STAUNTON-AUGUSTA-WAYNESBORO

TEN-YEAR CAREER AND TECHNICAL EDUCATION STRATEGIC PLAN

JUNE 2018-2028

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Executive Summary

This plan was set in motion by area employers who frequently, consistently, and repeatedly reported to economic developers that they are unable to fill critical jobs with the available workforce. The employers linked their inability to staff vacancies to the career and technical education programs offered in the region. While additional factors play into shortages of a skilled workforce, the economic developers of Staunton, Augusta, and Waynesboro determined there was merit in evaluating the strengths, weaknesses, and opportunities of career and technical education in the three jurisdictions and what could be done, over time, to improve programs for the benefit of students, graduates, employers, and the region's economy. The governing bodies of the three jurisdictions joined in support of the effort. Funding for the strategic plan was jointly pursued through the Department of Housing and Community Development and the localities were awarded a "Building Collaborative Communities" grant in the later part of 2017. The project kicked off in December 2017 with much enthusiasm among all partners.

Beginning in January 2018, data was collected through three surveys, observation of all middle and home high school career and technical education (CTE) classes, tours of Valley Career and Technical Center, phone interviews with employers, review of materials about CTE programs, consideration of new and emerging CTE programs (California's CTE program and the Hampton's Academies), and meetings with CTE teachers, administrators, Blue Ridge Community College (BRCC) career coaches, BRCC faculty, and AP Honors History classes.

The focus of the work was on career and technical education that specializes in skilled trades, applied sciences, modern technologies, and career preparation training, where students have opportunities to gain classroom and hands-on knowledge as well as work experience through internships, job shadowing, on-the-job training, and industry-certification. While ensuring students graduate with solid options, career and technical education also fulfills employer needs in high skill, high wage, and high demand jobs. CTE was examined across the county and two cities and includes examination of it across middle schools, high schools, and the community college—while recognizing that it also includes four year institutions. It is increasingly recognized the career and technical education has value and utility from kindergarten through lifelong learning.

Included in the findings is the fact that Staunton, Augusta, and Waynesboro can boast a dedicated, energized, and passionate cadre of CTE teachers, enthusiastic and responsive CTE students, and the elements necessary for an outstanding career and technical education program. The region can also boast of having had the foresight to create a joint career and technical center at the high school level long before regional cooperation was thought to be desirable. The dynamic presence of Blue Ridge Community College and its leadership, which spreads beyond its campus, is to be celebrated. BRCC made career coaches available to the region's high schools in a manner that is envied by many other localities. There is much to be proud of here. The strong foundation, already in place, makes implementation of this plan more readily possible.

The findings also bring the conclusions that the programs are uneven in rigor, fragmented, generally disconnected from broad educational understanding, and operating in isolation with little understanding of what is available to the students. As an example, students are unfamiliar with the term "career and technical education" and its acronym "CTE." Teachers expressed frustration that students in CTE courses are unaware of what it takes to be a CTE "completer" or "finisher." This can readily be remedied with some effort. What it points to, though, is that while significant funds are currently expended in career and technical education, no one is attending to the larger picture of CTE as a system of integrated, necessary parts where, *sui generis,* the whole is greater than the sum of its parts.

In a time where everyone is attending to his or her assigned tasks, no one who has been specifically tasked with the responsibility of leading a three-jurisdiction collaboration to ensure the middle schools and home high schools have logical, sequential, and widely-known and understood pathways in career and technical education culminating in a program of study at Valley Career and Technical Center (VCTC) and Blue Ridge Community College (BRCC).

Further evidence of this omission is the lack of a capital improvements plan for career and technical education equipment, equipment replacement, and facilities upgrades. VCTC, it was noted by more than one employer, has equipment that cannot be said to usefully train a student to standards of the 21st century. To wit, one lab has a lathe that apparently dates back to the 1940s. Teachers note the lack of basic, for the field, equipment such as hand-held plasma cutters (used to cut metals in fabrication and welding) and lack of funds for the consumable items used in technology classrooms.

An evaluation of immediate and long-term facility upgrades would be prudent. VCTC, built in the 1970s, is a wonderful community resource; however, upgrades to the building(s) haven't kept pace with changes in technology and attendant changes. The electrical installation in the 1970s could not have anticipated the introduction and expansive use of technology such as computers and high electricity usage technology such as CNC machines. As a result, there are power challenges at VCTC that the aging electrical system cannot match. In home high schools, similar electrical problems are endured. Flickering fluorescent lights distract from the subject matter. Some classrooms are bursting with equipment to the point there's little work space for the students. Another example of upgrading would be the Diesel Lab. Diesel equipment has grown in size over the past 50 years and it is challenging to fit the equipment into the lab so there are sufficient repair opportunities for all students. A new Diesel Lab may be in order.

None of the challenges is insurmountable, but all must be systematically addressed to bring the career and technical education programs firmly into the 21st century to match the abilities of the students to the needs of the current and future economy and workplaces. Area employers are asking for this and students deserve the best opportunities that can be provided.

Given how far career and technical education has come from the 1970s to the early 20s, the first step after acknowledging that leap is consideration of hiring a dynamic leader, paid for proportionately by the three jurisdictions, who will 1) oversee the implementation of the strategic plan and manage the attending budgets, 2) work collaboratively with the three CTE supervisors/coordinators of the three school systems to ensure appropriate alignment across jurisdictions, 3) conduct a tools/equipment

inventory and create a Capital Equipment Replacement Plan, and 4) provide recommendations on facilities upgrades.

The National Education Association (NEA) argues that "measures that provide schools, educators, and communities the dedicated, targeted resources needed to provide cutting edge career and technical education programs, instruction, and apprenticeships will ensure the greatest number of students achieve successful certification, gainful employment, and boundless options. NEA supports a career and technical education agenda that:

• Ensures access to the most up-to-date equipment;
• Maintains a strong pipeline of quality, credentialed, and experienced educators;
• Includes participation of underserved and nontraditional students;
• Provides real career pathways; and
• Fosters collaboration among business, labor, employment, and economic development sectors to produce meaningful programs of study.

This plan provides the requisite steps to meet the agenda NEA spells out.

Finally, there are more changes coming from the Departments of Education at the federal level and at the state level. The changes proposed here are designed to work in concert with new mandates.

Goals At-a-Glance – UPLIFT [Career and Technical Education]
Goal 1: **U**nify the disconnected elements
Goal 2: **P**romote the programs
Goal 3: **L**everage and engage employers
Goal 4: **I**nnovate
Goal 5: **F**ormalize equipment and facilities upgrade planning
Goal 6: **T**rumpet success loudly

Legend

Cost:

		Timeline:	
Staff time only	🎓	📅	Immediate
Under $10,000	🎓🎓	📅 📅	1 – 3 Years
$10-50K	🎓🎓🎓	📅 📅 📅	3 – 6 Years
$50-200K	🎓🎓🎓🎓	📅 📅 📅 📅	7 – 10 Years
Over $200K	🎓🎓🎓🎓🎓		
Multimillion	🎓🎓🎓🎓🎓🎓		
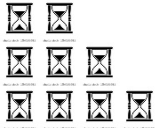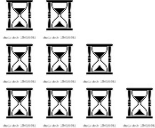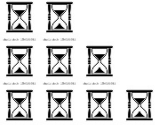
Goal and Objectives

GOALS AND OBJECTIVES	TIMELINE
GOAL 1: UNIFY THE DISCONNECTED ELEMENTS	
Objective 1: Develop career and technical students for successful employment.	⌛ ⌛ ⌛
Objective 1.2: Leverage the business community to strengthen and tighten CTE courses. Use existing VCTC Advisory Council along with BRCC technical advisors across the three jurisdictions. Where no Advisory Council exists, create the career cluster Employee Advisory Council. Make these roles essential to ensure CTE meets the standards of current best practices.	⌛
Objective 1.3: Maximize the value of certifications and credentials.	⌛
Objective 1.4: Ensure on-going opportunities for teachers and counselors to develop stronger, aligned curriculum and increased student opportunities.	⌛ ⌛ ⌛
Objective 1.5: Expand career and technical education opportunities for students.	⌛ ⌛ ⌛
Objective 1.6: Leverage the school systems' very strong relationship with Blue Ridge Community College to create expanded opportunities for Augusta – Staunton – Waynesboro students and teachers.	⌛ ⌛ ⌛ ⌛ ⌛ ⌛
GOAL 2: PROMOTE THE PROGRAMS	
Objective 2.1 Fully educate students, parents, teachers, school counselors, and the public to the opportunities available in career and technical education programs and careers.	⌛ ⌛ ⌛ ⌛ ⌛ ⌛
GOAL 3: LEVERAGE AND ENGAGE EMPLOYERS	
Objective 3.1: Working with Shenandoah Valley Workforce Development Board (SVWDB) and Shenandoah Valley Partnership (SVP), fully engage the "high-wage, high-demand job" business community in student opportunities and successes.	⌛ ⌛ ⌛
GOAL 4: INNOVATE	
Objective 4.1: Explore new career and education opportunities and expand programs that have high level of support from business community.	⌛ ⌛ ⌛ ⌛ ⌛ ⌛ ⌛ ⌛ ⌛ ⌛

GOAL 5: FORMALIZE EQUIPMENT AND FACILITIES UPGRADE PLANNING	
Objective 5.1: Equip career and technical labs with sufficient up-to-date equipment and materials to ensure learning is relevant to current standards.	
Objective 5.2: Evaluate career and technical education facilities and plan for upgrades and replacement facilities.	
GOAL 6: TRUMPET SUCCESS LOUDLY	
Objective 6.1: Share metrics and success stories with broader stakeholders, including economic development offices, employers, and on jurisdiction websites.	

Appendix

Overview

It's an exciting time to see Staunton-Augusta-Waynesboro moving in partnership to strengthen career and technical education in support of student success and regional economic strengthening.

