

California Community Colleges Task Force on Workforce, Job Creation and a Strong Economy

Report and Recommendations August 14, 2015

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Executive Summary

California Community Colleges (CCC) lead the state and nation in providing postsecondary career technical education (CTE) and training. Serving more than 2.1 million students, the 113 community colleges provide workforce training, basic skills education, and transfer preparation. Students can enroll in associate degree and certificate programs in 350 fields of study. The community colleges also offer apprenticeship programs, short-term training aligned to third-party credentials, and incumbent worker training to upgrade skill sets in various industry sectors.

Employers currently struggle to find workers who possess the necessary skills to fill job openings, and this skills gap is projected to grow. By 2025, thirty percent of all job openings in California – or a total of 1.9 million jobs – will require some form of postsecondary education short of a four-year degree. California's education pipeline is not keeping pace with the higher levels of skills and education required by employers and must significantly increase the number of individuals with industry-valued middle-skill degrees, certificates and credentials.

Far too many Californians do not possess the right skills and education to obtain a good job. Employers in key industries have difficulty filling job openings because the

workforce skills and aptitudes required are in short supply. Unless California immediately begins to address this mismatch, the state's economic prosperity and the success and income mobility of thousands of Californians are threatened.

"If we don't get it right in California, not only California but the country stands to lose its global competitiveness."

> Brice Harris, Chancellor California Community Colleges

California's community colleges have a strong career technical education mission and, with added emphasis and prioritization, are well positioned to close this impending skills gap. The CCC Board of Governors launched the Task Force on Workforce, Job Creation and a Strong Economy (Strong Workforce Task Force) to address the projected shortfall in middle-skill workers. The task force, comprised of both internal and external stakeholders, was convened to recommend a series of policies and practices to increase the production of industry-valued degrees and credentials.

The 25 recommendations in this report build upon current college efforts and address barriers to enhancing the capacity of California Community Colleges to prepare students for high-value jobs in regions throughout the state. The recommendations are the culmination of extensive input from more than 1200 stakeholders during a nine-month period to identify actions that can be taken to provide policy guidance, regulatory review, and legislative and budgetary actions with the goal of increasing the number of students obtaining CTE degrees and certificates – crucial for closing California's skills gap.

The importance of creating incentives, streamlining processes, and identifying and showcasing best practices was an overarching theme of the deliberations and the final recommendations. Based upon these concepts, the task force report is structured around the following issues. See detailed recommendations in this report.

Student Success

Community college students need a broader range of support services than traditional post-secondary students. Both populations are challenged by the need to identify a viable career path, but a greater percentage of community college students are first-generation and are prone to experience major impediments to completing their education. The Strong Workforce Task Force recommends a series of actions to raise awareness of and support for career exploration and planning starting in high school, to collaborate with education and workforce partners to enhance support services, and to increase financial support for community college CTE students.

Task Force Recommendations:

- 1. Broaden and enhance career exploration and planning, work-based learning opportunities, and other supports for students.
- 2. Improve CTE student progress and outcomes.

Career Pathways

Career pathways provide a seamless sequence of academic and CTE coursework across K-12 and postsecondary education. The Strong Workforce Task Force recommends creating pathways and curricula driven by industry and labor market needs, contextualizing basic skills and workplace readiness skills into pathway curricula, developing model CTE curricula and ensuring that career pathways meet the needs of non-traditional students.

Task Force Recommendation:

3. Develop and broadly publicize industry-informed career pathways that prepare students for jobs needed within the regional labor market.

Workforce Data and Outcomes

Colleges need robust metrics and outcome data in order to continuously improve pathways within career technical education, identify which programs employers' value, and align their program and course offerings to local and regional labor market needs. The Strong Workforce Task Force recommends building on current community college initiatives measuring student progress to align common metrics among all workforce programs; to increase the ability of governmental entities to share employment, licensing, certification, and wage outcome information; and to improve the quality and accessibility of student outcome and labor market data.

Task Force Recommendations:

- 4. Create common workforce metrics for all state-funded CTE programs and expand the definition of student success to better reflect the wide array of CTE outcomes of community college students.
- 5. Establish a student identifier for high school students and those enrolled in postsecondary education and training programs to enable California to track workforce progress and outcomes for students across institutions and programs.
- 6. Improve the quality, accessibility, and utility of student outcome and labor market data to support students, educators, colleges, regions, employers, local workforce investment boards, and the state in CTE program development and improvement efforts.

Curriculum

A rapidly changing labor market and diverse student body present a series of challenges and opportunities for career technical education. Faculty strive to keep courses and programs current with appropriate levels of academic rigor, yet lengthy local- and state-level approval processes can delay curriculum development and revision. The Strong Workforce Task Force supports clarifying and streamlining curriculum development and approval processes, achieving better alignment of curricula with the needs of business and industry, and improving articulation across institutions to support portability and completion in our increasingly mobile society.

Task Force Recommendations:

- 7. Evaluate, strengthen, and revise the curriculum development process to ensure alignment from education to employment.
- 8. Evaluate, revise and resource the local, regional, and statewide CTE curriculum approval process to ensure timely, responsive, and streamlined curriculum approval.

- 9. Improve program review, evaluation, and revision processes to ensure program relevance to students, business, and industry as reflected in labor market data.
- 10. Facilitate curricular portability across institutions.
- 11. Develop, identify and disseminate effective CTE practices.
- 12. Clarify practices and address issues of course repetition for CTE courses when course content evolves to meet changes in skill requirements.

CTE Faculty

Education and work experience requirements for hiring CTE faculty and salary differentials in highly paid fields may limit a college's ability to recruit a qualified pool of faculty for CTE courses and programs. The Strong Workforce Task Force recommends a range of activities to increase the pool of CTE faculty including developing pipelines for industry professionals to teach in community colleges, enhancing professional development opportunities for current faculty to maintain currency in industry standards, and exploring solutions for attracting industry experts to community college teaching from high-salaried fields.

Task Force Recommendations:

- 13. Increase the pool of qualified CTE instructors by addressing CTE faculty recruitment and hiring practices.
- 14. Consider options for meeting minimum qualifications to better integrate industry professionals who possess significant experience into CTE instructional programs.
- 15. Enhance professional development opportunities for CTE faculty to maintain industry and program relevance.
- 16. Explore solutions to attract industry professionals in high-salaried occupations to become CTE faculty in community colleges.

Regional Coordination

State-, federal-, and foundation-funded initiatives to address regional workforce and economic development often have similar and overlapping goals that may result in a fragmentation of efforts, duplication of services, and confusion to both students and employers. Successful integration of these initiatives can result in effective practices to meet student, job seeker, and regional economic needs. The Strong Workforce Task Force recommends enhancing the regional CTE framework within the community college system to improve coordination and provide greater alignment with the colleges' overall governance and reporting structures. The task force also

endorses developing robust regional partnerships among community college, industry, and other workforce and economic development entities to improve CTE program delivery and responsiveness to regional and industry labor market needs.

