high school students can attend college classes during the regular school day. Secondary schools in our region have up to four options for high school students to obtain post secondary credit during the regular school day, such as online access, dual credit options, on campus availability at CCC and NWKTC, or at our local schools with CCC or NWKTC college professors on our HS campuses. CCC offers online courses (e.g. AS in Equine Science) CTE Excel courses offered through CCC to the students in our region include courses available in the following Secondary programs: Agriculture, Food & Natural Resources, Business Management & Administration, Finance, Health Science, Engineering, and Law, Public Safety & Security. CTE Excel courses offered through NWKTC to the students in our region include courses available in the following Secondary Programs: Engineering, Law, Public Safety & Security, and Health Science. Health Science pathway may earn

		college credit prior to HS graduation, as well as CNA and OSHA 10 certifications.
5S2 Secondary: In the year 2016, our Regional percentage of concentrators in non-traditional fields was well above the state average of 22% at 35%, also exceeding the 2020 State indicator goal of 32%.	Strengths in our region to include making guest speakers, conferences (ex. TWIST), fields trips and displays such as posters and brochures in non traditional fields available to students a priority in all local secondary schools and post secondary institutions.	Marketing billboard displays on 1-70 in our local region of male nurses, and women in solar/ wind energy by CCC. Essdack's Career Expo for high school and middle school students.
1P1 - Placement -Post-secondary: State performance: 90% (2017) Postsecondary combined (NW Tech & CCC): 96% (2017)	Strengths are in the number of job opportunities that are available to technicians with an AAS degree. Advisory boards are very interactive with students and assist with local businesses hiring graduates. Business and Industry representatives reach out to CCC and NWKTC for placement interviews of future graduates.	Graduates of these programs are in demand and are employed upon graduation.
2P1 - Credential Attainment-Post-secondary: State performance: 83% (2017) Postsecondary combined: 77% (2017)	Some of the programs at CCC do not have credentialing. Efforts are underway to help CTE students attain a certificate or a degree. Energy companies are recruiting students from the program causing the students not to receive a certificate or a degree.	NWKTC: 99% of graduates are placed in employment, in the military or are continuing their education; 86% are employed in a field directly related to their program of study. In 2019, the CCC Nursing department had ADN test pass rates of 83.3% and PN pass rates of 96.4%, respectively.
3P1 - Non-traditional Concentration - Post-secondary: State performance: 11% (2017) Postsecondary combined: 11% (2017)	Postsecondary institutions emphasize recruitment for non-traditional students. CCC & NWKTC have received KBOR grant funding dedicated to the non-traditional students' recruitment activity. Both institutions monitor the analytics to analyze the success of recruitment efforts.	NWKTC: 23% of the student population is female, minority students make up 27% of the student population, and 311 concurrent enrollment (including students from 16 regional school districts), 42 of the students are 17 & under; 33% are 18 or 19 years of age.

		CCC: For 2019-2020, 37 students registered for Disability Services with TRIO. 24 of the 37 enrolled in an AAS program, 15 of the 24 are enrolled in Vet Nursing, and 8 are enrolled in Ag, Nursing, Criminal Justice and Physical Therapist Assistant.
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Optional Questions for Discussion:

- How are students performing in your CTE programs?
- What is the variation in performance among students in different programs?
- How are your schools and colleges performing compared to the state overall performance?

Based on available data, what are the student performance gaps in the region?