From the classroom tours, classroom observations, student comments, conversations with teachers, administrators, and career coaches, and the three targeted surveys (employers, CTE teachers, and CTE administrative stakeholders), the region can boast of dedicated, passionate, and inspiring teachers and equally committed stakeholders. The reality is that if nothing, absolutely nothing, changed, students would continue to be educated, engaged, and graduated. If, though, the three jurisdictions are inspired by "The Academies of Hampton," programs such as California's "Career Technical Education Pathways Initiative," possibilities that accompany the development of a "Profile of a Virginia Graduate," and the seemingly endless stream of articles focused on "Success in the New Economy," then there are some wonderful possibilities for advancing career and technical education over the next ten years. As Kevin Fleming wrote in *"Success in the New Economy"* (www.citruscollege.edu):

> "Our world has changed, and in this new economy the university degree is no longer the guaranteed path towards financial success as it was for previous generations…In today's highly-technical knowledge based economy, having hands-on skills and perfecting what you're good at can be more valuable than getting aa degree in "something" simply to get one…Since new and emerging occupations in every industry now require a combination of academic knowledge and technical ability, we need to ensure that we're also guiding students towards careers and not just to the university…Being a skilled craftsman or technician is highly valued. Investments in career education programs in high schools and community colleges will help all students obtain an education which includes technical training and preparation for the workplace. Ultimately, this is how all students can be successful."

Drawing on the *"Profile of a Virginia Graduate,"* the Virginia Department of Education has determined that a life-ready Virginia graduate must:

- Achieve and apply appropriate academic and technical knowledge (content knowledge);
- Demonstrate productive workplace skills, qualities, and behaviors (workplace skills);
- Build connections and value interactions with others as a responsible and responsive citizen (community engagement and civic responsibility); and
- Align knowledge, skills and personal interests with career opportunities (career exploration).

The Profile of a Virginia Graduate also gives consideration to the "5 C's":

- Critical thinking
- Creative thinking
- Collaboration

- Communication
- Citizenship

Most of the elements needed for a model career and technical education program are in place; however, the elements are neither fully connected nor integrated into a system with clear connectivity among the requisite parts. Said more plainly, the necessary parts are in place—they just aren't connected. As a result, the career and technical components function in relative isolation. That students find a way through to become finishers/completers is more testament to their determination than a nod to a comprehensive system that strives to produce as many skilled trade, career, and technical graduates as advanced diploma, college-bound graduates. This is underscored by a review of the Augusta County Ten-Year Capital Improvements Plan (2015-2015) where Valley Career and Technical Center is noticeably and notably absent.

The Career and Technical Strategic Plan (accompanying document) does not call for radical reform or restructuring of career and technical education; rather, it directs the integration of the disparate parts as well as the clarification and amplification of available pathways to career and technical skill proficiency. Modest proposals, as opposed to extreme revamping, include a more exposure to career and technical education for middle school students, including the proposal to introduce a middle school career and technical center.

While one could become a champion for the newly introduced Hampton Academies and lead efforts to recreate that model here, the physical size of Augusta County and the fiscal challenges that face Staunton and Waynesboro would make modeling after the Academies daunting. Moreover, it's uncertain that such a Herculean effort would yield any better results than a significantly less costly, less disruptive, and much faster methodical integration of what is at hand. The latter, which could be achieved in three to five years, will need advocates with influence and persistent oversight to ensure what is possible is realized.

The major goals of the strategic plan are:

Goal 1: Unify the disconnected elements.

Goal 2: Promote the programs.

Goal 3: Leverage and engage employers.

Goal 4: Innovate.

Goal 5: Formalize equipment and facilities upgrade planning.

Goal 6: Trumpet success.

While Blue Ridge Community College (BRCC) and VCTC Adult Education were included in conversations, BRCC is not the primary subject of any recommendations. The school is broadly viewed as being highly

responsive to the needs of area employers and was repeatedly cited as providing outstanding training and technical education. VCTC Adult Education, similarly, meets a niche need and fulfills that well. VCTC has the capacity to be more heavily relied as an additional partner to meet employer training needs.

For middle and high school students, the Virginia Department of Education's newly adopted standards (effective 2018-2019) allow a bit more flexibility in graduation requirements by reducing the number of required academic content courses. This flexibility should be leveraged by all three localities to promote career and technical education.

Methodology

This document contains summaries of the more than two hundred individuals who provided their insight on career and technical education in Augusta-Staunton-Waynesboro. Those insights are woven together in such a manner that an 11th grade student's voice carries as much weight here as an employer, a seasoned teacher, a skilled administrator, or an enthusiastic BRCC Career Coach. Each voice matters in planning the direction for career and technical education.

Multiple approaches were used in gathering the background information. This document provides a summary of the information gathered; this section provides an overview of how the information was gathered. Information, insights, and ideas were collected from the following:

- site visits to the career and technical education classes in all middle schools and comprehensive high schools in the three jurisdictions,
- site visits to the Valley Career and Technical Center,
- three surveys that were focused on a)career and technical education teachers, b) administrative support staff for career and technical education (school counselors, supervisors/coordinators of CTE, principals, assistant principals, college administrators, and superintendents), and c) area employers,
- two feedback sessions with CTE teachers,
- one employer feedback session,
- one-on-one interviews with the president of Blue Ridge Community College, with CTE supervisors, with the director of adult education at Valley Career and Technical Center (VCTC), with the assistant principal of VCTC, with a human resources representative from the medical field, and with the director for Wilson Workforce and Rehabilitation Center,
- group meetings with VCTC administrators,
- group meetings with VCTC students,
- phone interviews with area employers,
- site visit to Massanutten Technical Center and Northern Neck Technical Center (this was for a separate project; however, it provided additional insight into this 10-Year Strategic Plan process),
- meeting with seven Blue Ridge Community College Career Coaches assigned to home high schools,
- meeting with ten faculty and staff from Blue Ridge Community College,
- site visits with three Advanced Placement classes (two at Fort Defiance High School and one at Buffalo Gap High School), and
- feedback from the oversight 10-Year Strategic Plan Project Management Team

This document is intended to share the insights that were gathered from the many stakeholders which, in turn, informs the 10-Year Strategic Plan (separate document)

Site visits: The site visits were generally "tour and observe" opportunities to gain perspective on the scope of offerings, the teaching facilities, and the equipment. Where teachers were engaged in interaction with students, the visit was strictly observational. Where teachers were available to students but not actively interacting, the teacher was engaged in brief conversation with questions surrounding class size, educational activities, and question "If you could wave the magic CTE want, what change would you like to see?"

Surveys: The three surveys were vetted by the Project Management Team before being released through Survey Monkey. The following is a list of questions/information asked of the three populations.

Employers:

1. My company employs: 1-20, 21-50, 51-99, 100-500, >500.
2. Please select the category that best fits your business sector: Manufacturing, Distribution, Service/Retail, Office, Other (please specify).
3. On a scale of 1 to 10 1=not at all and 10=very familiar), how familiar would you say you are with the course offerings and certifications in the area's career and technical education?
4. What do you see as the 3 top strengths in career and technical education in the region?
5. What do you see as the 3 top weaknesses in career and technical education in the region?
6. What do you see as the 3 greatest opportunities that should be considered in the 10-Year Career & Technical Education Plan?
7. Which credential(s) do you consider important when making a hiring decision? (Please check all that apply)
   a. Microsoft Office
   b. Microsoft Word
   c. Microsoft Excel
   d. Microsoft PowerPoint
   e. MT1 Certification
   f. W!SE Certification
   g. Career Readiness Certificate
   h. NOTCI
   i. Workplace Readiness Certificate
   j. Other (Please specify)
8. When considering an individual for entry-level employment, which of the skills listed are very important to your business? (Please check all that apply)*
   a. Ability to work in a team environment
   b. Problem-solving
   c. Decision-making
   d. Ability to organize and prioritize work
   e. Ability to analyze quantitative data
   f. Technical knowledge related to the job
   g. Computer skills (Word, Excel, PowerPoint)
   h. Ability to create written reports

       i.   Good verbal communication skills

       j.   Conflict Management skills

       k.   Self-initiative

       l.   Able to receive constructive feedback positively

       m.   Punctuality

       n.   Work ethic

       o.   Mechanical skills

       p.   Troubleshooting problems

       q.   Basic math (read a tape measure, fractions)

       r.   Other (Please specify)

9. What are skill sets you need in business but don't believe are being fully learned in the classroom?

10. What are you not currently seeing in graduates of technical programs that your employees need to have?

11. In what grade should technical and career education begin? Before 6th grade, Grades 6 through 8, Grade 9 or higher

12. Please check as many as apply:

       a.   My company would sponsor a high school intern

       b.   My company would sponsor a high school student as an apprentice

       c.   My company would sponsor a community college student intern

       d.   My company would sponsor a community college student as an apprentice

       e.   My company would sponsor an area educator as a paid summer apprentice

       f.   I would be willing to host student tours of our facility

13. If you checked any of the boxes in Question 12, please provide your contact information

*One respondent noted, correctly, that the survey failed to include "Electrical skills."