Task Force Recommendations:

- 17. Strengthen communication, coordination, and decision-making between regional CTE efforts and the colleges to meet regional labor market needs.
- 18. Clarify and modify, as appropriate, state regulations to allow colleges to regionalize course articulation along career pathways utilizing regional or state curriculum models.
- 19. Develop regional leadership and operational partnerships among community college, industry, labor, and other workforce and economic development entities to improve the delivery of all CTE efforts.
- 20. Develop robust connections between community colleges, business and industry representatives, labor and other regional workforce development partners to align college programs with regional and industry needs and provide support for CTE programs.
- 21. Create a sustained, public outreach campaign to industry, high school students, counselors, parents, faculty, staff, and the community at large to promote career development and attainment and the value of career technical education.

Funding

Career technical education courses are funded at the same level as general education, lecture-based courses; however, these programs have higher startup and operating costs, high costs for equipment and specialized facilities, increased needs for professional development, and more frequent curriculum revision and program review. To ensure that CTE courses keep pace with the increasing demand for middle skill jobs, the Strong Workforce Task Force recommends a series of funding strategies that include establishing a supplemental funding source targeted to support high-cost courses and programs, creating a funding stream to support regional and local infrastructure and coordination, and leveraging public workforce funding streams to support training efforts for priority sectors in regions.

Task Force Recommendations:

22. Establish a sustained, funding source to increase community colleges' capacity to create, adapt, and maintain quality CTE courses and programs that are responsive to regional labor market needs.

- 23. Create a predictable, targeted, and sustained funding stream that leverages multiple local, state, and federal CTE and workforce funds to support an infrastructure for collaboration at the state, regional and local levels; establish regional funding of program start-up and innovation; and develop other coordination activities.
- 24. Review, analyze, and modify, as needed, laws and regulations related to student fees for disposable and consumable materials and CTE facilities.
- 25. Create incentives and streamline processes to maximize public and private investment in support of CTE programs.

Conclusion

The recommendations of the Task Force on Workforce, Job Creation, and a Strong Economy are the result of months of deliberations based on input from a wide variety of sources reflecting agreement from both internal and external stakeholders of the community college system. Some recommendations may require changes in statute or regulation, while others can be accomplished within the existing structure and parameters of the system. In all cases, these recommendations enhance career technical education and workforce training to meet the demands of the economy and the labor market, thus benefitting individuals, communities, and the entire State of California.

To ensure the economic prosperity of the state and its diverse population, California must address the issues and recommendations identified by the task force. This requires a broad-based commitment from the entire community college system, education and workforce partners, business and industry, and state policymakers so more Californians can acquire the education, skills, and work experience to participate in a strong and vibrant economy.

Background

California's community colleges supply the means for a skilled workforce by providing certificate and degree programs in more than 350 different fields of study. The community colleges offer approximately 8,000 certificate programs and 4,500 associate degree programs. Apprenticeship programs, short-term training aligned to third-party credentials, and incumbent worker training to upgrade skill sets in various industry sectors are also available. Colleges also deliver contract education to provide employer-supported, customized instruction for incumbent workers.

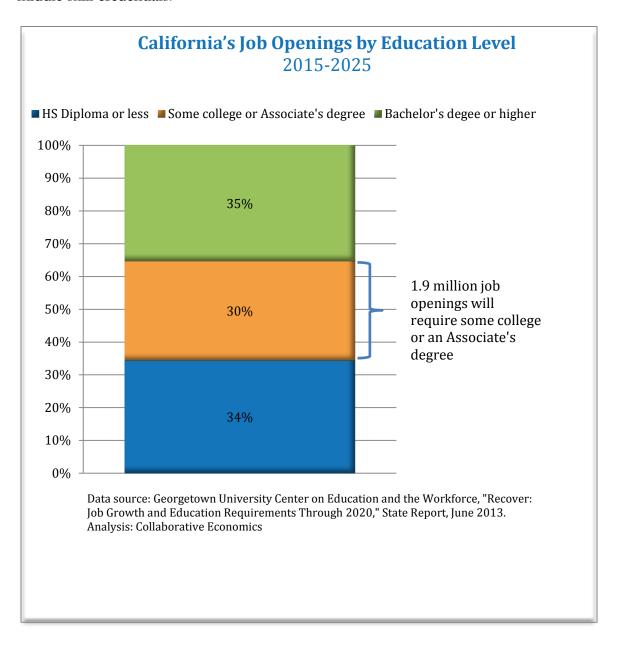
Employers currently struggle to find workers who possess necessary skills, and experts project that the skills gap will grow. What's more, it is estimated that by 2025, thirty percent of all job openings in California – or a total of 1.9 million jobs – will require some form of postsecondary education short of a four-year degree. California's education pipeline is not keeping pace with the higher levels of skills and education required by employers, and it must significantly increase the number of individuals with industry-valued middle-skill degrees, certificates and credentials.

California Community Colleges, with its strong CTE mission, is well positioned to help close the impending skills gap. While colleges are making great strides in working more closely with industry and moving students successfully along career pathways, a number of barriers to success still remain. CTE has not been viewed as a priority of the colleges and does not command the attention or resources to meet the needs of students and regional labor markets. The curriculum needs to remain continuously aligned with the dynamic skill requirements of industry to ensure that students successfully transition into self-sustaining employment. The expense to design, deliver and maintain CTE programs puts them at a disadvantage when competing for funding with less expensive course offerings on campuses.

The Student Success Task Force, in 2011, created a roadmap for California Community Colleges to improve student outcomes and expand structures to support students in achieving their goals. Then, in 2012, the California Community College Chancellor's Office *Doing What MATTERS for Jobs and Economy* (DWM) implemented new state legislation focused on increasing individual and regional economic competitiveness and providing California's workforce with the skills and quality credentials needed by employers. This work, along with other college initiatives, paved the way for an increased, system-wide focus on the role of community colleges in meeting the growing demand for career technical education.

To address the projected shortfall in middle-skill workers, the California Community College Board of Governors commissioned the Task Force on Workforce, Job Creation, and a Strong Economy (Strong Workforce Task Force) on November 17, 2014. The task force was asked to consider strategies and recommend policies and

practices to meet California's anticipated shortage of one million industry-valued, middle skill credentials.



Recognizing the need for a balance of internal and external participants, the Board of Governors appointed representatives from the community colleges (including faculty, staff, administrators, trustees and students); the employer community; labor organizations; public education, workforce training and economic development entities; and community-based organizations to the task force. The various community college constituent bodies selected individuals to represent them on the task force. Appendix #1 has a listing of task force members.

The work of the Strong Workforce Task Force was rolled out in three phases:

- Regional College Conversations November 2014 through March 2015
- Town Hall meetings February and March 2015
- Task Force meetings January through July 2015

Regional College Conversations

More than 750 community college Chief Executive Officers, Chief Information Officers, Career Technical Education Deans, Faculty, Sector Navigators, Deputy Sector Navigators, Contract Education Coordinators, Regional Consortia Chairs and Vice Chairs, and other staff participated in 14 Regional College Conversations conducted throughout the state. Three of these sessions were hosted by the Academic Senate for California Community Colleges (ASCCC) to ensure faculty input. Almost 40 percent of the participants in the Regional College Conversations were faculty.