Gap	Root Cause
<p>In 2018, our regions graduation rate for concentrators was 1% below the state average, however exceeds the 2020 state core indicator goal. (1S1)</p>	<p>The IPS implementation and Career Advising and Exploration process is still in the development stages in schools at the Secondary level in our region, therefore pathway focus, and clearly defined career plans that may include CTE are not in process for all students at this time. CTE focus and career plans continue to carry a stigma in our schools and communities, in which these options are not always a students first program or path of choice.</p>
<p>In 2017 our regions RLA academic proficiency percentage was 2% lower than the state average. and 8% below the 2020 state core indicator goal. (2S1, 2S2 and 2S3)</p>	<p>Academic programs and CTE teachers need to focus on utilizing student data to identify and improve gaps in performance. Academic deficiencies are not addressed or identified at times before entering CTE pathways or programs of study.</p>
<p>In 2018 our regions Placement percentage of concentrators who exited was 3% below the state average, but right at the 2020 state indicator core goal of 90% (3S1)</p>	<p>Possible causes accounting for this; reflective of the IPS implementation process still in the developing stages throughout the Secondary schools in our local region, along with inaccurate student data reporting due to the need for additional training of CTE staff and coordinators to ensure student reporting deadlines and information are reported in a timely manner, and school counselors schedules do not allow for sufficient time to assist students with their post-secondary plan, due to their workload (i.e scheduling, assessment coordinator, etc.)</p>
<p>In 2017 and 2018, our percentage of CTE concentrators in career and technical education programs and programs of study that lead to non-traditional fields was just below the state average (1% in 2017, 4% in 2018) as well as below the 2020 state core indicator goal of 32%. (5S1)</p>	<p>Lack of education for key stakeholders about the variety of opportunities available to all students. Needing to place a strong emphasis on marketing non-traditional fields of study during career exploration and career development can also be considered the root cause of this gap.</p>
<p>Post-secondary - Non-traditional & Diversity - ex: at NWKTC female student enrollment ranges between 23% and 33% from 2010 and 2016. Students 21 and older makes up 31% of enrollment as of 2017. ex: at Northwest Tech program schedules need to be flexible enough to</p>	<p>Lack of educating key stakeholders about the variety of opportunities available to all students.</p>

enable anyone interested in the program to be able to complete coursework and shop/lab experiences. (3P1)	
Post-secondary - Military - ex: Northwest Tech continues to experience low enrollment numbers with military experience.	Geographic location is not as readily accessible as other two year colleges and technical programs.

Optional Questions for Discussion:

- How are students performing in your CTE programs?
- What is the variation in performance among students in different programs?
- How are your schools and colleges performing compared to the state overall performance?

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

What does the law say?

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.

What does the law mean?

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.

State Definitions:

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
Are of sufficient size	<p>At the Secondary level enrollment numbers, student interest, Individual Plans of Study, if programs are meeting labor market needs and local demand, and the number of concentrators and completers reported. Maintain class sizes to a level in line with available equipment and technology to use. (e.g. specialized health care programs are limited in class size to increase student success). Post-secondary: Waitlists at NW Tech are minimal, and limited during recruitment season.</p>	<p>At the Secondary level, being able to offer multiple sections and pathway courses due to limited number of certified teachers. Continued efforts to align secondary pathways and courses to business and industry needs, regional demands and postsecondary programs of study. Continuing to generate interest in CTE programs through career exploration and the IPS implementation. Master schedule conflicts, limited sections being offered due to teachers work load. Accurate student data reporting. At the Post-secondary level, facilities, instructor recruitment, professional development and instructional resources must support program growth.</p>
Relate to real-world work environment (Scope)	<p>CTE programs in our region at the secondary and postsecondary level offer program and or industry recognized certifications. Pathways and Programs of study that offer work-based learning opportunities for students at the application level. Advisory committees assist in the facilitation of workplace skills that are necessary for business and industry. Students receive the opportunity to complete projects for community organizations and businesses. For example at NWKTC, all programs are involved in “live” work, to gain valuable experience about what it is like in the workforce. CCC programs offer job shadowing opportunities to increase exposure to the career field as well. Professional development for CTE faculty supported at all levels to keep our regional programs aligned with industry needs.</p>	<ul style="list-style-type: none"> ● Increase the number of certifications and work-based learning opportunities for each Pathway offered in our region. ● Align curriculum and technical level activities and equipment to meet industry standards ● Locating jobs/positions available in our local areas to view and work with specified careers. ● Post-secondary and Secondary programs see the need to increase hands-on activities that support industry standards.
Help students advance to future education (Scope)	<p>Partnerships and articulation agreements between our regions secondary and post secondary institutions. Opportunities for dual or concurrent postsecondary credit while in high school, and collaboration between</p>	<p>Allowing completer status for all pathways offered at the secondary level in our region, and end of pathway assessments or certifications for all pathways offered. Apprenticeship opportunities with local business and industry in the region. Increase partnerships within the</p>