Teacher Survey:

1. Do you teach in/at:

       a.   Augusta County

       b.   Staunton

       c.   Waynesboro

       d.   Valley Career & Technical Center

       e.   Blue Ridge Community College

       f.   Other (Please specify)

2. Where do you teach:

       a.   Middle School

       b.   Comprehensive High School

       c.   Valley Career & Technical Center

       d.   Valley Career & Technical Center Adult Education

       e.   Blue Ridge Community College

       f.   Other (Please specify)

3. On a scale of 1 to 10 1=not at all and 10=very familiar), how familiar would you say you are with the course offerings and certifications in career and technical education offered in the Staunton-Augusta-Waynesboro area?
4. Have you toured Valley Career & Technical Center?
5. Do you receive marketing materials from Valley Career & Technical Center?
6. How often do you take your students on tours of businesses in the region?
    a. I haven't take my students on a business tour
    b. At least once a year
    c. At least twice a year
    d. Three or more times each year
7. Have you toured Blue Ridge Community College (BRCC)?
8. Do you receive marketing materials from BRCC?
9. Do you invite employers to speak to your class(es)?
10. If you do invite employers to speak to your class(es), how often do you have employers speak with your students?
11. Do you incorporate employer feedback into your curriculum? If "yes," please use the comment space to let us know how you incorporate feedback.
12. Do you advise students on employment opportunities? If so, please let us know how in the comment space.
13. What do you see as the three top strengths in career and technical education in the region?
14. What do you see as the three top weaknesses in career and technical education in the region?
15. What three things would you most like to have considered in the 10-Year Career & Technical Education Strategic Plan?
16. Related to career and technical education, what would you like to have teachers, counselors, administrators, and students keep doing?
17. Related to career and technical education, what would you like to have teachers, counselors, administrators, and students start doing?
18. Related to career and technical education, what would you like to have teachers, counselors, administrators, and students stop doing?
19. Do you have the resources necessary to deliver training excellence in your subject matter?
20. What additional measures, if any, might ensure that career and technical education is meeting the needs of area businesses?
21. If an area business offered a paid summer internship, in your subject matter, how likely is it that you would participate?
    a. Very unlikely, my summer is already planned
    b. Somewhat likely, depending on the opportunity
    c. Very likely
22. Please feel free to add additional comments.

CTE Stakeholders (Administration, Counselors, etc.) Survey

1. Do you teach in/at:
   a. Augusta County
   b. Staunton
   c. Waynesboro
   d. Valley Career & Technical Center
   e. Blue Ridge Community College
   f. Other (Please specify)
2. Are you:
   a. Middle School Counselor
   b. High School Counselor
   c. Blue Ridge Community College Advisor/Counselor
   d. Middle School Administrator
   e. High School Administrator
   f. Other (Please specify)
3. On a scale of 1 to 10 1=not at all and 10=very familiar), how familiar would you say you are with the course offerings and certifications in career and technical education offered in the Staunton-Augusta-Waynesboro area?
4. Have you toured Valley Career & Technical Center?
5. Do you receive marketing materials from Valley Career & Technical Center?
6. Have you toured Blue Ridge Community College (BRCC)?
7. Do you receive marketing materials from BRCC?
8. Do you advise students on employment opportunities? If so, please let us know how in the comment space.
9. What do you see as the three top strengths in career and technical education in the region?
10. What do you see as the three top weaknesses in career and technical education in the region?
11. What three things would you most like to have considered in the 10-Year Career & Technical Education Strategic Plan?
12. Related to career and technical education, what would you like to have teachers, counselors, administrators, and students keep doing?
13. Related to career and technical education, what would you like to have teachers, counselors, administrators, and students start doing?
14. Related to career and technical education, what would you like to have teachers, counselors, administrators, and students stop doing?
15. What additional measures, if any, might ensure that career and technical education is meeting the needs of area businesses?
16. Please feel free to add additional comments.

Feedback Sessions with CTE Teachers (middle and high school):

In the feedback sessions, a brief overview of the 10-Year CTE Strategic Plan process was provided. Following that, the format used was to pose a question and then elicit a response from each person

present. The responses were recorded and, later, categorized using affinity clusters. The following questions were asked during two feedback sessions:

1. What do most people not understand about CTE that they need to if CTE is to provide even greater value to students and businesses?
2. You work most closely with students and more closely with parents than most, how can we best get parents on-board in supporting CTE for their students?
3. To write a meaningful strategic plan, what would I need to know that only you can help me understand?
4. Please complete the following, "For the strategic plan to be successful, it must…."

Employer Feedback Session:

Participants were shown a PowerPoint presentation that provided an overview of the process, an overview of the classes offered in CTE, a summary of the strengths identified in the three surveys, a summary of the weaknesses identified in the surveys, and a summary of the opportunities identified in the three surveys. Participants, working in break-out groups, addressed the following questions:

1. What additional weaknesses do you see that have not been mentioned?
2. If Augusta-Staunton-Waynesboro were to be the model in Virginia for CTE, what would that look like? What is your vision for CTE in this region?
3. What changes should we make to ensure we reach the vision?

One-on-one Interviews:

These meetings had no set structure; rather, they were directed at "help me understand" the challenges and opportunities surrounding CTE in Augusta-Staunton-Waynesboro.

Group Meetings with VCTC Students:

At these "stand-up meetings" seven questions were posed to six groups of students, with each group containing 5 – 7 members.

1. What attracted you to Valley Career and Technical?
2. Who influenced your decision to come here?
3. How involved were your parents in the decision?
4. How involved was your school counselor in your decision?
5. At what point in school did you know you wanted a career in this field?
6. How do your friends view Valley Career and Technical?
7. If Valley Career and Technical offered a summer program for credit, would you attend?

Phone Interviews with Employers:

Employers were asked:

1. How familiar are you with the career and technical education offered in Staunton-Augusta-Waynesboro?

2. Does your company hire entry level employees from the career and technical program offered here?
3. What do you see as the strengths of career and technical education in the region?
4. What do you see as the weaknesses of career and technical education in the region?
5. What do you see as the opportunities that can be leveraged in career and technical education in the region?

Group Meeting with BRCC Career Coaches, BRCC Instructors and Administrators:

These meetings had no set structure; rather, they were directed at "help me understand" the challenges and opportunities surrounding CTE in Augusta-Staunton-Waynesboro.

Advanced Placement Classes: Fort Defiance High School and Buffalo Gap High School:

A brief overview of the strategic plan for CTE was provided. Students were asked the following questions:

1. Have any of you taken a CTE class?
2. Why/why not?
3. What do you think of the CTE courses available here and at VCTC?
4. If you could have taken a CTE class at Valley Career and Technical during the summer, would you?

Their answers provided opportunities for follow-up questions and opened new, related areas of inquiry.

Vision

Individuals participating in the Employer Feedback Session were asked to describe their vision of career and technical education in Staunton, Augusta, and Waynesboro if these jurisdictions were, jointly, the model in Virginia for career and technical education. The responses, when aggregated, paint a picture of an achievable vision. Wording the employers provided served as source for putting their thoughts together as a vision.

The entire community—educators, counselors, employers, parents, and students-- recognizes the value and champions career and technical education (CTE) as strongly as it champions college options. Silos have been eliminated between CTE and honors classes and a cross-pollination of theory and practice has taken the place of silos. In the cross-pollination environment, students learn theory in classes and put that theory to the test in CTE environments. For example, students take the lessons learned in physics and, using technology such as 3-D printing, create rockets to gain mastery of the application of theory. Cross-pollination becomes so engrained in the culture that high school graduation ceremonies celebrate all next-steps including sports scholarships, the two-year and four-year college bound, those entering military service, and those entering into employment directly out of high school.

Many area employers are fully engaged in the CTE. There are active employer advisory boards for each of the CTE areas: Agricultural, Food, and Natural Resources; Business; Family and Consumer Science; and Information Technology. Each of the advisory boards serves all the three jurisdictions jointly. They evaluate classrooms and equipment and when they identify out-of-date equipment, they provide replacement funds. These subject-matter-experts help ensure that students have access to materials that mirror equipment currently used by employers in their workplaces. The advisory board also establishes standards of learning that students in a CTE course of study should know. This both ensures that students in all three jurisdictions, in all schools, will have similar exposure and that area employers can have high confidence in CTE finishers/completers. The advisory groups work with educators across the middle school, comprehensive high schools, Valley Career and Technical Center, and Blue Ridge Community College to eliminate unnecessary duplication, thereby maximizing future investments, and ensure that any student who enters a CTE course of study sees a logical, sequential path through education to employment. Finally, the advisory groups identify and promote industry-related credentials that are meaningful to employers. For example, students completed manufacturing course work would earn the OSHA-10 credential which has value to manufacturers. Where a credential is not recognized by the state's Department of Education, the advisory groups would petition for acceptance and recognition.

The region distinguishes itself by beginning career exploration in kindergarten. All faculty are familiar with Virginia's Workplace Readiness Skills and build skill components into lesson plans as appropriate. Students, beginning in kindergarten and through fourth grade, take virtual tours of businesses and learn how what they are learning adds value to the workplace. Beginning in fifth grade, students take an annual tour of VCTC and one business. Beginning in sixth grade, school counselors join students on tours. Additionally, an annual, innovative program at VCTC engages all school counselors in a week-long

hands-on learning experience. School counselors "enroll" in mini-courses designed to provide exposure to class content and career opportunities in a course of study.

Modeling after the JMU developed course, "Interpersonal Dynamics in the Business Organization," which is taught at BRCC and the Virginia Community College System's newly developing program in soft and employability skills, "Professional Readiness," Augusta-Staunton-Waynesboro students now graduate having completed a Professional Readiness program in their home high schools. This is particularly welcomed by area employers who cited lack of work ethic and employability skills, such as attendance and punctuality, as significant factors that challenge them in retaining a qualified workforce.

The region found an innovative solution that enables all students, beginning in fifth grade, to participate in career exploration and CTE classes. No student is exempted for band or because the student is pursuing an advanced diploma. A partnership with Wilson Workforce and Rehabilitation Center also makes it possible for students with disabilities to participate fully in CTE courses.

By the time students graduate high school, every student has knowledge of career opportunities, salary potential, debt avoidance, and financial literacy. The region's students are known for mastery of soft skills, life skills, employability skills, and career readiness skills. About half of each graduating class will pursue a two or four-year college degree. The other half will have achieved "finisher/completer" status and, of those, about half will have completed pre-apprenticeships. The employer advisory groups will have worked with the three superintendents and the three CTE supervisors to successfully champion insurers of private companies to allow individuals younger than 18 to work. As a result, student work experience is meaningful and provides students a starting point for gainful employment following graduation.