These meetings explored policies and practices to inform the scope and goal of the task force. Participants discussed issues related to:

- Increasing the number of community college students who earn quality industry-valued credentials
- Creating a stronger alignment between community colleges and the needs of the state's regional economies
- Ensuring sustainable funding for CTE programs

These conversations raised a number of ideas for consideration by the task force to help address the goals of completing industry-valued credentials, increasing responsiveness to business and industry needs, and braiding funds from multiple sources. A summary of those recommendations can be found in Appendix #2.

Strong Workforce Town Hall Meetings

Seventeen Strong Workforce Town Hall meetings were convened in six regions across the state with participation from an estimated 640 external stakeholders. Leaders from business, economic development, K-12 education policy, labor, elected officials, and other community organizations were invited. The meetings were made possible through the leadership of a number of private sector partners throughout the state.

Participants at the Town Hall meetings shared input on the most important actions the community college system can take to be a catalyst for growth in California's regional economies. Suggestions from the town hall meetings can be found in Appendix #3. Input from the Regional College Conversations and Strong Workforce

Town Halls were compiled into issue statements to provide a framework for task force deliberations. The issues statements can be found in Appendix #4.

Town Hall Meeting Locations

San Diego Hosts

- San Diego Workforce Partnership
- San Diego Regional Economic Development Corporation
- California Business Roundtable

Los Angeles Hosts

- Los Angeles Chamber of Commerce
- Los Angeles County Economic Development Corporation
- California Business Roundtable

Fresno Hosts

- San Joaquin Valley Partnership
- California Business Roundtable

Sacramento Hosts

- Valley Vision
- NextEd
- Sacramento Employment and Training Agency
- Los Rios Community College District
- California Manufacturers and Technology Association
- California Business Roundtable

Silicon Valley Hosts

- Silicon Valley Leadership Group
- California Business Roundtable

Coachella Valley Hosts

Inland Empire/Desert Regional Consortium

Strategies and Policies for Closing the Skills Gap

The Strong Workforce Task Force believes that closing the skills gap in California is essential to bolster California's economic vitality and restore upward mobility to its residents. The task force urges the Board of Governors to implement the following package of recommendations and position California Community Colleges to meet California's workforce needs. These recommendations were informed by a series of background papers and other readings, input from the Regional College Conversations and Strong Workforce Town Hall meetings, presentations by experts, and public comments.

Student Success

In 2012, the Student Success Task Force adopted a series of recommendations to improve student outcomes in California's community colleges. Student support was at the core of the recommendations and resulted in the new Student Success and Support Program. The program's goal is to help students persist in college and complete their educational objectives by providing a range of core student services such as orientation, assessment, counseling, and other general education planning services.

Students enrolled in CTE programs often need additional support services, such as:

- Career guidance, including awareness and exploration of the many occupations and associated skill requirements labor market demand, and earning potential that allow students to make informed choices about selecting a program of study.
- Career pathway planning with academic and contextualized support services.
- Identification of and engagement in work-based learning opportunities that give students real workplace experience and employability skills in their program of study.
- Job placement, either concurrent with college enrollment or upon completion, that allows students to build on the knowledge gained from a program of study.

More targeted and integrated supports, aligned with regional labor market demands of business and industry, will help students set career goals that equip them to compete in a dynamic workplace and changing economy. Access to robust support systems designed for CTE students will help them acquire the skills and abilities necessary to complete college, obtain industry-recognized credentials, and secure meaningful employment.

For a more in-depth discussion of these issues, refer to the Strong Workforce Task Force background papers entitled, *College-to-Career Pathways: Getting from Here to There on the Roadmap for a Stronger California Economy* and *Structured Career Pathways and Student Support.*

Recommendations

- 1. Broaden and enhance career exploration and planning, work-based learning opportunities, and other supports for students.
 - a. Provide resources for student support and career center services to raise the awareness of career planning and provide information to high school, adult education and community college students on labor market demand and earnings potential.
 - b. Develop and implement common, effective career and educational planning tools for high school, adult education and community college counselors to provide detailed and comprehensive information, resources, and support on career awareness, preparation, and exploration; CTE pathway and education planning; workplace-readiness skills; work-based learning opportunities; and local and regional employer needs and job requirements.
 - c. Work with industry, labor, and workforce boards to develop and coordinate work-based learning opportunities, including internships and apprenticeships.
 - d. Collaborate with workforce boards to enhance capacity to provide career counseling, job placement, and supportive services.
 - e. Enhance capacity of counselors to provide CTE-related program counseling through professional development and the sharing of best practices such as designating counselors as CTE specific or designating liaisons to CTE programs.
 - f. Support efforts to increase financial support under the Cal Grant C program for community college CTE students.
- 2. Improve CTE student progress and outcomes.
 - a. Enable and support faculty to coordinate with industry to identify required work-based and skill competencies, including technology, for specified occupations in order to facilitate student advancement through mechanisms such as authentic competency-based assessments.
 - b. Support faculty in contextualizing basic skills, work readiness and technology skills into CTE programs and embedding career-related content into general education courses.

Career Pathways

The career pathway movement – both nationally and in California – is focused on providing a seamless sequence of integrated and articulated coursework across K-12 and postsecondary education that provides positive outcomes for all students and leads to employment. Starting with exposure to careers in middle school, engagement in applied programs of study in high school leads to degree, certificate or credential achievement in community college and beyond. Career pathways are developed and implemented in collaboration with workforce partners. Pathways are a strategy that works for a variety of populations, including traditional high school students, adult learners, and frequently marginalized populations, including those with low education and skill levels. Well-designed pathways move students to successively higher levels of education and training while providing multiple entry and exit points, related work experience opportunities at various stages, and wrap-around support services.

Quality career pathways integrate and align academic and technical skills to move students through a progression of coursework. They provide multiple on-ramps and off-ramps with modularized curricula that make it easy for students to move through a pathway, exit for personal reasons, and then re-enter to complete their career objectives. Smooth and well-articulated transitions between education and workforce systems help ensure that students move successfully from high school to postsecondary or from adult education to postsecondary. Student support is provided in areas such as basic skills and counseling upon entry and throughout progression through the pathway. Industry engagement in both program design and identification of work-based learning opportunities results in pathways with strong employment outcomes.

Career pathways are embedded in a number of current state-, federal-, and foundation-funded efforts, necessitating coordination of these initiatives both at the state and regional level. Strategies such as dual enrollment and model pathways can serve to align efforts among high school, adult education, and community college providers.

For a more in-depth discussion of these issues refer to the Strong Workforce Task Force background papers entitled, *College-to-Career Pathways: Getting from Here to There on the Roadmap for a Stronger California Economy* and *Structured Career Pathways and Student Support.*

Recommendations

- **3.** Develop and broadly publicize industry-informed career pathways that prepare students for jobs needed within the regional labor market.
 - a. Support faculty and colleges to design pathways with multiple entry and exit points that correspond to industry-recognized credentials.