	<p>educational partners at both levels to assist with seamless transitions for students in their post-secondary plans. Work based learning or OJT opportunities with local business and industry that may lead to future employment. Post-secondary: articulation agreements and 2+2 agreements that support student transition from 2 year colleges to universities. The utilization of system wide transfer courses.</p>	<p>healthcare field. Post-secondary: education on reverse transfer opportunities, early interventions, and accommodations to support first generation and low-income student populations. Continuing to strengthen relationships between our local secondary schools with our post-secondary institutions. Also, at the post-secondary level a need to improve upon increasing articulation agreements and 2+2 agreements with local universities has been identified. A more effective approach that supports students in navigating through college resources and opportunities from secondary to postsecondary.</p>
<p>Are of high quality</p>	<p>Student performance, graduation rates, job placement rates for each program of study, student interest, multiple entry and exit points in the pathway. Use of advisory committees with post-secondary representatives and business and industry members to align content, and to evaluate the quality of the pathways and programs of study. Retention rates of instructors has an impact on program consistency for alignment, certifications and partnership development with both education and business and industry. Post-secondary institutions are monitored through their accreditation and licensure agencies. Program technology is current, and reflects business and industry standards.</p>	<p>Address student performance gaps, teacher recruitment and retention and professional development within our region for our CTE programs. Utilizing advisory boards to ensure alignment with business and industry standards. Ensuring proper equipment and instructional materials are available within the programs. Strong focus on instructor retention, salary schedules or lack of opportunity to pay instructors according to labor market data. Continuing education and instructor training within our CTE programs and pathways to ensure quality, rigor and adapting to business and industry changes. Access to end of pathway assessments or certifications at the secondary level, which can be directly used in a students post-secondary plan either continuing postsecondary education, or in the workforce.</p>
<p>Should be offered in the region</p>	<p>Based on Labor Market Data, post secondary programs of study available, student interest through Individual plans of study and local demand. At the Post-secondary level institutions and school districts work collectively to develop fiscally sound plans to ensure ongoing sustainable programming. (Ex. NWKTC adding a location in Gove County for Welding Technology.)</p>	<p>More collaboration and involvement with business and industry and workforce centers at the middle school and secondary level. At the post-secondary level, more collective efforts between the institutions and the local school districts, along with business and industry partners. Ensuring proper and continuous training for all CTE staff to meet the changing needs of business and industry.</p>

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

What does the law say?

The needs assessment will include an evaluation of progress toward the implementation of CTE programs and programs of study.

What does the law mean?

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, non-duplicative 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
<p>Secondary Schools in our region implement programs of study and pathway courses by assessing student needs and interests through the career development process, and individual plans of study, pre-enrollment, and labor market data.</p>	<p>Career exploration and development programs in our region secondary schools that include elementary level career exposure and awareness, middle school career exploration and high school career preparation to generate student interest. Secondary schools offer post-secondary planning as well as career development through the Individual Plan of Study implementation, career guidance and advising.</p>	<p>Our local region identifies the need to increase community knowledge and participation in the efforts throughout the career development process at the secondary level, in order to sustain our communities by making students aware of the needs and availability of opportunities available to them. Increasing family engagement in the IPS process.</p>
<p>Secondary- New course addition submission for secondary schools to be presented and approved through Building Leadership Teams and submitted for District school board approval for course or program additions. Secondary schools follow the process required by KSDE for Pathway Program of Study Application and approval.</p>	<p>Statewide articulation agreements with Colby Community College and Northwest Kansas Technical College for post-secondary options for high school students. Students have the opportunity to receive industry recognized certifications for continued growth in the pathways. The Excel CTE courses made available to secondary students by the State of Kansas promotes a more seamless transition from secondary to postsecondary programs, and allows students access to courses not/ or unable to be offered by our local secondary schools.</p>	<p>Our local region identifies the need to continue to align our pathways to regional demand, and to utilize articulation agreements more effectively in collaborating with postsecondary institutions. An increased awareness at all levels about CTE pathways in our local school districts. Multiple entry and exit points for all CTE pathways, and the ability to obtain certification or end of pathway assessment for all offered CTE courses within our programs of study.</p>
<p>Post-secondary - follow an eight step process required by KBOR. These steps include identifying the program with descriptions, objectives, admission and graduation requirements. The college administration must develop a budget, determine faculty qualifications, workforce needs, have the</p>	<p>Post-secondary - an increasing number of technical programs provide opportunities for students to start a technical program as a junior with the possibility of graduate with a HS diploma and AAS degree. (Ex: Engineering Technology, Welding, Computer Graphics.) Mission statements across local</p>	<p>Post-secondary: multiple entry and exit points require extended time to complete the program in some cases. Turnover among school districts and institutions have an impact on partnership agreements. (Retention).</p>

