CTECS Community of Practice
Update Report

Kentucky CTE:
A look at where we’ve been and where we’re headed…

October 19, 2015
Today’s Topics

• 2015-2016 OCTE Strategic Priorities
• CTE Overview
• Economic Competitiveness Act
• 2016 Biennium Budget Requests
2015-16 Strategic Priorities

- Effective CTE Programs of Studies
- Career Readiness Accountability
- Professional Learning for All Stakeholders
- Advocacy for Rigorous and Relevant CTE
Effective CTE Programs of Studies

• Career Pathways Development and Revision
  – New document published 2015-16

• Work-Based Learning Opportunities
  – New WBL Manual released October 2015

• Instructional Support Tools for Teachers
  – Use of career readiness performance data to drive development of targeted resources

• Industry Needs Alignment and Workforce Sector Strategies
  – Upcoming Task Force meeting to guide pathway development and industry certification needs
Career Readiness Accountability

- KY Occupational Skill Standards Assessments & Industry Certifications
  - Measures of career readiness technical skills
- ACT WorkKeys & ASVAB
  - Measure of career readiness academic skills
- Accountability Monitoring and Program Improvement Processes
  - Verification of accurate reporting
  - Identification of needs
  - Planning and support
Professional Learning for All Stakeholders

- New Teacher Institute
- Technical Upgrade Training
- Professional Growth and Effectiveness System
- Project-Based Learning
- Kentucky’s Professional Learning Standards
- Concierge Services for OCTE staff
Advocacy for Rigorous and Relevant CTE

• Training and Workshops for Stakeholder Groups
• Economic Competitiveness Agenda
• CTE Funding
• CTSO Integration
Kentucky CTE Enrollment Data
Preparatory Status

A "preparatory" student has completed two (2) credits and is enrolled in the third credit within an approved CTE pathway.

- **Completed two** means on the transcript the student has passed and received 2 credits from valid course(s) as part of the pathway.

- **Enrolled in the third credit** means the student is scheduled to take the third credit sometime during the academic year. It is expected the student will successfully complete the credit bearing course(s) during the year. If the student withdraws or fails the third credit course(s) (must receive a credit on the student transcript), his/her status must be changed from preparatory back to exploring.
CTE Data Overview

- Total High School (9-12) Enrollment: 132,847
- Preparatory Enrollment: 37,401
- Students in 167 Districts are impacted by CTE programs
- CTE pathways are offered in:
  - 217 High Schools (68% of Students)
  - 53 Area Technology Centers (12.1% of Students)
  - 42 Locally Operated Centers (19.8% of Students)

Source (TEDS 2014-2015 Enrollment Data)
69.5% of KY High School (9-12) Students Enrolled in CTE Programs

Total – 191,144

CTE Students: 132,847
Non-CTE Students: 58,297

Based on 2014-2015 Data
## Secondary Enrollment by Program Area

<table>
<thead>
<tr>
<th>PROGRAM AREA</th>
<th>Enrollment</th>
</tr>
</thead>
<tbody>
<tr>
<td>AGRICULTURE AND NATURAL RESOURCES</td>
<td>31,521</td>
</tr>
<tr>
<td>ARCHITECTURE AND CONSTRUCTION</td>
<td>6,591</td>
</tr>
<tr>
<td>ARTS, A/V TECHNOLOGY AND COMMUNICATIONS</td>
<td>4,275</td>
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<tr>
<td>ARTS AND HUMANITIES</td>
<td>8,580</td>
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<tr>
<td>BUSINESS AND ADMINISTRATION</td>
<td>48,525</td>
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<tr>
<td>HEALTH SCIENCE</td>
<td>18,310</td>
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<tr>
<td>FAMILY &amp; CONSUMER SCIENCES</td>
<td>40,942</td>
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<tr>
<td>INFORMATION TECHNOLOGY</td>
<td>7,008</td>
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<tr>
<td>LAW &amp; PUBLIC SAFETY</td>
<td>12,051</td>
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<tr>
<td>MANUFACTURING</td>
<td>9,041</td>
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<tr>
<td>PATHWAY TO CAREERS</td>
<td>343</td>
</tr>
<tr>
<td>RETAIL/WHOLESALE SALES AND SERVICE</td>
<td>13,282</td>
</tr>
<tr>
<td>SCIENCE, TECHNOLOGY, ENGINEERING AND MATHEMATICS</td>
<td>12,221</td>
</tr>
<tr>
<td>TRANSPORTATION, DISTRIBUTION AND LOGISTICS</td>
<td>5,107</td>
</tr>
</tbody>
</table>