- b. Develop state-aligned or regionally-aligned strategies and structured industry-informed pathways, coordinated with faculty and other workforce partners and industry intermediaries, that seamlessly transition high school and adult students to community college programs of study.
- c. Ensure career pathways meet the needs of displaced workers, veterans, English language learners and other adult populations.
- d. Support faculty to develop and align model CTE curricula that facilitate articulation, dual enrollment and CTE pathways.
- e. Identify and resolve barriers as appropriate to career pathway implementation.
- f. Provide resources to faculty to contextualize basic skills English, math, English as a Second Language, and workplace readiness skills into pathway curricula in collaboration with faculty trained in basic skills disciplines.
- g. Enable and encourage faculty to develop applied English and math courses that meet both CTE and associate degree requirements.
- h. Support the ongoing development and implementation of current initiatives to develop programs of study tools for bridging from high school and adult education preparation into community college CTE pathways in order to help community college students plan their CTE course taking.

Workforce Data and Outcomes

Colleges rely on access to robust metrics and student outcome data (such as degrees, completions, certificates, and employment) to continuously improve pathways within career technical education, identify which programs employers value, and align their program and course offerings to local and regional labor market needs.

Today's students and incumbent workers rely on a community college education to obtain the skills needed to be competitive and keep pace with a rapidly changing workplace. Because many employers require job applicants to demonstrate workplace readiness skills (sometimes called "soft-skills"), technology skills, and competencies in specific skill-sets, there is increased demand for short-term training aligned with a third-party credential, such as a state license or an industry certification. Some students (called "skills-builders") elect to take one or two community college courses to help them solidify or gain skills required for ongoing employment and career advancement, without completing a program of study.

California community colleges have made progress in measuring critical momentum points and student outcomes. The Student Success Scorecard reports attainment of degrees, certificates and transfers to four-year institutions. A set of common metrics tracks student progress and outcomes in CTE grants funded by the Chancellor's Office. The Chancellor's Office's Salary Surfer reports average earnings and wage increases by program of study for students who complete a certificate or degree. Also in development is a new tool, called the LaunchBoard, which provides program-level

information to community college faculty and administrators on student coursetaking, completion, employment, and labor markets.

While these tools now make some CTE outcome information more accessible to faculty, students and policymakers, the following data challenges remain, making it difficult to evaluate whether the state and its public education and workforce system are making the right program investments. Data challenges include:

- Metrics and metric definitions vary by individual programs and funding sources.
- Many certificates offered by the community colleges are in low-unit degrees (fewer than 12 units) and are therefore not counted as success in statewide accountability metrics.
- There is no statewide data system that tracks students from high school through the higher education segments and no formal data exchange that allows community colleges and workforce investment boards to share student program and outcome information.
- Third-party credential data from outside entities (like licensing boards and industry certifications) are frequently requiring reporting metrics, but they are difficult to obtain because of actual and perceived legal hurdles.
- Information on student employment data and labor market information often requires analytical skills to interpret and apply to college decision-making.

For a more in-depth discussion of these issues, refer to the Strong Workforce Task Force background paper entitled, *Moving the Needle: Data, Success, and Accountability for Workforce Programs*.

Recommendations

- 4. Create common workforce metrics for all state-funded CTE programs and expand the definition of student success to better reflect the wide array of CTE outcomes of community college students.
 - a. Develop, streamline, and align common outcome metrics for all state-funded CTE programs and ensure that they are compatible with federal reporting requirements.
 - b. Expand the definition of student success to better address workforce training outcomes for both "completers" (students who attain certificates, including low-unit certificates, defined as fewer than 12 units; degrees; transfer-readiness; or enrollment in four-year institutions) and "skills builders" (workers who are maintaining and adding to skill sets required for ongoing employment and career advancement).
 - c. Report outcomes by student demographic characteristics.

- 5. Establish a student identifier for high school students and those enrolled in postsecondary education and training programs to enable California to track workforce progress and outcomes for students across institutions and programs.
 - a. Require the sharing of employment/wage outcomes and third party licenses/certification data across government entities.
 - b. Explore barriers, both real and perceived, to sharing data and create new incentives for the timely sharing of data.
 - c. Ensure data sharing activities are for the purpose of continuous program improvement, while also protecting privacy rights.
- 6. Improve the quality, accessibility, and utility of student outcome and labor market data to support students, educators, colleges, regions, employers, local workforce investment boards, and the state in CTE program development and improvement efforts.
 - a. Provide labor market, workforce outcome, and student demographic data/information that are easily accessible and usable.
 - b. Validate labor market supply and demand information with industry partners.
 - c. Provide technical assistance, data visualization tools, and analysis tools to colleges for the use of labor market and student outcome data.
 - d. Develop the state's capacity to capture changes and gaps in workforce supply and demand and to assess each region's educational capacity to address workforce gaps.

Curriculum

A rapidly changing labor market and diverse student body present a series of challenges for career technical education. Faculty strive to keep courses and programs current with appropriate levels of academic rigor. Yet lengthy local- and state-level approval processes can slow curriculum development and revision. Current approval processes have valuable aspects that allow colleges to serve their particular communities; however, various elements of these processes could be streamlined and/or clarified for greater efficiencies.

The framework for community college curriculum development and approval is provided in the California Education Code and Title 5 regulations. Myriad curriculum standards and processes exist requiring a mix of local-, regional-, and state-level review, including approval dependent on whether a course is for no credit, credit, or fee-based community education. Local faculty have primary responsibility for curriculum development and delivery. Faculty and administrators are also responsible for ensuring that instruction meets various compliance and accreditation standards. At the state level, ASCCC, as the representative of faculty in academic and professional matters, has the primary responsibility for making recommendations

regarding curriculum regulations and processes. Curriculum processes may differ from college to college. However, there are two additional steps in the development of CTE curricula to ensure alignment with industry needs and regional labor market demand.

- CTE faculty work with advisory committees comprised of community, business and industry leaders in industry sectors that are related to their programs to ensure that programs are responsive to labor market needs and that students who complete the programs will attain the required skills and knowledge to obtain employment.
- CTE program proposals must also be reviewed by the regional consortia prior to submission to the CCCCO. The regional consortia help validate the need for new programs and avoid unnecessary duplication of programs that may oversupply regional labor markets.

For a more in-depth discussion of these issues, refer to the Strong Workforce Task Force background paper entitled, *Essential Elements for Strong Programs: Curriculum Development and Instructors*.

Recommendations

- 7. Evaluate, strengthen, and revise the curriculum development process to ensure alignment from education to employment.
 - a. Create consistent mechanisms for improved regional engagement of business and industry in the curriculum development process.
 - b. Provide state-level leadership and coordination in developing model curricula that can be customized and considered for adoption by faculty and colleges.
 - c. Create a process for the development of collaborative programs between colleges.
 - d. Support faculty and colleges in developing and expanding the use of contract education to meet the dynamic needs of business and industry in an expedited manner.
- 8. Evaluate, revise, and resource the local, regional, and statewide CTE curriculum approval process to ensure timely, responsive, and streamlined curriculum approval.
 - a. Provide state-level coordination to ensure a streamlined curriculum approval process at the Chancellor's Office.
 - b. Provide sufficient staffing and resources in the Chancellor's Office to accelerate the state-level curriculum approval process.
 - c. Identify and disseminate effective practices in local curricula adoption and revision processes and provide technical assistance for faculty and colleges.