<p>institution’s administrative support, and submit to KBOR for review.</p>	<p>school districts and colleges support workforce readiness initiatives like technical program implementation. Collective effort to keep graduates in our rural communities.</p>	
<p>Colby Community College has 218 courses that qualify for Excel in CTE. These classes include courses from business, alternative energy, agriculture, allied health, criminal justice, dental hygiene, nursing, physical therapy, and veterinary nursing.</p>	<p>The college’s on campus faculty work with distance learning and adjunct faculty to ensure adherence to course structure and rigor. Classes allow students to enroll in courses at a minimum expense, earn college credit while still in high school, and with some programs, students can graduate with both a high school and college degree/certification.</p>	<p>Increase and improve the marketing of this initiative as not all people are aware of this program.</p>
<p>Colby Community College has one state-wide approved articulation agreement with any Kansas high school student for Marketing Pathway (52.1402) or Business Entrepreneurship and Management Pathway (52.0799).</p>	<p>Articulation agreements provide a path for completion</p>	<p>Increase and improve the marketing of this articulation agreement in the state.</p>
<p>NWKTC has articulation agreements with three high schools in the service area. These programs include the Industrial, Manufacturing, and Engineering pathway for Carpentry and Diesel Technology programs for an Associate of Applied Science Degree. The Computer Graphics Technology and Business Administration Technology program with the Art & Communication pathway for an Associate of Applied Science degree and the Computer Graphics Technology program with the Art & Communication pathway for an Associate of Applied Science degree. Colby Community College has articulation agreements with four high schools in the</p>	<p>Articulation agreements</p>	<p>NWKTC is in the process of working with KSU to update 2+2 agreements. Northwest Tech needs to continue updating articulation agreements with school districts in our 17 county region with emphasis on any new industry recognized credentials that go along with technical program.</p>

<p>college service area. The programs include the agriculture science pathway for the Associate of Applied Science degree, nursing/allied health classes for the Associate of Applied Science degree, business administration/accounting classes for the Associate of Science degree, criminal justice program of study for the Associate of Applied Science degree, early childhood education, elementary education, secondary education, social work and sociology for the Associate of Arts or the Associate of Applied Arts, or the Associate of Applied Science degrees, animal science program of study towards an Associate of Applied Science degree, and Physical Therapist Assistant program of study to earn an Associate of Applied Science degree.</p>		
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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
<p>Secondary-Train: Professional Development opportunities are made available to CTE teachers in our region through Perkins funding. School leaders work directly with teachers to identify training needs and opportunities. New CTE teachers are assigned mentors for a minimum of two years.</p>	<p>Secondary- Our region schools are offered professional development opportunities annually, school districts support instructors with conference attendance, mentoring programs, and business and industry training. There are on-going training opportunities and workshops across our state annually for professional development.</p>	<p>Secondary- Many of our local school districts have too few teachers on staff, so most teachers are not specialized fully in CTE area, or have limited ability and scheduling options to receive specialized training due to also teaching core academic courses. Multiple daily preps hinder the options for professional development. Ongoing training and development to meet changing industry needs and demands.</p>
<p>Secondary-Recruitment: Through the Transition to teaching program opportunity to recruit quality CTE teachers with business and industry knowledge and experience. At the secondary level, often times CTE teachers are recruited within the general education teachers, especially in our rural school districts. Traditional recruiting methods such as job postings on websites, newspapers and social media platforms etc. are also used. The annual CTE conference can provide recruitment opportunities for teachers.</p>	<p>Secondary school districts assisting secondary instructors in obtaining licensure and certifications to be able to teach CTE courses. Districts are adaptable when looking for quality teachers. Teachers working collaboratively with post-secondary instructors for training needs. Northwest Kansas Technical College supports Secondary teacher continued education by offering advanced content specific courses to teachers at no cost. Several methods are used for recruiting, expanding efforts to obtain qualified applicants for CTE positions.</p>	<p>Secondary- The ability to recruit quality teachers to a rural area can be a challenge, due to the travel distance and offering competitive salaries. Private industry wages can be more enticing for quality applicants.</p>
<p>Post-secondary - Recruitment - HLC provides credential guidelines for instructors, industry experience is vital to real-world experiences, and the institution's reputation</p>	<p>Post-secondary - a variety of methods are used to attract candidates.</p>	<p>Post-secondary - CTE faculty are on the same pay scale with other faculty, making competition with private industry salaries very difficult.</p>