There is a pipeline of CTE teachers with in-depth trade experience which was made possible by the new program that partners with Blue Ridge Community College and Mary Baldwin to provide the courses required for provisional certification to those in the trades.

All parents, students, teachers, school counselors, and employers are fully informed of the opportunities in CTE because of a strong educational marketing program that was unveiled in 2019. It is sustained because of the value the original unveiling produced.

The region created a state-of-the art middle school career center located on the VCTC campus which is heavily used for summer programs. VCTC has undergone a freshening so it offers a welcoming environment. The expanded summer school for high school students is in heavy demand. Funding has been made available through grants, employer contributions, and through contributions to the Valley CTE Foundation which solicits funds to serve all CTE classrooms in the Staunton-Augusta-Waynesboro area.

Business prospects note the area's enthusiasm for career and technical education. It's an attractive draw.

Survey Results

Participant Demographics

Three surveys were conducted focusing on 1) Career and Technical Education Teachers, 2) Administrative Support, and 3) Employers in the Augusta-Staunton-Waynesboro area. A total of 69 teachers responded. Twenty-one administrative support stakeholders responded. And 37 employers responded.

For those in education, the geographic representation, teaching level, and administrative support areas are shown below.

Employed by…		
Locality	Teachers	Administrative Support
Augusta	34	6
Staunton	3	2
Waynesboro	4	7
Valley Career & Technical	22	3
Blue Ridge Community College	5	2
Other	1	1

Where do you teach?	
Middle School	12
Comprehensive High School	26
Valley Career & Technical Center	15
VCTC Adult Education	10
Blue Ridge Community College	4
Other	2

Administrative Support Role	
Middle School Counselor	1
High School Counselor	4
BRCC Advisor/Counselor	1
BRCC Career Coach	2
Middle School Administrator	2
High School Administrator	1
Other	11

*Responses for "Other" include: Secretary, Central Office, Coordinator, VoTech Adult Education, Division Administrator, Instructional Supervisor, Registered Apprenticeship Consultant, Director of Instruction and Technology, Differentiation & Placement Specialist

For employers, the company size and industry sector are summarized below.

Number of Employees	
1-20	1
21-50	9
51-99	10
100-500	9
>500	8

Industry Sector	
Manufacturing	18
Distribution	5
Service/Retail	5
Office	1
Other *	8

*Other (specified) included Construction, Mechanical Contractor, State Agency Health & Human Services, Transportation-political subdivision, Technology, Education, Non-profit Fulfillment, Transportation for Hire

Familiarity with Career & Technical Program Offerings/Certifications

Participants were asked to rate their familiarity with the Staunton-Augusta-Waynesboro area's career and technical program offerings and certifications. The summary follows below.

Participants	1 Not at all	2	3	4	5 Fairly Familiar	6	7	8	9	10 Very Familiar
Teachers	0	1	0	2	14	5	9	17	12	8
Administrative Support	0	0	0	2	2	2	0	4	7	4
Employers	4	1	4	0	5	4	4	5	2	8
N=126	4	2	4	4	21	11	13	26	21	20

Facility Tours and Promotional Materials

Educators (both teachers and administrative support) were asked if they had toured Valley Career & Technical Center and Blue Ridge Community College. Additionally, they were asked if they had received promotional materials such as brochures, catalogs, and schedules of offerings from the two institutions. The results are summarized below.

Facility Tours and Promotional Materials				
Institution	Yes-Toured	No-Haven't Toured	Yes-Received Materials	No-Haven't Received Materials
VCTC	Educ. 58 Admin.19	Educ. 11 Admin. 2	Educ. 38* Admin. 19*	Educ. 31 Admin. 2
BRCC	Educ. 43 Admin. 15	Educ. 26 Admin. 6	Educ. 43 Admin. 18	Educ. 26 Admin. 3

*Adult Education does send promotional materials and schedules to households as well as sponsoring radio ads to promote evening classes. VCTC High School has no marketing budget and does not currently market to promote enrollment.

Engagement with the Business Community

Teachers were asked how often they take students on tours of businesses in the region. The results are summarized below.

Frequency of Student Tours of Businesses			
Never	1x Each Year	2x Each Year	3x or More Yearly
38	18	7	6
Frequency of Guest Employers as Speakers			
22*	4	22	19

*One respondent noted that "the process to get a guest speaker is too much paperwork, time constraints, and hassle for them (guests). I have people refuse because of it."

When asked if employer feedback is incorporated into career and technical education curriculum, teacher were split almost evenly down the middle with 33 responding that they do include such feedback (49.25%) and 34 saying they do not (50.75%). Of those who do incorporate feedback, teachers cited most frequently that they:

- Use Augusta Home Builder's Association as an Advisory Board; use Engineering Review Board for Engineering drawing class; use Advisory Boards, use Advisory Councils
- Use employers feedback in making decisions as to what should be added/removed from curricula
- Use feedback to discuss employer expectations with their students, often referring to specifics provided by guest speakers
- Find the BRCC Career Coaches often echo what employers are saying which reinforces the importance
- Use post-graduation employer surveys

Advising Students on Employment Opportunities

When asked if they advised students on employment opportunities, 46 (66.67%) of teachers and 13 (61.90%) of administrative support respondents do advise students. When asked how they advise students, the responses included:

- Refer them to online employment sites, job boards, postings in classroom of jobs, posting of jobs on the resource board in common area, posting to Moodle site, use Remind app and email, school TV
- Tie projects to related careers
- Have them study potential employers in the area
- Require students to participate in supervised work experience
- Require student portfolios
- HR Director visits and annual job fair

Strengths

Respondents were asked to list the top three strengths in the area's career and technical education. The strengths listed here are from the combined teacher, administrative support, and employer surveys as well as from telephone interviews with employers. Responses were gathered from 160 individuals. The 480 responses (total) clustered in nineteen areas. A response is included here if the item had three or more individuals citing it as strength. There is a considerable amount the region can point to with pride.

- Potential for growth
- Ready for an action plan
- Breadth and depth of programs
- Quality, knowledge, talent, real world experience, and passion of educators
- Quality of school
  - o Comprehensive high schools
  - o Valley Career & Technical Center
  - o Wilson Workforce & Rehabilitation Center
  - o Blue Ridge Community College
    - Quality of programs
    - Dual enrollment
- Quality of students
- Career opportunities and skills students learn
- High density of manufacturing and fabrication businesses
- Apprenticeship programs
- Affordability and accessibility
- Quality of programs
- Flexible structure for training
- Career exploration and the range of options
- Building soft skills

- Job opportunities and employer involvement; employers value our students
- Prepare students for a career right out of high school
- Hands-on, practical work experience
- Certification = marketability
- Local community support

Weaknesses

The same participants responded to the question "What do you see as the three (3) top weaknesses in career and technical education in the region. The 160 respondents were joined by 30 individuals attending the Employer Feedback Session, for a total of 190 respondents. This provided a total of just over 500 responses. The responses clustered as follows (again, a minimum of three individuals had to have raised a weakness before it was added to the list).

- Insufficient understanding of CTE
    - Lack of advocates
    - School counselors unfamiliar with course content
        - Not able to fully advise students
        - Students disproportionately pulled from CTE classes for conferences or SOL studying
        - Education for Employment courses should be full but students aren't being enrolled in them
        - When school counselors are addressing students about course offerings they, often, note academic classes but when preparing to discuss career and technical classes they preface their comments with "for those of you who won't be attending college." This leaves college-bound students feeling CTE classes are, generally, not for them
    - Students unfamiliar with course content
        - In spring 2017, 926 Augusta students completed CTE survey.
        - When asked, "Do you know what you would have to do to be a CTE Finisher/Completer, 88.4% responded either "No," or "I don't know what a finisher/completer is)
        - Asked "Are you aware of credential options in your CTE classes?" 20.7% responded yes, while 723 (79.3%) responded either "No," or "I don't know…"
        - Some of the lack of familiarity may have to do with calling the classes "CTE." Students profess not knowing CTE classes are available; however, the do know that vocational classes or shop or industrial classes exist
    - Parents unfamiliar with course content
- Insufficient Recruiting and Marketing
    - Need to promote trades to students
    - Need marketing plan for CTE to get the word out; need to educate students to the meaning of "CTE" and "career and technical"

- o Need marketing funding-$$
  - o Need to educate parents to understand the value of CTE
  - o Need to educate school counselors regarding course content
  - o Need to recruit students to CTE
  - o Need to leverage social media: Facebook, Instagram, YouTube, Twitter
- Funding
  - o Cost to maintain shops
  - o Cost of purchasing consumable supplies
  - o Equipment is old
    - 50 – 60 year old equipment
    - Behind in technology (employers note: do not take old equipment they aren't using, it's outdated and shouldn't be used to train students)
    - Behind in software
    - Lacking equipment (e.g., handheld plasma cutter)
      - Building rockets: some with 3D printer, others with soda bottles
  - o Classroom design is outdated (trying to use one classroom for both formal instruction and for hands-on lab work (in comprehensive high schools)
  - o Inadequate space – Diesel classroom at VCTC isn't large enough to have enough vehicles in it for hands-on work
  - o VCTC has not been upgraded since it was built
  - o Need 15 passenger vans for field trips
  - o Need new textbooks (especially in accounting)
  - o Supervisor reluctant to spend money on workbooks and support materials
- Inconsistency across classrooms/schools
  - o CTE may enjoy more autonomy than SOL faculty
  - o CTE faculty do not have a venue for sharing information, curricula, or exercises
  - o No Ag program in Staunton or Waynesboro
- o Training is expensive. Not enough hands-on experience available
- o Duplication and inefficiency
  - o Resourcing inefficiencies
  - o Insufficient collaboration and communication between comprehensive high schools and VCTC
  - o No leadership team with a vision for high return-on-investment initiatives
  - o No regional CTE entity that catalyzes, aligns, and integrates resources from business/industry for K-12, 2 year, 4 year, and adult learners
- Stigma (Perception)
  - o Redneck Vo-Tech
  - o It isn't "cool to be " tech
- Insufficient credentialing
  - o From Augusta Survey, 79.3% did not know credential options associated with CTE
  - o 88.4% didn't know what one would have to do to become a finisher/completer