- 9. Improve program review, evaluation, and revision processes to ensure program relevance to students, business, and industry as reflected in labor market data.
 - a. Engage employers, workforce boards, economic development entities, and other workforce organizations with faculty in the program development and review process.
 - b. Promote effective practices for program improvement (retooling) and program discontinuance based upon labor market data, student outcomes and input from students, faculty, college staff, employers, and workforce partners.
- 10. Facilitate curricular portability across institutions.
 - a. Scale up and resource the "C-ID" (course identifier) system for CTE courses, certificates and degrees to enable articulation across institutions.
 - b. Disseminate effective practices for streamlining and improving processes for recognizing prior learning and work experience and awarding credits or advanced placement toward CTE pathways.
 - c. Enable and encourage faculty and colleges, in consultation with industry, to develop industry-driven, competency-based and portable pathways that include stackable components and modularized curricula, work-based learning opportunities, and other support services.
- 11. Develop, identify and disseminate effective CTE practices.
 - a. Develop a website repository of CTE model curricula that faculty and colleges can select and adapt to their own needs.
 - b. Develop an interactive system where regional industry stakeholders can provide feedback to both validate and enhance the quality of CTE programs.
- 12. Clarify practices and address issues of course repetition for CTE courses when course content evolves to meet changes in skill requirements.
 - a. Clarify interpretation of course repetition regulations to assist colleges in implementing policies and practices.
 - b. Identify and disseminate best practices for using noncredit to provide opportunities for CTE students to build skills and knowledge.
 - c. Revise existing policies regarding the use of a state-required audit fee to provide colleges with the necessary flexibility to allow auditing of credit courses previously completed as an option for students to refresh their skills and knowledge.

CTE Faculty

A system of minimum qualifications for hiring community college faculty was adopted in legislation in 1988 by Assembly Bill 1725 (Vasconcellos). Minimum

qualifications are established by the Board of Governors, based on recommendations by the ASCCC, and are used to determine a candidate's eligibility for faculty positions in the community college system. While the minimum qualifications process is a vital aspect of ensuring quality instruction throughout the community college system, colleges in some areas of the state have raised concerns that this process, in conjunction with salary differentials in high-paying fields, may limit their ability to recruit and employ a qualified pool of faculty for CTE courses and programs.

The minimum qualification for most CTE faculty is a bachelor's degree in any discipline and two years of professional experience, or an associate degree in any discipline and six years of professional experience. However, a number of technical disciplines, such as engineering, home economics, nursing, dietetics, accounting, and business management stipulate that the minimum qualifications include a masters' degree in the discipline of the assignment or a bachelor's degree in the discipline of the assignment and a master's degree in a reasonably related discipline.

While specific hiring processes vary from district to district, all faculty hired must meet minimum qualifications or equivalency criteria for their disciplines. The local equivalency process is governed by Title 5 regulations and varies by college district. Each community college governing board and corresponding academic senate develops its own process, criteria, and standards to assess equivalencies. State regulations require that both minimum qualifications and equivalency procedures be established by the college's governing board. Granting of equivalency allows a faculty member to teach all courses within an appropriate discipline; equivalency for individual courses (single course equivalency) is not allowed.

For a more in-depth discussion of these issues, refer to the Strong Workforce Task Force background papers entitled, Essential Elements for Strong Programs: Curriculum Development and Instructors, College-to-Career Pathways: Getting From Here to There on the Roadmap for a Stronger California Economy, and Structured Career Pathways and Student Support.

Recommendations

- 13. Increase the pool of qualified CTE instructors by addressing CTE faculty recruitment and hiring practices.
 - a. Clarify legislative and regulatory barriers to hiring CTE instructors who may not meet existing college hiring standards but possess significant industry experience.
 - b. Disseminate effective practices in the recruitment and hiring of diverse faculty and the application of minimum qualifications and equivalencies.
 - c. Develop pipelines to recruit community college faculty with industry expertise through collaborations with higher education, business, and industry professional organizations.

- d. Establish a mentorship model that delineates pathways for industry professionals to intern at colleges to gain teaching skills, knowledge, and experience while pursuing an associate degree or the equivalent.
- 14. Consider options for meeting minimum qualifications to better integrate industry professionals who possess significant experience into CTE instructional programs.
 - a. Convene discipline faculty statewide to establish general criteria that may be used at local colleges when granting equivalency for minimum qualifications within CTE disciplines.
 - b. Create effective local, regional, and statewide practices for integrating industry professionals into CTE instruction such as faculty internships where needed, guest lecturing, and supplemental teaching partnerships with non-faculty and disseminate to colleges for implementation.
 - c. Develop an Instructional Skills Module through the ASCCC Professional Development College that includes the option of obtaining continuing education credits to provide an opportunity for industry professionals to gain teaching skills while earning college credit.
 - d. Develop guidelines and training modules for CTE industry professionals who serve as on-site supervisors for work experience and internships.
 - e. Develop and promote guidelines to implement Title 5 §53502, Faculty Internship Minimum Qualifications, for those disciplines for which a master's degree is not expected or required.
 - f. Convene representative apprenticeship teaching faculty, labor organizations, and other stakeholders to review the appropriateness of minimum qualifications for apprenticeship instructors.
- 15. Enhance professional development opportunities for CTE faculty to maintain industry and program relevance.
 - a. Provide all faculty with training in teaching methods and strategies, including the use of technology.
 - b. Identify and address structural barriers that prevent full- and part-time faculty participation in professional development and create fiscal and other incentives that address reassigned time, externships and other methods of skill upgrades to ensure currency.
 - c. Provide professional development for counselors to support the use of career and educational planning tools common to secondary education, adult education and community colleges.
 - d. Increase opportunities for CTE faculty to participate in professional development such as sabbaticals, industry events and training to augment discipline knowledge and connections with employers and the workforce system.

- 16. Explore solutions to attract industry professionals in high-salaried occupations to become CTE faculty in community colleges.
 - a. Create and share models and best practices developed as part of local labor negotiations to address the salary differential needs in high-pay fields.
 - b. Encourage partnership with industry and the local community to support salary differential needs.

Regional Coordination

Regional delivery of career technical education and workforce development services presents both opportunities and challenges. State-, federal-, and foundation-funded initiatives to address workforce and economic development often have similar and overlapping goals. This can result in a fragmentation of efforts, duplication of services, poor connection among programs, and confusion to both students and employers. However, successful integration of these initiatives can result in effective practices that braid multiple resources to meet student and employer needs.

In recent years, community colleges and their workforce partners have moved toward a regional approach to respond more effectively to regional labor market needs and address the skills gap. Current national and statewide efforts support the move to organize workforce services regionally. The newly enacted federal Workforce Innovation and Opportunity Act (WIOA) focuses on regional action, partnering with workforce and education professionals to meet industry needs, integrating service delivery, and braiding resources to improve service delivery. Key elements of California's 2015-16 Budget Act also address regional program alignment, adoption of common performance measures, and employer engagement in the workforce development system.

Colleges have also made progress in identifying the kinds of activities that can be accomplished more effectively at a regional level. The CCCCO DWM framework braids resources and provides incentives to support CTE programs in key and emerging industry sectors. DWM works with Regional Consortia, Sector/Deputy Sector Navigators and Technical Assistance Providers to identify activities that are best delivered on a regional scale. This developing regional work promises to support college efforts to respond to their dynamic regional and local economies.