**Total Student Enrollment – 217,797**
98% of Kentucky’s preparatory Career and Technical Education (CTE) seniors graduated from high school in 2014

Source (Carl D. Perkins Federal Accountability Data)
Kentucky CTE Performance Data
# CCR Accountability Model

**College Ready:** Must meet benchmarks on one of the following:

- Armed Services Vocational Aptitude Battery (ASVAB)
- ACT Work Keys (Applied Math, Locating information, and Reading for Information)

**Career Ready:** Must meet benchmarks for one requirement in Career Academic area and must meet one requirement in Career Technical area

- Career Ready Academic
  - Kentucky Occupational Skills Standards Assessment (KOSSA)
- Career Ready Technical
  - Industry Certificates

**Bonus:** College AND Career Ready must meet at least one from each area

<table>
<thead>
<tr>
<th>College Ready Academic</th>
<th>Career Ready Technical</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACT or COMPASS or KYOTE</td>
<td>KOSSA</td>
</tr>
</tbody>
</table>

**NOTES:**
1. By meeting the College Ready Academic definition, the student does not have to take the additional tests of ASVAB or Work Keys for the bonus area.
2. For accountability purposes, the bonus shall not allow the readiness percentage to exceed 100 percent.
CCR Accountability CTE Data Updates

Preliminary 2014-2015 CCR Data

- Increase in the number of preparatory graduating seniors (20,563 to 21,958)

- Increase in the number of students graduating career ready (7,865 to 8,612)

- Increase in the percentage and number of students passing career ready assessments
ACT WorkKeys Results 2014-2015

- 14,134 Students Tested
  - *Increase of 1,720 students from last year*
- 9,901 Students Earned Certificates
  - *Increase of 1,514 certificates from last year*
- Overall 70.05% Students Earned Certificates
  - *Increase of 2.49% from last year*

<table>
<thead>
<tr>
<th></th>
<th>Kentucky Average</th>
<th>National Average</th>
<th>Difference</th>
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<tbody>
<tr>
<td>Silver Level or Above</td>
<td>70.05%</td>
<td>66.00%</td>
<td>4.05%</td>
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</table>
ASVAB Results

- 18,097 Students Assessed

- 6,208 Students Received a 50 or higher AFQT

- ASVAB numbers are lower than in 13-14, but there is a slightly higher pass rate

- The decrease in ASVAB testing in 2014-15 is most likely due to state funding of WorkKeys and guidance from CTE on how to properly identify students for assessments.
KOSSA

KY Occupational Skill Standards Assessment

Every Scholar Needs A Skill

Kentucky Skill Standards, Assessment, and Certification System
KOSSA Overview

• Historical Perspective
• Present Day
• The Future
KOSSA Results

• 26 Assessment Areas
• 27,086 Students Assessed
  • 10.9% increase from 2013-14
• 15,854 Students Earned Certificates
  • 19.5% increase from 2013-14
• Overall 59% Pass Rate
  • 9.2% increase from 2013-14
Industry Certifications

- 10,009 Industry Certifications Awarded
- 9,584 Students Earned Industry Certifications
  - 12.6% increase from 2013-2014
Industry Certifications

• Top Industry Certifications
  • State Registered Nursing Assistant (SRNA/MNA)
  • ASE Student Certifications – Automotive Maintenance and Light Repair
  • Microsoft Office Specialist (MOS) – Access, Excel, Word, PPT
  • NCCER (National Center for Construction Education and Research)
  • ServSafe Food Managers
Kentucky’s Economic Competitiveness Act: 
*The Concept & Requirements*
Themes of the Economic Competitiveness Act

- Career Pathways & Sector Strategies
- Work-Based Learning Infrastructure
- Workforce Services Infrastructure Realignment
- Data & Performance-Informed Decision Making
- Communications
Collaborate with business and industry to define career pathways for critical state and regional sectors.