- o W!SE is a generally accepted credential that meets DOE requirement, but to employers it is a meaningless credential. None surveyed had heard of it nor would they value it on an application
  - o Credential offerings in high schools are inconsistent and lacking
  - o Need certifications that are meaningful to employers
- Lost opportunities
  - o Middle school students in band are exempt from career exploration
- Lack of adequate internet and AV materials including videos to show students about BRCC and VCTC
- Lack of support from senior administration
- Lack of skill updating for teachers
- Need clear linkage between middle school and high school CTE
- Limited programs for students with disabilities
- Need a separate vocational school for middle schoolers
- Need better vertical alignment between VCTC and BRCC in course content
- Need more dual enrollment opportunities
- Need mentorship programs
- Lack of partnership with local employers, involve them in educational steering committees, advisory groups
- No coherent plan for high school to trade school to job site
- Need classes in quality assurance and inspection
- Need to understand actual employer needs
- Need coordinated summer internship programs

Opportunities

Respondents were asked "What three things would you most like to have included in the 10-Year CTE Strategic Plan?" All responses from the three separate surveys were combined. Respondents were asked to identify the three greatest opportunities that should be leveraged in the 10-Year Strategic Plan for CTE. The responses follow:

Engage Employers:

- Partner with employers to form advisory councils
- Partner with employers to provide equipment funding
- Create an employer funded CTE Foundation with money to improve all CTE equipment on a rotation directed by employer advisory council
- Work with employers as volunteers
- Provide pre-apprenticeship training
- Have employers talk with students
- Host field trip tours
- Create liaison between schools and industries, between businesses and school counselors

- Sponsor individual students
- Create prototype for entry-level to manager training
- Invite businesses/associations to hold meetings at VCTC
- Develop innovative programs: businesses buy at discount at Staples, e.g., and discount if donated to technical training
- Industry Career Day
- Invite Industries to schools
- Reverse Career Days: Invite industries to schools' career/technical classes
- Employers share best practices with schools for workplace readiness and certifications

Marketing/Outreach:

- Through marketing and outreach, reduce/eliminate stigma associated with technical training
- Show career pathways and wages
- Branding occupation/training
- Make it cool to be technical
- Need "how to" manual for parents
- Use social media and marketing classes to create campaign, including "Want to learn to fix…? Go to [name of class]."
- Provide sustaining marketing funding for CTE in comprehensive high schools and for VCTC
- Incentivize parents to attend VCTC technical showcase
- Develop strong student recruitment practices
- Need funding and advocates
- Invite 2 recent high school graduates to talk with students
- Have people with success stories go to schools and tell the stories

Funding:

- For equipment
- For project materials
- For workbooks
- For additional training for teachers (e.g., CASE training for Ag Ed teachers)
- For green house supplies
- For shop supplies
- To purchase wish list items
- To hire additional business teachers
- Allow current teachers to teach 4 classes and be paid for extra class
- To get materials to teach up-to-date information
- Need state-of-the-art technology
- More updated computers
- Equipment updating/replacement
- For CTE-focused career coaches
- For scholarships
- More tuition discount funding (WCG)
- For funding certifications for students

Innovate:

- Need a plan for integrating, funding, and sustaining CTE-related business-education partnerships between CTE and Staunton Makerspace, Staunton Innovation Hub, and Make
- Involve middle school in Makerspace
- Create vertical alignment to make a seamless CTE path from middle school through graduation
- Create career/technical associates degree from VCTC with 4 year apprenticeship
- Require students to attend one year at VCTC
- Invite home schooled students to VCTC

Middle School:

- Teach computer applications in middle school
- Create a middle school VCTC
- Start middle school age in career/technical
- Vertical alignment: seamless path from middle to high school to BRCC in CTE

High School Curriculum

- Offer more business classes
- Push Education for Employment (EFE); require of all students
- Continue curriculum updates by a panel of teachers and industry leaders
- Need more CTE options at Lee High School
- Vertical alignment
- Streamline course offerings at home campuses with higher level only at VCTC
- Retitle/rebrand classes. Class titles haven't evolves as the trades have (e.g., home building trades)
- Add:
  - Continuous Improvement & Lean Manufacturing practices (quality)
  - PLC Programming
  - Production Supervisor/Manufacturing Management
  - Robotics
  - Electrical
  - Project Management skills and experience
- Catch up with technology
- Work ICC (International Code Council) HSTTP (High School Technical Training Program) into curriculum
- Need lab for hands-on plumbing training
- Shop class, hands-on projects in classrooms
- More partnerships with institutions for culinary arts
- Emphasize important of CTE student organizations as additional training supporting classroom work
- 9th graders who shouldn't be on the algebra path need a career/technical plan in 9th grade

Certification:

- More opportunities for certifications for students
- More funding for certifications for students

School counselors, Career Coaches, Career Placement;

- BRCC Career Coaches should visit VCTC frequently
- BRCC Career Coaches should visit businesses
- Need formal mechanism for recruiting/placing graduates
- Need more career placement activity
- Educate school counselors on skilled trades

Facilities:

- Larger working bays for diesel mechanics program
- Renovate CTE classrooms to provide space for both classroom and hands-on labs
- Renovate VCTC to match modern day needs of our industries
- Need larger public safety training facility for police, fire, and EMS training

Advanced/Standards Diplomas

- Educate parents that not all students need advanced diploma
- Educate school counselors to help students understand that not everyone needs an advanced diploma
- Eliminate 2-diploma option

What should we keep doing?

For teachers, counselors, and administrators, the question was posed: "Related to career and technical education, what would you like to have teachers, counselors, administrators, and students keep doing?" The responses feel under one general heading that was among all the responses received:

"Prepare students for the 21st century with job skills that can be used to obtain employment in various career fields."

Under that heading, the responses were clustered around the following area; each bullet reflects multiple respondents choosing the same key "keeps":

- Continue promoting CTE as equally as we do college.
- Teaching/promoting CTE
- VCTC and BRCC visits
- Having teachers collaborate with business and industry
- Educators in my school express a genuine passion for the coursework they teach
- Allowing students to visit and determine interest
- Promote mentorships, site visits, and job shadowing
- Providing opportunities for students to learn about the options available to them
- Hands-on experience
- Career fairs, open houses
- Supporting our students

What should we start doing?

Respondents (teachers, counselors, and administrators) were asked: "Related to career and technical education, what would you like to have teachers, counselors, administrators, and students start doing?"

The following highlight areas that were noted by three or more respondents:

- Offer more hands-on training
- Projects that can start in lower grades and add more technology as the students progress
- Credits for working
- Assessing needs of local area companies better
- Counselors learn about CTE classes, promote VCTC and EFE classes more (EFE should be required), properly understand and communicate what CTE courses are about, properly place students in classes that will aid them in their goals/plans
- Get more outside support from local government to help fund schools
- Value CTE as much as SOL classes
- Allow new classes (Entrepreneurship, Marketing)
- Identify students earlier that are not traditionally successful high school students and get them on CTE career path
- More student exposure to range of CTE offerings
- Help students and parents understand that a 2 or 4-year college degree is not the only path to a successful career
- Get more employers to speak to students
- Expose students to the many career options that don't require a college degree

What should we stop doing?

Respondents (teachers, counselors, and administrators) were asked: "Related to career and technical education, what would you like to have teachers, counselors, administrators, and students start doing?"

The following highlight areas that were noted by three or more respondents:

- Break the narrative that you can only be successful by going to college
- Career surveys that are not reinforced with exposure to job experience
- Stop operating in "silos" and coordinate more shared opportunities for learning that include the high schools, VCTC, and BRCC partnerships
- Stop thinking that CTE courses are "throw-away" classes
- Stop putting students in my class who aren't interested in a career in this field
- Stop the practice of not letting advanced diploma students take CTE classes
- Using resources that are outdated
- Stop dumping uninterested students into CTE classes

Necessary resources

Teachers were asked: "Do you have the resources necessary to deliver training excellence in your subject matter?" 68.18% of teachers responded that they do have the resources necessary. Twenty-one (31.82%) responded that they did not have the necessary resources. All twenty-one responses are shown below, by general category.

Facilities/Lab

- Need an actual lab for plumbing. This will greatly increase enrollment and apprentice success
- Dedicated classroom space
- Funding to update current facility
- We make do, but constant pressure to reduce our budget does not allow for innovation of bringing labs up to "state of the art" real-world conditions

Equipment

- Proficiency scales and lesson plans
- Need Agriculture Mechanics related equipment
- My kitchen is across the hall and has only one stove for a class of 25
- My programs need modern equipment. The equipment we train students on is old and obsolete
- Better computer software
- I have adapted with what I have. It's not always about equipment, but the training to know how to use it and teach it to others
- Access to new software
- Updated Microsoft programs

Training

- Would like to attend multiple CASE Institutes (Ag Ed) to acquire more current information for curriculum
- If I were to teach culinary, I would need more training in that area

Materials

- More teaching materials
- Our coordinator doesn't like textbooks so he won't buy them. He won't buy workbooks.
- More support materials for the subjects I teach. There is never enough money to buy current materials.
- I do have the basic resources. However, not the resources for excellence
- We could always add more
- It is tough stretching supplies to last the year
- Need upgrades to some materials
- Many materials are reused and worn out
- More materials for student projects
- We need new accounting resources
- Budge is always an issue for any instructor

Other
- Yes, but it is because we have the expertise to use old school methods to get the job done

Additional measures to meet the needs of area businesses

Respondents (teachers, counselors, and administrators) were asked: "What additional measures, if any, might ensure that career and technical education is meeting the needs of area businesses?" The responses were combined with last survey question: "Please feel free to add additional comments" because the "additional comments" were focused on meeting the needs of business. The categories below represent areas of thought identified by three or more respondents, except where noted at the end of this section.