For a more in-depth discussion of these issues, refer to the Strong Workforce Task Force background paper entitled, *Thriving Regions, Thriving California*.

Recommendations

17. Strengthen communication, coordination and decision-making between regional CTE efforts and the colleges to meet regional labor market needs.

- a. Clarify the role and fiscal management structure of the Regional Consortia, Sector Navigators, Deputy Sector Navigators, and Technical Assistance Providers and their relationships with the CCCCO and the colleges.
- b. Ensure that the CTE regional framework is designed to do the following:
 - Designate labor market driven priority and emerging sectors in coordination with employers, workforce boards and economic development entities.
 - Coordinate colleges within the region to meet business and industry needs.
 - Convene discussions about development of common CTE entry pathways and industry-valued credentials based on regional industry needs.
 - Share best practices on regional coordination, communication, and decision-making.
 - Conduct joint marketing and facilitate asset and equipment sharing.
 - Support joint professional development of faculty to respond to evolving skill needs of industry sectors.
 - Provide other needs and strategies as prioritized by the region.
- 18. Clarify and modify, as appropriate, state regulations to allow colleges to regionalize course articulation along career pathways utilizing regional or state curriculum models.
- 19. Develop regional leadership and operational partnerships among community college, industry, labor, and other workforce and economic development entities to improve the delivery of all CTE efforts.
 - a. Coordinate industry and labor engagement tied to sector strategies.
 - b. Develop feedback methods from industry and labor that provide for continuous program improvement.
 - c. Articulate skill sets embedded within industry-valued credentials across regions.
 - d. Support college collaborations to leverage multiple state and federal CTE and workforce funding streams to build capacity to meet regional needs and mitigate the risk associated with new program start-up.
 - e. Coordinate alignment among community college CTE efforts and implementation of the regional framework developed under the federal Workforce Innovation and Opportunity Act and the adult education consortia.
- 20. Develop robust connections between community colleges, business, and industry representatives, labor and other regional workforce development partners to align college programs with regional and industry needs and provide support for CTE programs.
 - a. Align college programs with regional and industry needs by leveraging

- multiple labor market information sources, including California Community College Centers of Excellence, Deputy Sector Navigators, industry associations, state agencies, economic development entities, and workforce boards.
- b. Provide support for CTE programs including internships, guest lecturers, employment, equipment and facilities support, and participation on advisory boards.
- 21. Create a sustained public outreach campaign for industry, high school students, counselors, parents, faculty, staff, and the community at large to promote career development and attainment and the value of career technical education.

Funding

Workforce preparation is a primary mission of the California community college system. Yet, since the 2000-01 academic year, CTE's share of community college enrollment has declined from 31.3 percent to 28.2 percent. This decline comes at a time when California is struggling to meet the need for middle-skilled jobs and anticipates an increasing demand for these jobs in the coming years. The decline in CTE course offerings has significant impact on student economic success and California's economic prosperity. College records indicate that the median wages of workers five years after receipt of an associate's degree in a CTE discipline is more than 70 percent higher than those with non-CTE associate degrees.

CTE courses receive the same dollar amount for a full-time-equivalent student (FTES) as general education, lecture-based courses that do not incur the same startup and operating costs. CTE courses are often more expensive because of the need for:

- Labor market research and analysis to determine demand for a program
- Specialized equipment and facilities required for program operation
- Smaller class sizes required by regulation or safety requirements
- Additional time for faculty to interact with business and industry to ensure initial and ongoing program relevance and currency
- Continuous curriculum development and retooling to retain course and program relevance and currency
- Faculty professional development in industry settings
- Data collection to report employment, wage, and other program outcome information for accountability purposes.

The task force reviewed how other states have addressed the issue of high-cost courses/programs by creating differential base-line funding formulas; supplemental funding streams that support increased costs; differential tuition based on program

cost; and performance funding, in which all or a portion of funds are tied to program outcomes.

For a more in-depth discussion of these issues, refer to the Strong Workforce Task Force background paper entitled, Funding Career and Technical Education (CTE) Programs at California Community Colleges.

Recommendations:

- 22. Establish a sustained funding source to increase community colleges' capacity to create, adapt, and maintain quality CTE courses and programs that are responsive to regional labor market needs.
 - a. Target funding to offset the high cost of CTE programs and other courses that lead to CTE programs.
 - b. Provide additional fiscal incentives to support high-value outcomes and continuously evaluate the results to determine effectiveness.
 - c. Develop and support a sustainable and adequate equipment and facilities funding stream.
- 23. Create a predictable, targeted and sustained funding stream that leverages multiple local, state, and federal CTE and workforce funds to support an infrastructure for collaboration at the local, state, and regional levels; establish regional funding of program start-up and innovation; and develop other coordination activities.
- 24. Review, analyze, and modify, as needed, laws and regulations related to student fees for disposable and consumable materials and CTE facilities.
 - a. Evaluate the impact of student fees for disposable and consumable materials on CTE programs and students. If warranted, explore options for funding support that does not limit student access, such as covering the cost of fees under a BOG waiver.
 - b. Provide flexibility and funding for new and modernized CTE facilities.
- 25. Create incentives and streamline processes to maximize public and private investment in support of CTE programs.

Appendix #1

Task Force Membership



Sunny Cooke (Chair)
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Mira Costa Community
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Lynn Shaw (Co-Chair)

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College Full Time Faculty
Union

Vice Chair, Los Angeles and
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Appendix: #2

Executive Summary of 14 Regional College Conversations



REGIONAL COLLEGE CONVERSATIONS

Over 750 community college Chief Executive Officers, Chief Information Officers, Career Technical Education Deans, Faculty and local Academic Senate Faculty members, Sector Navigators, Deputy Sector Navigators, Contract Education Coordinators, Regional Consortia Chairs and Vice Chairs, and other staff participated in 14 Regional College Conversations (RCCs) conducted throughout the state. Of these participants, almost 40% were faculty. These meetings explored policies and practices to further the scope and goal of the Task Force.

Specifically, participants were asked to address the following three questions: 1) how do we dramatically increase the number of community college students who earn quality industry valued credentials, 2) how do we ensure that community colleges work better and in a more timely manner with industry to assure that students leave with appropriate skills for high value and good paying jobs, and 3) how do we make funding for workforce programs and structured CTE pathways more sustainable especially during budget downturns?

These conversations raised a number of ideas for consideration by the Task Force. All ideas generated are listed in the Appendices. This Executive Summary is a compilation of the ideas that were heard frequently; would require state-level guidance or regulatory, legislative or budget action; and would help address the goals of the Task Force to increase completion of industry-valued credentials, keep community colleges responsive to business/industry needs, and braid funds from multiple sources to this effort.

1 - WORKFORCE DATA & OUTCOMES

- Expand the definition of student success to better address workforce training outcomes for both "completers" (students who attain certificates, degrees, transfer-readiness, or enrollment in 4-year institutions) and "skills builders" (older students who take only a few courses to advance in their career).
- Provide workforce outcome data and labor market information, data visualization and analysis tools and technical assistance to support students, faculty, colleges, regions and their industry partners, and the state in CTE program development and improvement efforts.
- Remove regulatory and statutory barriers for sharing of employment/wage outcomes and third-party licenses/certificates data among governmental entities for the purpose of program improvement and ensure the protection of student and employer privacy rights.