**Impact on K-12:**

- Creation of an employer-led review process of career pathways, course work, and assessments to ensure business and industry alignment
- Stackable certifications and credentials
KWIB’s Economic Sectors

Kentucky’s Target Industry Sectors (2011)

1. Automobile and Aircraft Manufacturing
2. Transportation, Distribution, and Logistics
3. Business Services / Research and Development
4. Health Care / Social Assistance
5. Energy Creation / Transmission

Source: KY Workforce Investment Board Sector Strategy Toolkit
Sector Strategy
Framework for Success

1. Sectors Based on Real-Time Data
2. Sectors Reflect Regional Consensus
3. Employer Talent Needs Identified
4. Partner’s Plans & Organizations Support Sectors
5. Education & Training Aligned
6. Business Services Aligned
7. Continuous Improvement & Sustainability

World-Class Sector Strategies
In alignment with Federal Perkins Regulation, a Career Pathway will:

- be a non-duplicative sequence of CTE courses;
- incorporate secondary education and postsecondary education elements;
- include coherent and rigorous content aligned with challenging academic standards and relevant career and technical content in a coordinated, non-duplicative progression of courses that align secondary education with postsecondary education to adequately prepare students to succeed in postsecondary education;
- may include the opportunity for secondary education students to participate in dual or concurrent enrollment programs or other ways to acquire postsecondary education credits;
- and lead to an industry-recognized credential or certificate at the postsecondary level, or an associate or baccalaureate degree.
Components of Effective CTE Programs of Study

<table>
<thead>
<tr>
<th>Legislation &amp; Policies</th>
<th>Course Sequences</th>
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<tr>
<td>Partnerships</td>
<td>Credit Transfer Agreements</td>
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<td>Professional Learning</td>
<td>Guidance Counseling &amp;</td>
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<td>Academic Advisement</td>
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<tr>
<td>Accountability and Evaluation</td>
<td>Teaching &amp; Learning Strategies</td>
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<tr>
<td>Systems</td>
<td>Technical Skills Assessments</td>
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<tr>
<td>College &amp; Career Readiness</td>
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<tr>
<td>Standards</td>
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</tbody>
</table>
CTE Program of Studies and Career Pathways

- The Program of Studies provides a framework to identify Career Pathway options within a Career Cluster(s).

- A Career Pathway is a **four course sequence of rigorous academic and career/technical courses**, commencing in the ninth grade and leading to an associate degree, baccalaureate degree and beyond, an industry recognized certificate, and/or licensure.

- The Career Pathway is developed, implemented, and maintained in partnership among secondary and postsecondary education, business, and employers.

- Kentucky CTE Programs of Study can be viewed at
  
Industry Certification Criteria

1. Recognized, endorsed, or required by industry.

2. Written and verified by national or state industries.

3. Curriculum and certification aligned with state and/or national standards.

4. Certification must be an end of program assessment related to the student’s identified career pathway achieved through a sequence of courses.
Industry Certifications for CCR

- KDE-OCTE Content Specialist (Consultants) confer with industry representatives in the selection process.

- The Kentucky Workforce Investment Board makes a final review and recommendation of the Valid Industry Certifications.