The three dominant themes in responses were "Business Engagement," "Student Training/Opportunities," and "Funding." Additional areas were "Job Placement/Recruitment" "School Counselor Training," and VCTC.

Business Engagement:
- Have business leaders meet with 9th grade to tell them directly what opportunities are available with CTE
- Need regular opportunities for teachers to interface with career cluster business related stakeholders (this was echoed in one form or another by nearly half the teacher respondents, N=30)
- Round table event with area businesses
- . Seminar with real teachers and local employers.
- Continue to look closely at needs of business and industry and continue to work together
- More tours for students
- Create a responsive committee of local employers that can actively ensure we are shaping our curriculum to their needs
- Make guest speaker approval more streamlined, less paper work
- Videos of heads of business telling students what they are looking for in employees
- Business could and should do a better job of creating career paths from high school to their business
- Ask them; questionnaires and surveys to businesses
- Businesses need to have realistic expectations. Business technology moves faster than education can keep up, both in physical goods and training of teachers. High school classes are often generalized.
- Have businesses observe classes in their field and collaborate to prepare students.

Student Training and Opportunities

- Teach
    - professionalism
    - work ethic
    - work readiness skills across entire schools
    - soft skills
    - soft skills course in elementary/middle school to reinforce communication, attendance, and hygiene
    - Ag classes at Waynesboro and Staunton high schools
- More opportunities in
    - Job shadowing
    - Mentorships
    - Pre-apprenticeships
    - Summer internships
- Business engagement opportunities
    - Let students get jobs via our classes so we can work with employers
    - More examples, test set-ups, samples from local businesses
    - In technical fields, many plants have specialized equipment and machinery. I'd love to have a training rig developed to provide my students with more hands-on
    - More tours for students, teachers, and school counselors
    - Need to update courses/classes based on population of that school district, new technology, and keeping up with the times
- BRCC: encourage more BRCC enrolment through focused "Promise" program for careers
- Middle school: provide middle school exploration days
- Allow all elementary, middle, and high school students to tour VCTC and see the wonderful offerings
- We keep hearing that CTE is important and valuable. They take away our classes for six more days for testing with no consideration of our curriculum. Our school is about SOL, Dual Enrollment, and AP courses. Little or no value given to our students at VCTC or in CTE classes

Funding

- Provide financial support for lab training
- Update facilities
- Update equipment
- Desperately need to become more updated and progressive. We need more marketing and branding of the programs much like MTC does in Harrisonburg
- Advertise and promote

- Videos I could show to my students
- The shift to CTE is great! However, we need to be careful of pushing more without support of necessary materials
- If CTE teachers will be expected to teach several course sections during one block, there needs to be consideration of compensation or reduction of additional duties to allow for prep time
- Adult Ed: Instructors are paid for 3 hours per class which is spent teaching. This means all class prep work, research, class development, and lab prep is done for free. Need to pay for prep time.

Job Placement/Student Recruitment

- Place students
- Train teachers about current job listings in our area
- Hire a High School Recruiting Coordinator at VCTC, focused on student recruitment, marketing, and placing seniors for work experience and post high school employment

School counselors

- Please educate the high school counselors about CTE and real local job opportunities

VCTC

- VCTC is going through an evolution from where it used to be to going to survive in this world. As a community we need to be working together to build VCTC up and prepare our students for the future.

Paid Summer Internships for Teachers

Teachers were asked "If an area business offered a paid summer internship, in your subject matter, how likely is it that you would participate?"

30.43% said it would be "very likely." 55.07% responded "somewhat likely, depending on the opportunity." 14.49% responded "very unlikely, my summer is already planned."

Pain summer internships would provide the opportunity for teachers to gain current experience which would inform their teaching and provide real-world recent examples for use in the classroom.

Employer-valued Credentials

Employers were asked "Which of the credential(s) do you consider important when making a hiring decision? (Please check all that apply)". The table below captures the responses.

Credential	N	Percentage
Microsoft Office	16	45.71
Microsoft Word	11	31.43
Microsoft Excel	13	37.17
Microsoft PowerPoint	9	25.71
MT1 Certification	7	20.00
W!SE	3	8.57
Career Readiness	8	22.86
NOTCI	3	8.57
Workplace Readiness	8	22.86
Other	24	68.57

For the category "Other," respondents were asked to specify what would be an important credential to consider. There was no recurring response that identified a preferable credential; however, it is notable that several respondents use the "please specify" to submit that they had no familiarity with any of the certifications noted above. While it is a Department of Education requirement that students graduate high school with at least one workforce certification, only three of the respondents placed value on the W!SE which is the near-universal certification earned my graduates of Staunton-Augusta-Waynesboro. At $10/per test, the W!SE is one of the more affordable certifications; however, it has virtually no name-recognition with employers.

Microsoft certification, which does have name-recognition with employers, can be obtained at no cost. Moving to Microsoft certification could present a "check-the-box," no cost, valued added solution to the certification requirement.

Skills Important to Businesses

Employers were asked "When considering an individual for entry-level employment, which of the skills listed are very important to your business? Please check all that apply." The table below shows respondents' preferences.

Skill	N	Percentage
Work ethic	36	97.30
Ability to work in a team environment	33	89.19
Punctuality	33	89.19
Self-initiative	31	83.78
Good verbal communication skills	27	72.97
Able to receive constructive feedback positively	26	70.27
Problem-solving	24	64.86

Ability to organize and prioritize work	22	59.46
Technical knowledge related to the job	20	54.05
Decision-making	19	51.35
Basic math (read a tape measure, fractions)	19	51.35
Computer skills (Word, Excel, PowerPoint)	18	48.65
Mechanical skills	16	43.24
Conflict Management Skills	13	35.14
Troubleshooting problems	12	32.43
Ability to analyze quantitative data	6	16.22
Ability to write written reports	6	16.22

There were five comments in the "Other" field. They are:

- Continuous improvement mindset
- Basic hygiene
- Entry level usually means showing up for work and being able to work with a team
- Motivated to begin, follow-up, and stay on task with job duties within job description both on demand and planning
- Why is electrical being left off this list? Mechanical is stated but not electrical. This is frustrating. The word is now all connected and electrical.

If the reader has any questions about the methodology, he or she may contact Amanda Glover, Economic Developer with Augusta County at: 540-245-5619 or aglover@co.augusta.va.us.

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Technical Resource: Goals and Objectives *with* Identified Strategies

Goal 1: Unify the disconnected elements

Objective 1: Develop career and technical students for successful employment.			
Rationale: Employers consistently report that current applicants don't have soft skills or employability skills. Moreover, they are willing to hire individuals with "aptitude and attitude" and train for skills. For career and technical education to be fully successful, efforts must be made to educate the "whole person," not just train for skills. Practical work experience should be part of the career and technical education student's experience; however, teachers rarely have sufficient connections to area employers to enable them to identify CTE-related work experience. Lacking that, the practice of "a job, any job" to fulfill the PWE requirement tends to become the practice. Going forward, the Employer Advisory Group as well as a Career Counselor located at VCTC should ensure all students have meaningful, CTE related Practical Work Experiences.			
Strategies and Action Items	Priority	Cost	Assigned
Strategy 1.1.1: Graduate students with high soft skills, employability skills (punctuality, work ethic), and a strong understanding of what is required for career success. Partner with WWRC to use their model of teaching employability skills as well as with Blue Ridge Community College and their Professional Readiness course and reproduce those models in career and technical courses.			
Strategy 1.1.2: Establish a policy that practical work experience (PWE) and work-based learning for career and technical pathways must be relevant to the career cluster. Work with the newly formed Employer Advisory Groups to create a roster of approved PWEs as well as a roster of sponsoring employers who will provide practical work experience.			
Strategy 1.1.3: Market the benefits of active membership in Career Technical Student Organizations (CTSO) such as FFA, HOSA, Skills USA, TSA, DECA, FCCLA, and FBLA.			
Strategy 1.1.4: Develop performance metrics to track career and technical education graduates for five years, measuring 1) time from graduation to employment, 2) wage earnings, 3) job turnover, and 4) career-longevity vs. career change.			
Strategy 1.1.5: Market VCTC Adult Education and BRCC programs to area businesses as an additional source of incumbent workforce training.			
Strategy 1.1.6: Leverage readily available resources that highlight careers available in the region, such as Shenandoah Valley Partnership's career videos. http://www.valleycareerhub.com/			
Strategy 1.1.7: Sponsor annual teacher and counselor in-service on how to use Shenandoah Valley Partnership and Shenandoah Valley Workforce Development Board videos and data bases for career counseling in CTE fields. Explore recertification credit for these in-service trainings.			