 Align outcome measures for all state-funded CTE initiatives and streamline grant reporting to these metrics.

2 - CURRICULUM & INSTRUCTORS

- Evaluate and revise the CTE curriculum approval process as appropriate to streamline and shorten in order to optimize responsiveness and efficiency.
 - Consider process for new course/program approval to respond to emerging labor market needs; rapid adoption and local customization of courses/programs approved at other colleges, and multi-college adoption of industry-advised courses/programs.
 - O For state level activities, fund and provide fully trained staff in the Chancellor's Office to speed up the curriculum approval process.
- Facilitate student portability across institutions. Consider 1) creating a "C-ID" (course identifier) system for CTE certificates and degrees to enable region- and/or state-wide articulation across institutions, and 2) recognizing prior learning and work experience for adults that award credits toward CTE pathways.
- Enable CTE curriculum portability across institutions. Consider a repository of CTE curriculum models that faculty/colleges can select and adapt to their own needs.
- Increase the pool of qualified CTE instructors by reviewing statewide and minimum qualifications, modifying equivalency for CTE faculty, and providing fiscal incentives for professional development activities for CTE faculty such as externships and other methods of skill upgrades to ensure currency.
 - o Revise the single subject equivalency regulation to allow CTE programs to hire an individual to teach one course.
 - o Create an academic pathway to allow someone to be hired from industry.
 - o Provide CTE faculty with credit for years in the field vs. advanced degrees.
- Consider student advancement based upon mastery of competencies for a specified occupation through authentic, performance-based assessment, rather than time-in-seat.
- Clarify practices and/or address treatment of 'repeatability' on CTE courses when course content evolves to meet changes in skill requirements.
- Embed basic skills into CTE utilizing evidence-based practices such as contextualization.
- Create a CTE effective practices website.

3 - STRUCTURED CAREER PATHWAYS & STUDENT SUPPORT

- Develop strategies and structured industry-informed pathways that are regionally aligned so that high school students can more seamlessly transition to community college CTE certificates and/or transfer degrees; develop CTE model curriculum (e.g., SB1440); extend model curriculum into high schools to enable dual enrollment and CTE pathways between high schools and community colleges.
 - Create support for interdisciplinary collaborations (not just CTE) to create specific pathways between and among all disciplines.
 - o Align basic skills curriculum, including ESL, with workplace skill requirements.
- Expand definition of pathways and create structured pathways for non-traditional students (of all ages) who are displaced workers, veterans, adult populations, etc.
- Create and provide financial support for campus hubs for student success supportive of CTE students that include career exploration, CTE pathway and education planning, working with industry to develop and coordinate work-based learning/internship/apprenticeship opportunities for CTE students, and building of foundational workplace/career skills in students. Provide tools in support of these campus hubs.

4 – FUNDING

- Revise the baseline CTE funding model when there is high cost and "unmet" workforce demand, in order to increase CTE capacity responsive to labor market needs. Range of ideas include creating a weighted funding formula based upon the cost of instruction, modifying funding for multi-year cohort training, funding based upon attainment of skill competencies and revising accounting models for program costs.
- Utilize workforce categorical funding to support the following practices:
 - O Reduce competitive grant awards in favor of predictable funding that incentivizes collaboration, regional coordination, and workforce outcomes;
 - o Institutionalize the CTE Enhancement Fund as an on-going funding source;
 - o Provide tax credits and incentives for business and industry to offer work-based learning or partner with colleges;
 - o Create separate funding category for CTE facilities and equipment;
 - Ongoing funding for designated CTE position(s) at every college to connect CTE programs to industry and internships as part of campus hub; and/or
 - o Redirect funding to base funding for rainy day funding for CTE.

Allow student fees for consumable and disposable materials.

5 - REGIONAL COORDINATION

- Support the development of structures and staffing to coordinate regional level common efforts some of which are sector-specific such as: industry engagement tied to sector strategies, course scheduling coordination for shared programs, regionalized articulation through curriculum model development, standardizing industry-valued credentials across regions, joint marketing, asset/equipment sharing, joint professional development of faculty as the sector evolves its skill needs, data collection and evaluation, calibrating regional supply and demand and other shared needs and strategies as prioritized by the region. In this context, provide clarity of roles for Sector Navigators, Deputy Sector Navigators and Regional Consortia.
- Build upon best practices for use of non-credit, fee-based and/or revenue sharing arrangements by these regional networks/structures.
- Develop a sustained public outreach campaign to industry, high school students, counselors, parents, faculty and staff to promote career development and attainment and the value of career technical education.

Appendix: #3

Executive Summary of 5 Strong Workforce Town Halls



STRONG WORKFORCE TOWN HALLS

Five town halls in regions across the state convened an estimated 550 external stakeholders who rely on the community colleges for workforce training. Leaders from business, economic development, K-12 education policy, labor, elected officials, and other community organizations were invited. The Town Halls focused on 1) discussing the most important actions for the community college system to take in order to act as a catalyst for growth in California's regional economies, and 2) identifying specific ways that employers can help to prepare a strong workforce.

	Schedule of Town Halls	
	Co-Hosts	
Central Valley	California Partnership for the San Joaquin Valley; Betts Manufacturing; Fresno Business Council	February 10, 2015
Los Angeles	Los Angeles Area Chamber of Commerce; Los Angeles County Economic Development	March 4, 2015

	Corporation	
Silicon	Silicon Valley Leadership Group	March 10, 2015
Valley		
Sacramento	Valley Vision; Sacramento Employment and	March 16, 2015
	Training Agency; Los Rios Community College	
	District; NextEd; California Manufacturers and	
	Technology Association	
San Diego	San Diego Regional Economic Development	March 18, 2015
	Corporation; San Diego Workforce Partnership	
Coachella	College of the Desert; Inland Empire/Desert	May 8, 2015
Valley	Regional Consortium	·

Each Town Hall included a facilitated discussion, where participants were asked to review and build on specific themes that surfaced through the Regional College Conversations and identify specific actions the community college system could take to prepare a strong workforce (See Appendix 1) for the topics for discussion presented at each Town Hall). Following the discussion, participants were asked to vote on their top two priorities for action. In addition, participants were asked to fill out a feedback form to indicate whether they agreed, disagreed or were neutral to each of the suggestions that surfaced from the Regional College Conversations. Employer participants were also asked to identify specific ways they would be willing to help prepare a strong workforce.

Top Priorities for Preparing a Strong Workforce

Overall, Town Halls participants expressed broad agreement that preparing a strong workforce will require deeper working relationships with employers/industry, more timely and relevant education and training, and sufficient funding for CTE programs needed in state and regional labor markets.

In particular, the following were identified as top priorities for the community college system:

• Coordinate Employer Outreach Regionally

O Engage employers regionally and by sector (as opposed to one-on-one) to anticipate labor market trends, build career pathways, determine specializations, and validate skill competencies.

Expand Work-Based Learning

 Develop more work-based learning opportunities offered in partnership with career technical education in order to improve day-one readiness of students hired.