- 2015-16 Industry Taskforce development (Curriculum and Industry Certifications)
The list of approved industry certifications for CCR during the 2015-16 school year can be found on the KDE-OCTE website:
http://education.ky.gov/CTE/kossa/Pages/ValidKOSSAList.aspx
Kentucky Occupational Skills Standards Assessment (KOSSA)

- Developed following the 1996 National Education Summit, at the direction of the Governor Patton and in partnership with Kentucky business and industry representatives for high demand occupational areas.

- KOSSA is a tool to assess technical skill attainment required under Perkins legislation.

Standards were established in three broad categories:

1. Academic
2. Employability
3. Occupational

- Assessment items were developed based on industry identified standards
- Curriculum was aligned to the Kentucky Occupational Skills Standards

KOSSA Standards can be viewed at [http://education.ky.gov/CTE/kossa/Pages/KOSSAStandardsDocs.aspx](http://education.ky.gov/CTE/kossa/Pages/KOSSAStandardsDocs.aspx)
Work-Based Learning Infrastructure

Create a state level framework to facilitate employer engagement in work-based learning and to ensure consistency across the education and training continuum partners regarding definition, etc.

**Impact on K-12:**

- Governance structure that is partnership based
- Identification of best practices
Work-Based Learning

705 KAR 4:041

Proposed Changes:

• Title Change / Inclusion of Other Forms of WBL

• Broadened Eligibility Requirements for Cooperative Education

• Incorporation by Reference: KY WBL Manual

NEWLY REVISED WBL MANUAL, Oct. 2015
CTE™
Learning that works for Kentucky
TRACK
Tech Ready Apprentices for Careers in Kentucky
KENTUCKY APPRENTICESHIP
- Pre-Apprenticeship program in partnership with the Kentucky Labor Cabinet for Registered Apprenticeship
- Utilizes the current secondary Career and Technical Education infrastructure at no cost
- Creates a seamless Career Pathway for students into post-secondary opportunities
- Creates a pipeline of students with a good foundation and an interest in the occupation
TRACK Method...

- Employer registers apprenticeship program with Labor Cabinet
- Employer works with school to identify students and selection process
- Employer chooses a minimum of a 4 courses sequence
- Employer determines if student completes successfully
- Student to receive industry certification; on-the-job hours are credited
- Post-secondary requirements determined by employer
TRACK Results

✓ Students prepared for local workforce
✓ Career pathway leads to the gainful employment
✓ Work-based learning opportunities through co-op
✓ Dual/articulated credit is accepted, if applicable
✓ Enforces employability skills
✓ No student loans
Student Benefits

• Industry certification recognized by statewide organizations

• Highly favored for an interview

• Credit will be decided upon after acceptance
Youth Employment Solutions – YES!

• Solution to worker’s comp barrier of employing students under 18
• District signs an MOU with Adecco
• Work-based learning in conjunction with a career pathway (not to supplement a workforce)
• Includes most occupations
• Refer employer to Adecco for rate information, risk assessment, etc.
Workforce Services
Infrastructure Realignment

Continue to evaluate and realign services and support structures to expand on efforts to build a truly customer-centric model at the local level.

Impact on K-12:

- Regionalize service delivery
- Transition of state operated technical centers to regional centers
- Career counseling for every high school and technical center
Data and Performance-Informed Decision Making

Ensure the collection of the right data to inform policy and practice among the partners to create an efficient and effective talent pipeline.

Impact on K-12:

- Creative State Financial Strategies
- Kentucky Longitudinal Data System
Data and Performance-Informed Decision Making

The Kentucky Longitudinal Data System

Identity Resolution/Assignment And Cleaning

De-Identified Warehouse

Data Requests

Policy Evaluations

What If's

Analyses

Reports
Data and Performance-Informed Decision Making

CTE data provided to the Kentucky Longitudinal Data System

- Student Demographics
- Pathway Enrollments
- Student Objective
- Industry Certifications
- KOSSA
- CTE Dual-Credit Hours
- Credentials (Diploma/GED)
Data and Performance-Informed Decision Making

**Key CTE Research Questions:**

What percentage of students graduating Career Ready successfully transition to adult life 1-year out or even 5 years out? How does this compare with students not meeting Career Ready benchmarks?