Strategy 1.1.8: Align majority of CTE offerings with economic development target sectors and job forecasts.			
Strategy 1.1.9: Focus Family and Consumer Science classes on career opportunities.			
Objective 1.2: Leverage the business community to strengthen and tighten CTE courses. Use existing VCTC Advisory Council along with BRCC technical advisors across the three jurisdictions. Where no Advisory Council exists, create the career cluster Employee Advisory Council. Make these roles essential to ensure CTE meets the standards of current best practices.			
Strategy 1.2.1: Create Employer Advisory Councils to the career clusters across all high school career and technical education programs as well as BRCC. Ensure advisory committees include BRCC technical representatives.			
Strategy 1.2.2: Have Employer Advisory Councils provide feedback to teachers to ensure curricula is current with best practices. The Councils will identify, validate, and review curriculum for technical, academic, and employability knowledge that meets the needs of students and of industries.			
Strategy 1.2.3: Have Employer Advisory Councils identify unnecessary duplication of courses and forward recommendations for streamlining to CTE coordinators/supervisors, superintendents, and BRCC.			
Strategy 1.2.4: Have Employer Advisory Councils work with teachers to identify/create clear pathways from middle school (career exploration) to home high school (career discovery) to VCTC (career credentials) to BRCC (career mastery).			
Strategy 1.2.5: Have Employer Advisory Councils identify obsolete equipment and make recommendations for replacements to CTE coordinators/supervisors, superintendents, and BRCC. The Councils will partner with the school systems to defray or eliminate costs to schools through the SAW Career & Technical Education Foundation.			
Strategy 1.2.6: Have Employer Advisory Councils identify any CTE class which does not lead to a career pathway with access to middle class income and evaluate discontinuing such classes, making recommendations to CTE coordinators/supervisors, directors of instruction/curriculum, and superintendents. Establish a four-year review cycle to continue recommending dropping a course of study with no career pathway and adding emerging sector classes.			
Strategy 1.2.7: Have Employer Advisory Councils identify appropriate, industry recognized certifications and credentials and recommend adoption to the school systems.			
Strategy 1.2.8: Work with Augusta Health Center to create and leverage apprenticeships, internships, and work experiences. AHC functions as a miniature city and has jobs in all CTE areas.			

Strategies and Action Items	Priority	Cost	Assigned
Strategy 1.2.9: Have Employer Advisory Councils evaluate the names of classes to ensure they reflect current industry thinking.			

Objective 1.3: Maximize the value of certifications and credentials.			
Rationale: Students are required to graduate with a workforce certification. W!SE is an inexpensive assessment that provides a certification; however, employers don't recognize the certification or give it weight when considering an applicant. The W!SE runs the risk of becoming a "check the box" solution that offers no value other than a criterion is met. Directing funds from W!SE to other, relevant certification will provide more meaningful certifications.			

Strategies and Action Items	Priority	Cost	Assigned
Strategy 1.3.1: Introduce digital literacy in grade 7.			
Strategy 1.3.2: Create a manual of career pathway courses available through VCTC and BRCC along with a list of available certifications and credentials and how to earn them. Align manual with VA Board Certifications and Credentials. Distribute the career readiness manual annually in grade 7 through 11.			
Strategy 1.3.3: Work with Employer Advisory Councils to gain Department of Education approval of industry-recognized and valued credentials such as OSHA-10.			
Strategy 1.3.4: Encourage courses to use industry recognized certification when available. Encourage students to "start early and certify often." Minimize certifications that are not industry-recognized such as W!SE.			

Objective 1.4: Ensure on-going opportunities for teachers and counselors to develop stronger, aligned curriculum and increased student opportunities.			
Rationale: There is little standardization of career and technical curriculum both between and within schools. As a result, no employer has any assurance that a graduate of one program has had the same course of study that a graduate of another school's program has had. Employer confidence can build only when there is some degree of reliability that every student following a career pathway has had the same exposure. Counselors are generally highly supportive of student goals. They could further leverage their support by acquiring a more in-depth understanding of what materials covered in a CTE class include.			

Strategies and Action Items	Priority	Cost	Assigned
Strategy 1.4.1: Create "Affinity Groups" for teacher in each career cluster, across the three jurisdictions, to enable curricula sharing and to work toward a general, standardized curriculum for the same classes offered at different schools. Present finalized joint curriculum to Employer Advisory Councils for endorsement.			
Strategy 1.4.2: Create a partnership between BRCC, VCTC and counselors to provide counselors familiarity with career and technical education courses, job opportunities, and area employers, thereby allowing counselors to provide fuller direction and guidance to students.			
Strategy 1.4.3: Provide education/training scholarships for CTE teachers for summer training opportunities in subject matter.			
Strategy 1.4.4: Direct VCTC to host annual, statewide CTE curriculum development conference in the career clusters featured in this region's schools.			

Strategies and Action Items	Priority	Cost	Assigned
Strategy 1.4.5: Develop a CTE teacher succession plan and develop a campaign to recruit potential CTE teachers from the trades. Screen for skills, aptitude, and desire to work with students. Partner with JMU to prepare this "bench" for provisional certification.			
Objective 1.5: Expand career and technical education opportunities for students.			
Rationale: The investment of space and equipment for careers and technical education is not currently being leveraged for maximum return on investment or maximizing student educational opportunities.			
Strategies and Action Items	**Priority**	**Cost**	**Assigned**
Strategy 1.5.1: Create week summer academies for middle school students in career and technical education programs to provide hands-on exposure and skill gains. Sites could include home high schools, VCTC, and BRCC.			
Strategy 1.5.2: Open VCTC for summer sessions for credit classes, allowing rising sophomore and above the opportunity to fast-track career and technical education. Partner with BRCC to create dual-enrollment summer career and technical classes.			
Strategy 1.5.3: Explore feasibility and viability of creating a career and technical school for middle school.			
Strategy 1.5.4: Work with the Employer Advisory Councils to develop new course offerings, such as machine maintenance and quality control that reflect needs of a significant number of area businesses.			
Strategy 1.5.5: Increase the use of adjunct faculty to maximize dual-enrollment classes for college credit with BRCC.			
Strategy 1.5.6: Leverage Virginia's virtual classes.			
Strategy 1.5.7: Expand career and technical offerings in Staunton, Augusta, and Waynesboro to ensure students have broad exposure to the career clusters and to create a pipeline to VCTC and BRCC so more students have access to credentials and career opportunities.			
Strategy 1.5.8: Create a system to ensure every student has a cohesive career plan and portfolio from 6th grade to graduation. The plans can change—even an evolving plan provides some direction.			
Strategy 1.5.9: Create a plan to expose students to technology as early as possible and plan to have technology exposure expand with each grade year.			
Strategy 1.5.10: Link middle school students more fully to BRCC with tours and hands-on learning experiences.			
Strategy 1.5.11: Ensure counselors convey to students that they can get college credit at VCTC via dual-enrollment classes with BRCC.			
Objective 1.6: Leverage the school systems' very strong relationship with Blue Ridge Community College to create expanded opportunities for Augusta – Staunton – Waynesboro students and teachers.			

Goal 2: Promote the programs

Objective 2.1 Fully educate students, parents, teachers, school counselors, and the public to the opportunities available in career and technical education programs and careers.			
Rationale: CTE appears to be a relatively well-kept secret. In the spring of 2018, Augusta County administered a CTE survey to all middle and high school students. Of 920 high school students, only 107 (11.6%) knew how to become a CTE "Finisher/Completer." Responding to the question, "Are you aware of credential options in your CTE classes?" 20.7% responded "Yes." While only two data points, those two points support the belief that students and parents are not well-informed about the career and technical offerings available. It may be that students still think of CTE as "Vo Tech" or vocational education or that they have no familiarity with the subject at all. An educational campaign that continues for several years would help remedy the lack of knowledge.			
Strategies and Action Items	Priority	Cost	Assigned
Strategy 2.1.1: Create and annually distribute a Career & Technical Education Manual that describes the sixteen career clusters identified by the Department of Education and highlights the four available career and technical clusters, available classes, and how students can use their home high schools to explore those tracks or to prepare for more in-depth student at VCTC. Include information on what a student must do to become a "finisher/completer." This would be given to students to share with parents at the end of each academic year, beginning in grade 6 and ending in grade 12. Emphasize that middle school is for career exploration, high school offers general hands-on exploratory, and VCTC and BRCC offer advanced training and credentialing.			
Strategy 2.1.2: Annually create and distribute a brochure targeting parents showing success stories of recent graduates of VCTC and BRCC. Include testimonials from graduates and brief showcases of their workplaces.			
Strategy 2.1.3: Create a venue to educate school counselors to the available career and technical tracks, available courses, pre-requisites, and career possibilities. Engage them as advocates for career and technical education programs. Encourage counselors to avoid language such as "for those of you not going to college…." Repeat annually.			
Strategy 2.1.4: Encourage an annual Marketing Class project contest to design and implement a CTE marketing campaign (targeting students, parents, teachers, and school counselors) using print, visual, and social media.			
Strategy 2.1.5: Develop a flyer that clarifies the differences between a standards diploma and the advanced diploma. Show what is possible with a standard diploma. Distribute annually to parents of students in grades 6-8.			
Strategy 2.1.6: Provide a marketing budget to VCTC to promote awareness of the range of career and technical classes available and to highlight certificates, credentials, and pathways with Blue Ridge Community College.			
Strategy 2.1.7: Create collateral marketing materials that show the vertical paths available within career clusters. For example,			

show how completion of the CNA opens paths to LPN and RN certification. Every "exit" point should be accompanied by knowledge of the next "entry" point on a career pathway. This should include BRCC programs where appropriate.			
Strategy 2.1.8: Ensure each school commits to distribute materials they receive on CTE opportunities.			
Strategy 2.1.9: Work with local media to provide coverage of CTE events.			
Strategy 2.1.10: Have educator become visibly and symbolically supportive of both academic *and* career and technical education. **Action 2.1.10.1:** At graduation, give statistics regarding the number of students going directly into employment as well as the number of students pursuing 2 and 4-year degrees.			
Strategy 2.1.11: Create a Career Coalition comprised of CTE teachers, counselors, VCTC assistant principal, BRCC, and area human resource officers to design an annual event each fall that would assist CTE completers in identifying potential employers, allowing students to begin their application processes.			
Strategy 2.1.12: Hire a Career Placement Counselor or BRCC Career Coach to be located at VCTC. This position would be responsible for recruiting students to VCTC and BRCC and, once the student is there, serve as a resource for job search skills (resume writing, how to complete applications). The counselor would work with students to find after-graduation placements as well as work with businesses for internships, job shadowing experiences, pre-apprenticeships, and paid employment.			
Strategy 2.1.13: Require students to tour VCTC every year from grade 6 through grade 10. Have students choose three areas of interest and have them attend one mini-class with hands-on experience (led by VCTC students) in each of their three areas of interest. Include an orientation class that explains how to earn certificates and credentials, the programs available, and job opportunities.			
Strategy 2.1.14: Require students to tour BRCC once during middle school and once during high school and allow them to attend one mini-class with hands-on experience in a career and technical area of interest.			
Strategy 2.1.15: Work with WWRC to eliminate silos between students with disabilities and career and technical education program opportunities.			
Strategy 2.1.16: Minimize disruption to career and technical classroom time and each student's time in that class. If a student needs to meet with a counselor or school official, minimize calling the student out of a CTE class when possible.			