• Develop Public Awareness Campaign

Develop a sustained public awareness campaign promoting attainment of indemand degrees, certificates, and industry-valued credentials.

• Increase Responsiveness of CTE Curriculum Approval and Modification processes

o Modify curriculum approval and modification processes to keep pace with changes in the workplace and business cycles.

A Shared Investment Approach

The Town Halls affirmed the idea that preparing a strong workforce will require a new level of collaboration among colleges and business. Business leaders at the Town Halls indicated that they would be willing to:

- Provide feedback on curriculum and validate skill competencies;
- Develop or increase work-based learning opportunities in partnership with community college CTE programs;
- Convene or join an industry-driven regional sector partnership to collaborate with other businesses and community colleges on shared workforce needs;
- Contribute experienced subject matter experts to help instruct CTE courses;
- Contribute to the development of a public awareness campaign promoting awareness of career opportunities in high demand fields;
- Specify community college and/or industry-valued credentials as "desired qualifications" in job descriptions.

Appendix: #4

Issue Statements

DATA

- There is a need for access to current industry sector-specific data and for technical assistance to ensure that data are relevant and understandable for decision-making at the student, program, college and regional levels.
- Expand the definition of student success in community colleges to include multiple, successful Career Technical Education outcomes valued by students, the workforce and coordinated with all workforce and education partners.
- State and federal Career Technical Education metrics and reporting outcomes –
 including demographics on race, ethnicity, and previous education need, where
 possible, to be simplified, consistently tracked, evaluated and aligned across
 agencies.

STUDENTS

- To improve completion and employment for increasingly mobile students and graduates, learning should be regionally aligned, modularized and industry informed to be focused on needed competency attainment and skill-based learning.
- Enhanced student support mechanisms such as counseling, work-based learning, internships, and job placement are needed to help students explore and commit to coherent career pathways from high school through college.
- Students need to have opportunities for contextualized learning, work-based learning, dual enrollment credit, soft skill attainment and appropriate mechanisms for acknowledging credit for prior learning to accelerate their transition to careers.
- Students need improved connections and integration between adult education programs and career technical education programs.
- Students, parents, educators, counselors, and employers would benefit from a public outreach campaign to promote the value and labor market outcomes of Career Technical Education.

STRUCTURE AND RESOURCES

- Colleges and regions need sustainable, adequate, and predictable resources and mutually supportive relationships with all workforce partners to create and maintain innovative workforce training programs to meet the ever-changing needs of business and industry.
- Support, incentives and technical assistance are required to strengthen coordination, collaboration and effectiveness of coherent workforce training structures and approaches at the statewide and regional levels, both inside and outside the community college system.
- Colleges report significant challenges attracting, hiring, and retaining highly skilled Career Technical Education faculty.
- Improve the local, regional, and state curriculum approval process to fit the dynamic nature of Career Technical Education programming, the need to be responsive to industry and community needs, and the need to produce job ready program completers with industry-specific competencies.
- Collaborate with workforce partners to improve the alignment of workforce system funding, outcomes, and audiences served including the delivery of incumbent worker onsite training and connections to industry certification systems.

Appendix: #5

Background Papers

(located at http://doingwhatmatters.ccco.edu/StrongWorkforce/ReadingList.aspx)

Workforce Data & Outcomes

Moving the Needle: Data, Success, and Accountability for Workforce Programs, Kathy Booth, WestEd

Curriculum & Instructors

Essential Elements for Strong Programs: Curriculum Development and Instructors, Academic Senate for California Community Colleges

Structured Pathways & Student Support

College-to-Career Pathways: Getting from Here to There on the Roadmap for a Stronger California Economy,

Career Ladders Project and Jobs for the Future

Structured Career Pathways and Student Support, Academic Senate for California Community Colleges

Regional Coordination

Thriving Regions, Thriving California, California Community Colleges Doing What MATTERS for Jobs and the Economy

Funding

Funding Career and Technical Education (CTE) Programs at California Community Colleges, Blue Sky Consulting Group

Appendix: #6

Task Force Reading List

Completion

The Road Less Traveled: Realizing the Potential of Career Technical Education in the California Community Colleges, Nancy Shulock, 2011

Career Opportunities: Career Technical Education and the College Completion Agenda, Part I: Structure and Funding of Career Technical Education in the California Community Colleges, Nancy Shulock and Jeremy Offenstein, 2012

Empowering Community Colleges to Build the Nation's Future, American Association of Community Colleges, 2014

Responsiveness

Help Wanted: Projections of Jobs and Education Requirements Through 2018, Anthony P. Carnevale, Nicole Smith, and Jeff Strohl, McKinsey Global Institute, June 2010

Portable, Stackable Credentials--A New Education Model for Industry-Specific Career Pathways, James T. Austin, Gail Mellow, and Mitch Rosin, 2012

Across The Great Divide: Perspectives of CEOs and College Presidents on America's Higher Education and Skills Gap Civic Enterprises, John Bridgeland, Jessica Milano, and Elyse Rosenblum, March 2011

The Real Revolution in Online Education Isn't MOOCs, Michelle Weise, Harvard Business Review, October 2014

Funding

Workforce Investments: State Strategies to Preserve Higher Cost Career Education Programs in Community and Technical Colleges, Institute for Higher Education Leadership & Policy, 2013

Shared Strategy for a Shared Prosperity-California's Strategic Workforce Development Plan: 2013-17, California Workforce Investment Board

Report of the CCCT CTE Task Force on Differential Funding for CTE Programs, Jim Moreno and Andreea Serban, January 2013

Help Wanted: Professional Development and Training for Career and Technical Education Faculty, Krista D. Kerna, International Journal of Vocational and Technical Education Vol. 4(3), pp. 38-45, March 2012

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BOARD OF GOVERNORS CALIFORNIA COMMUNITY COLLEGES

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- Cecilia V. Estolano (Vice President of Board)
- Arnoldo Avalos
- Joseph J. Bielanski, Jr.
- Scott Budnick
- Jeffrey Burdick
- Connie Conway
- Thomas Epstein
- Danny Hawkins
- Ravneet Kaur
- Deborah Malumed
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- Valerie Lynne Shaw
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- John Colborn, Director, Skills for America's Future, Aspen Institute
- Kris Costa, Statewide Career Pathways Articulation Liaison
- Tim Gage, Principal and Co-Founder, Blue Sky Consulting Group
- Doug Houston, Chancellor, Yuba Community College District
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^{*}excludes Task Force members who served on panels

HOSTS OF REGIONAL COLLEGE & FACULTY CONVERSATIONS INFORMING THE TASK FORCE ON WORKFORCE, JOB CREATION AND A STRONG ECONOMY

*Denotes representative from the region to the Economic Development Program Advisory Committee (EDPAC) advising the California Community Colleges Chancellor's Office.

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- Julie Bruno, Vice President, Academic Senate for California Community Colleges
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- Shawn Carney, Solano College, Drafting, CTE Leadership Committee
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- Phil Crawford, San Jose City College, Political Science/Sociology, CTE Leadership Committee
- Donna Davis, Butte College, Respiratory Care, CTE Leadership Committee
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