<p>for excellence helps attract applicants who may be currently in the industry. Post-secondary uses multiple sources such as posting vacancies on college websites, newspaper, national websites, and websites specific to industries. Also word of mouth at professional development activities.</p>		
<p>Post-secondary - Retain - empowering instructors to implement the curriculum in ways that incorporate their own strengths allows them to utilize their passion for certain content to engage students.</p>	<p>Post-secondary - industry experience empowers instructors to have the necessary strengths to be successful in the lab/clinical setting..</p>	<p>Post-secondary: as long as we can hire early, new instructors can participate in orientation or new instructor bootcamp as a proactive strategy to improve transition.</p>
<p>Post-secondary - Train - onboarding workshop help instructors coming from industry to transition to academic setting and responsibilities. New instructors attend the New Instructor Seminar offered by the Kansas Council for Workforce Education. Institution offers incentives for degree completion within a designated timeline.</p>	<p>Post-secondary - Programs with more than one instructor benefit from “train the trainer” conferences, it enables new instructors to continue advancing their skill sets specific to their program of study, degree completion plans with universities streamlines the process to complete a degree.</p>	<p>Post-secondary: degree completion, certification testing, transitioning from industry to education, and maintaining a program aligned with industry standards can be a challenge. Sometimes we find ourselves paying for training that later goes with them should they leave the institution.</p>
<p>Secondary-retain: CTE teachers receive support and on-going development options through the advisory board process. The partnerships between CTE programs and business and industry members in our local communities allows for creative collaboration and opportunities which can be rewarding. High degree of control over course curriculum and activities. Ongoing faculty support through professional development options and teacher mentoring programs.</p>	<p>At the Secondary level there are multiple options and avenues for support and professional development for CTE instructors.</p>	<p>Secondary: the need to have competitive salaries for CTE teachers, to retain them as educators rather than working in business and industry. Multiple daily preps can be a deterrent for retaining CTE faculty in small or rural school settings, due to having to teach both CTE and core classes.</p>

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 support for special populations. States assist locals in directing resources or supports to close performance gaps and remove barriers and to provide the 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>Secondary School districts in our region have equal access for all students to enroll in CTE programs of study. Secondary school districts offer support services for members of special populations which include local CTE programs</p>	<p>Lack of training for teachers, paraeducators, guest teachers, career advisors, guidance counselors and other supports in frameworks to be effective in career development and advising with students who are members of special populations.</p>	<p>Professional development for teachers, paraeducators, guest teachers, career advisors, guidance counselors and other supports in frameworks to effectively teach students who are members of special populations, as well as to increase professional development in the area of academic and career advising for members of special populations as well.</p>
<p>All students at the Secondary level, including special populations participate in the career and academic planning process and have an individual plan of study on file beginning in 8th grade.</p>	<p>Collecting special populations student data and evaluations, and reporting it in a timely manner. In some cases special education transition coordinators are not connected to all CTE programs of study.</p>	<p>Reviewing the data results and making adjustments to better serve special population students as needed. Identify those positions at which students who are considered to be a member of special populations can be successful, and address those employment options and needed skills during the career and academic planning process.</p>
<p>Secondary school districts provide opportunities for all students including members of special populations to learn about the schools CTE programs of study</p>	<p>Secondary - Schools struggle to implement individualized education plans for all students in special populations (from economically disadvantaged backgrounds and non-traditional fields)</p>	<p>Provide strategic steps to inform and recruit students who are members of special populations to our CTE programs. Increase training for all staff that included IPS implementation and self advocacy development for members of special populations, to ensure equal participation in CTE programs of study. Obtaining industry-recognized certification assessment support tools that can be made available to increase student success rates in our special population members.</p>