Strategy 2.1.17: Form a Parent-Teacher Association or Parent Council at VCTC.			
Strategy 2.1.18: Create a unified leadership team that actively promotes the value of CTE and works to ensure continued, sustainable integrations of the CTE components. This may be a part of the Career Pathways Consortium at BRCC.			
Strategy 2.1.19: Integrate the elements of workplace readiness and Profile of a Graduate into curriculum so each student develops the competencies.			
Strategy 2.1.20: Rename "Vo Tech" drive to "Valley Tech"			

Goal 3: Leverage and engage employers

Objective 3.1: Working with Shenandoah Valley Workforce Development Board (SVWDB) and Shenandoah Valley Partnership (SVP), fully engage the "high-wage, high-demand job" business community in student opportunities and successes.			
Rationale: Area employers are key stakeholders in the success of the career and technical education programs offered in the Staunton-Augusta-Waynesboro schools and at Blue Ridge Community College. The quality of "school output" directly affects the quality of human capital "input" in area businesses. The area businesses have a strong sense of community responsibility and have made it clear they will play an active role if they are asked and if the role is well-defined, meaningful, and will make a difference. Now is a good time to form collaborative partnerships that will benefit students, employers, and the region's economy.			
Strategies and Action Items	Priority	Cost	Assigned
Strategy 3.1.1: Create a S-A-W Career & Technical Education Foundation for the purpose of providing guidance and securing funding for equipment and hands-on consumable goods for increased quality education. **Action 3.1.1.1:** The Foundation will provide scholarship assistance to career and technical student organizations to maximize student participation. **Action 3.1.1.2**: The Foundation may provide scholarships for students attending career and technical courses of study at BRCC.			
Strategy 3.1.2: Increase the number of internships, job shadowing experiences, pre-apprenticeships, registered apprenticeships, and meaningful paid work experiences.			
Strategy 3.1.3: Foundation members will identify sponsor employers who will provide paid summer "master externships" and "master apprenticeships" to educators to allow teachers to have access to fresh industry experience which will inform their teaching and their students.			
Strategy 3.1.4: Create a postcard marketing campaign, targeting area employers identified through the Commissioners of Revenue offices BPOL and Tool Tax lists, identifying the key contacts for incumbent worker training. Contacts would include VCTC Adult Education, BRCC, and Shenandoah Valley Workforce.			
Strategy 3.1.5: Link the work of the Foundation to the work of the career cluster Employer Advisory Councils.			

Goal 4: Innovate

Objective 4.1: Explore new career and education opportunities and expand programs that have high level of support from business community.			
Strategies and Action Items	Priority	Cost	Assigned
Strategy 4.1.1: Work with BRCC to develop a degree program for students to take while in high school career and technical programs and apprenticeships.			
Strategy 4.1.2 Establish a residential two-year high school (11th and 12th grade) that draws highly talented student from across Virginia to the Virginia School for Advanced Career and Technical Education. **Action 4.1.2.1:** Residential students would bring their FTE status to Augusta County. Non-residential could complete portions of the work on-line and receive a VSACTE certificate. **Action 4.1.2.2:** Explore the space between VCTC and WWRC as a possible location.			
Strategy 4.1.3: Provide incentives to teachers who combine SOL theory classes with CTE application classes on joint projects that require both theoretical and applied knowledge to allow students to learn from one another.			
Strategy 4.1.4: Create a "GoFundMe" account for specific classroom needs (consumable goods) that individuals can donate to for supplies and equipment with monitoring oversight provided by the procurement division.			
Strategy 4.1.5: Leverage and monetize VCTC Adult Education training, modeling after the cosmetology/barber/nail technician training where students, statewide, complete theory training online with VCTC and complete practicums/apprenticeships in their home area.			
Strategy 4.1.6: Create a centralized three-jurisdiction career and technical education middle school that operates during the summer months.			
Strategy 4.1.7: Working with the Small Business Development Center, (SBDC) develop a Youth Entrepreneurial Program.			
Strategy 4.1.8: Develop a Career Technical Academy CTA), grades 9-12, targeting students at risk of academic failure. Students must meet specified at-risk criteria, including past record of irregular school attendance, behind in coursework for grade level, low motivation or disinterest in the regular school program, and economically disadvantaged. **Action 4.1.8.1:** Shuttle students from home school to CTA in buses driven by drivers who have a record of being extraordinarily positive influences on challenging routes.			

Strategy 4.1.9: Incentivize collaborative ventures between SOL, Governor's School, and CTE classes for innovative "theory meets application" experiences. For example, collaboration between theater students and culinary arts students could create a dinner theater experience.			
Strategy 4.1.10: Explore the Hampton Academies concept for modified replication in Staunton-Augusta-Waynesboro, ensuring students have access to all 16 career cluster tracks.			

Goal 5: Formalize equipment and facilities upgrade planning and implementation

Objective 5.1: Equip career and technical labs with sufficient up-to-date equipment and materials to ensure learning is relevant to current standards.			
Rationale: Employers have noted that some equipment in the career and technical education classrooms and labs are antiquated. One example cited was a lathe that was produced in 1940 and lacks the capabilities of lathes currently in use by employers. Employers also counseled the schools to refrain from accepting donated, used equipment from area employers because "we're getting rid of it for a reason, it no longer meets industry standards." While students may not have exposure to the most recent technology, the intent is to ensure classroom and lab equipment bear close semblance to what is used by area employers so students have only slight adjustments to make in order to sue more modern equipment.			
Strategies and Action Items	Priority	Cost	Assigned
Strategy 5.1.1: Create a replacement plan and capital equipment budget to ensure equipment is on an industry-standard replacement plan.			
Strategy 5.1.2: Evaluate the need for a plumbing lab to enable students to have hands-on experience.			
Strategy 5.1.3: Require teachers to provide an inventory of equipment, approximate age and condition of that equipment, and an assessment of the equipment's usefulness in teaching.			
Strategy 5.1.4: Create a policy to govern acceptance of surplus equipment.			
Strategy 5.1.5: Have CTE coordinators/supervisors work closely with BRCC's CTE grant program for micro-fund equipment grants. Ensure teachers are actively pursuing funding for classroom equipment through BRCC grants and other grant agencies.			
Strategy 5.1.6: Replace out-of-date and/or deteriorated text books with appropriate materials.			
Strategy 5.1.7: Standardize equipment across classrooms so every student has the same opportunity to use similar equipment			
Strategy 5.1.8: Ensure classrooms are equipped with most recent software.			
Objective 5.2: Evaluate career and technical education facilities and plan for upgrades and replacement facilities.			
Rationale: Career and technical education requires equipment that isn't designed for the traditional classroom.2018-2019 would be good time to evaluate all CTE classrooms for size, lighting, code, and suitability for the equipment required. From that, a timeline to upgrade space, provide auxiliary space, or renovate existing space would allow jurisdictions the opportunity to budget appropriately.			
Strategies and Action Items	Priority	Cost	Assigned
Strategy 5.2.1: Evaluate all career and technical education classrooms and teaching labs for adequacy and determine upgrade needs and priority. Include in the evaluation input from teachers and from industry. **Action 5.2.1.1:** Where possible, engage career and technical students to perform facility upgrades under teacher supervision as an extension of their lab work.			

For example, students could replace lighting at VCTC to improve lighting and reduce energy costs.			
Strategy 5.2.2: Assess where construction of a stand-alone CTE auxiliary building would ease crowding and provide better teaching space for career and technical education classes.			
Strategy 5.2.3: Assess the need and ROI on construction of a larger public safety training facility for fire, police, and EMS.			
Strategy 5.2.4: Evaluate the feasibility of constructing a new diesel bay at VCTC to replace the one currently in use, which is very small given the size of diesel vehicles.			
Strategy 5.2.5: Update the interior corridors of VCTC to feature exhibits of student work, photographs of students engaged in lab work, and banners and plaques awarded to students. Create student-friendly corridors using paint and murals. [Note: Fort Defiance High School serves as a stellar example where student-created murals and artwork lead to, as several students affirmed, "a feeling of pride and ownership."]			
Strategy 5.2.6: Evaluate all career and technical education classrooms and teaching labs for adequacy and determine upgrade needs and priority.			
Strategy 5.2.7: Include VCTC in the 10-Year Capital Improvement Plan.			

Goal 6: Trumpet successes loudly

Objective 6.1: Share metrics and success stories with broader stakeholders, including economic development offices, employers, and on jurisdiction websites.			
Strategies and Action Items	Priority	Cost	Assigned
Strategy 6.1.1: Develop performance metrics to track career and technical education graduates for five years, measuring 1) time from graduation to employment, 2) wage earnings, 3) job turnover, and 4) career-longevity vs. career change.			