What regional sectors/needs are not being addressed through current pathway enrollments in CTE? Are we supplying a trained workforce to meet the sector demands? Are students working in the area in which they received their training?

What is the return on investment for career and technical education programs in Kentucky? What impact are CTE students making on Kentucky’s economy?

Does obtaining specific industry certifications have an impact on earnings and employment?
Data and Performance-Informed Decision Making

Next Steps

- OCTE is one partner collaborating with the Kentucky Center for Education and Workforce Statistics (KCEWS) on a grant opportunity to improve and expand the Kentucky Longitudinal Data System

- In 2015-2016 all Career and Technical Education Centers, including Area Technology Centers, will use Infinite Campus for scheduling, attendance, grades, etc…

- Upgrade and improve TEDS system for Stakeholders

- OCTE Officewide data retreat series to ensure the right data is collected and to analyze existing data to improve practices

- CTE specific CCR Data 101 sessions with districts/schools
# CCR Accountability—School Report Card Tab for CTE

**500 Mero Street**  
Frankfort, KY 40601  
Phone: (502) 564-3141  
Fax: (502) 564-5680

**Kentucky**  
State Membership: 654,289  
School Year: 2013-14  
Commissioner: Terry Holliday, Ph.D.

## Career Pathways

*Students’ roadmaps to college and career readiness - pathway enrollments and industry certifications earned.*

Last Updated Date: 11/14/2014

<table>
<thead>
<tr>
<th>Career Pathway</th>
<th>Total Enrollments</th>
<th>Total KOSSA and Industry Certifications Earned</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>State</td>
<td>State</td>
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<tr>
<td>ACADEMIC ENRICHMENT</td>
<td>31</td>
<td>0</td>
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<tr>
<td>ACCOUNTING</td>
<td>1,389</td>
<td>223</td>
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<tr>
<td>ADMINISTRATION SUPPORT</td>
<td>14,073</td>
<td>2,218</td>
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<tr>
<td>ADVANCED MANUFACTURING</td>
<td>610</td>
<td>62</td>
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<tr>
<td>ADVERTISING</td>
<td>369</td>
<td>55</td>
</tr>
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</table>
Perkins

The Carl D. Perkins Career and Technical Education Act of 2006 (Perkins IV) requires a state performance accountability system to promote continuous career and technology education (CTE) program improvement. Federal funding is dependent upon the state meeting performance goals that address the eight core indicators for student achievement outlined in the federal law. Local school districts and multidistrict career centers (LEAs) are assessed annually for performance on these eight indicators, which are referred to as the Perkins Performance Measures.

<table>
<thead>
<tr>
<th>Performance Measure</th>
<th>Total Accountable Enrollments</th>
<th>Number of Students Meeting Benchmark</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>State</td>
<td>State</td>
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<tr>
<td>Academic Attainment - Math</td>
<td>17,774</td>
<td>5,926</td>
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<tr>
<td>Mathematics - 152</td>
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<tr>
<td>Academic Attainment - Reading</td>
<td>18,682</td>
<td>9,747</td>
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<tr>
<td>- 151</td>
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<tr>
<td>Technical Skill Attainment -</td>
<td>16,055</td>
<td>11,241</td>
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<tr>
<td>251</td>
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<tr>
<td>Secondary School Completion</td>
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<td>16,724</td>
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<td>- 351</td>
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<tr>
<td>Student Graduation Rate -</td>
<td>19,007</td>
<td>16,724</td>
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<tr>
<td>451</td>
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<td>Secondary Placement -</td>
<td>13,416</td>
<td>12,037</td>
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<tr>
<td>551</td>
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<tr>
<td>Non-Traditional Participation</td>
<td>98,432</td>
<td>36,509</td>
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<tr>
<td>- 651</td>
<td></td>
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<tr>
<td>Non-Traditional Completion -</td>
<td>13,743</td>
<td>2,768</td>
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<tr>
<td>652</td>
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</table>