<p>Secondary - Provide equipment to students to use outside of class for all courses, as well as access to 24/7 online college courses. Concurrent and online courses are available to students, including special populations.</p>	<p>Secondary - Awareness of opportunities for students that align with the needs and interests of special populations.</p>	<p>Develop and implement an evaluation of our CTE programs to include an assessment of how the needs of special populations are being met to ensure access and equity for all students, to include discussion points during advisory board meetings about students with special needs.</p>
<p>Post-secondary - open enrollment means everyone welcome, accommodations available to meet the needs of students with a disability, 504 Plans, access to food pantry, plus access to English Language Learner (ELL) courses. Grants provide funding for promotional materials to engage special populations in the recruiting process.</p>	<p>Post-secondary - processes to educate and encourage self-reporting of a disability. Increasing visibility and awareness of opportunities during academic advising, social media promoting participation in all program offerings.</p>	<p>Post-Secondary: move up registrations to enable Academic Affairs office time to adequately following up on all high school transcripts. Wrap-around conferences with student-instructor-administration to ensure implementation and access to supports are made available. Degree completion plans are monitored for progress.</p>
<p>Post-secondary - grants provide funding for promotional materials to engage special populations in the recruiting process.</p>	<p>Students may not always be aware of what financial benefits are available to them for continuing their education.</p>	<p>Post-secondary: social media campaigns to attract the attention of special populations to our program offerings across the region. Latino Days and other Registration Days must continue to emphasize open enrollment. Identify strategies to improve awareness of financial benefits and options for members of special populations.</p>
<p>The Physical Therapist Assistant program has enrolled up to 85% of low income students. Some students have had physical disabilities that require special accommodations with the state testing boards. Visual challenges have required special</p>	<p>No gaps exist.</p>	<p>The Physical Therapist Assistant program curriculum is focused on assisting patients with physical needs. The program director and faculty deal with each circumstance as presented and no one has been turned away based on special needs.</p>

<p>computer monitors or computer readers, The student enrollment has been very diverse with students from Asia, Russia, and African countries. Several students have been of various hispanic backgrounds. Many of the students are single mothers or children of military service personnel.</p>		
<p>34 students registered for disability services with Colby Community College's Student Support Service department. 16 of the students were enrolled in Associate of Applied Science programs, 9 were in the Veterinary Nursing program, and 7 others were in the dental hygiene, business, horse production and criminal justice programs.</p>	<p>Students are made aware of the special services available to anyone enrolled in college classes. However, the college has to rely on the student to identify their needs.</p>	<p>Colby Community College has a very progressive and active Student Support Services (TRIO) department on the college campus. Many times throughout the year, the department promotes and advertises its services via email, text messages, flyers, by visiting the Student Success class offered to freshman. Faculty and staff are also aware of the services available and have referred students to TRIO.</p>
<p>Colby Community College promotes all of its programs for non-traditional enrollment. The nursing program has had male graduates, the veterinary nursing programs has male students, and the PTA program has had several male students graduate from its program.</p>	<p>Every postsecondary institution tries to recruit non-traditional students for its programs. Successful recruitment of non-traditional students is impacted by the declining number of high school graduates and their career choices.</p>	<p>It is now common to see male nurses and technicians which helps to expose society to a changing demographic in the healthcare field. Dentists are now starting to hire male dental hygienists which helps to attract non-traditional students to the program.</p>

The Kansas Perkins V Team,

The Web and Digital Communications Pathway includes a variety of courses delivered within three tiered levels: Introductory Level, Technical Level, and Application Level. Students following the Web and Digital Communications Pathway obtain knowledge and skills that fill a need within our local businesses where specialty positions are not readily available. Most specifically the following Web and Digital Communication Pathway courses best meet the needs of members of our local/regional area:

- Computer Applications
- Web Page Design
- Computer Graphics
- Graphic Design
- Internet Marketing
- Particular Topics in Media Technology
- Media Tech-Workplace Experience
- Project Mgmt. & Res. Scheduling

Three districts within the Colby/Goodland Regional Needs Assessment area offer the Web & Digital Communications Pathway and would greatly benefit from continued Perkins support. Based on the data provided to the Goodland/Colby Region 6 Perkins workgroup, the data indicated zero (0) job openings in this career area (only occupations with a total demand score greater than or equal to 10 were reported). As a region represented by small/rural business with an employee base often under 10 employees and/or have a demand score that was less than 10 were not included in the regional data provided to the team. With 37 Web & Digital Communication Concentrators from the region, our stakeholders would suggest that the students identified as Concentrators will continue to benefit and support the small and rural business in western Kansas.

In addition, the following data is being supplied for the third column on page 27 (Kansas Labor Market Data or Local Labor Data Source) for Web & Digital Communications, Graphic Design: The Web & Digital pathway includes coursework, skills, and content common across the Information Technology cluster, and most occupations in this cluster exceed the growth rate (4.3%) for all occupations in Kansas; three occupations in the IT cluster are in the top 5 fastest growing jobs in Kansas, exceeding 25% growth by 2026. According to O*NET data provided by KSDE, the 2012-22 projections indicated job growth ranging from 7-28% for most occupations in Web & Digital.