# Career and Technical Education

## Specific College and Career Readiness

*College and Career Readiness data for students listed as preparatory in a career pathway at this specific institution.*

**Last Updated Date: 11/14/2014**

<table>
<thead>
<tr>
<th>Total CTE Senior Enrollments</th>
<th>Total Senior Preparatory Enrollments</th>
<th>College Read</th>
<th>Career Ready</th>
<th>Career Ready Total</th>
<th>% of CTE Preparatory Students College and/or Career Ready</th>
<th>Number of Preparatory Students BOTH College and Career Ready</th>
</tr>
</thead>
<tbody>
<tr>
<td>State</td>
<td>State</td>
<td>State</td>
<td>State</td>
<td>State</td>
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<tr>
<td>38,414</td>
<td>20,563</td>
<td>11,160</td>
<td>7,862</td>
<td>3,584</td>
<td>5,648</td>
<td>9,154</td>
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</table>
Communications

Develop and implement a cross agency communication strategy that reinforces the education, economic development and workforce development activities and accomplishment toward our vision for a world-class talent pipeline.

Impact on K-12:

- “Get Ready” Brand and Messaging Tools
- Identify Business and Industry “Champions”
Biennium Budget Requests
**Equipment**

**REQUEST:** A one-time bond of **$30,000,000** to upgrade equipment in schools and technical centers that provide programming that aligns with regional and/or state economic sectors.

**WHY?**

- Two reports based on recent studies conducted on career and technical education in Kentucky have indicated the need to upgrade equipment in schools and technical centers.

- The estimated value of current equipment used for CTE in schools and centers is approximately $35 million dollars, requiring an additional annual allocation of $3.5 million dollars from the state to maintain and update those resources.

- No allocations for equipment at the state level has been made since 2006.
Industry Certifications

REQUEST: $1,000,000 to create a tiered reimbursement program for the successful earning of valid industry certifications.

WHY?

- Industry certifications play a vital role in the development and growth of today's workforce. They are an acknowledgement of an individual's skills, knowledge, and abilities for many of our state's high demand career fields.

- Cost is a barrier for many students... the price for industry certifications can range from a little as $10.00 to as much as $500.00.

- The tiered system would financially support all valid industry certifications, but would place the highest emphasis on those certifications and credentials that align to Kentucky's priority industry sectors.
Locally-Operated CTCs

REQUEST: Increase the amount of funding for Kentucky’s locally-operated CTE centers (LAVECs) to $6,300,000.

WHY?

- The LAVEC funding level has been stagnant for almost 10 years, while the number of requests for new centers and programs has increased each year.
  - In the past five years, four schools have been added to the funding formula (which continues to make the allocation smaller for all who qualify).
  - Three districts are requesting to be added to the funding formula beginning with the 2016-2017 school year.
Regional Technical Centers

REQUEST: $1,000,000 to award four (4) $250,000 planning grants for the establishment of regional technical centers.

WHY?

- Two recent reports on the state of career and technical education in Kentucky have indicated the need to merge the locally operated and state operated centers into one system.

- Whether true or not, a widespread perception exists that either state operated or locally operated technical centers are receiving more funding than the other. The sense of inequity works against efforts to advance the goal of a unified world-class CTE system.

- Successful collaboration model of iLEAD Academy / Carroll County ATC
**REQUEST:** Additional supports totaling $3,000,000 to address the need for new and on-going professional learning, technical skills updates, project-based learning training/resources and technical assistance for implementation of CTE programs.

**WHY?**

- The Thomas P. Miller & Associates CTE Funding Study (2015) identified instructor/student supports as an area of need for KY CTE in order to develop a skilled workforce the Commonwealth will need to move forward and be globally competitive.

- A stronger, more well-prepared CTE teacher workforce, as well as expanded contextual learning experiences for CTE students will lead to the development of stronger skills and competencies required by business and industry.
Contact Information

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