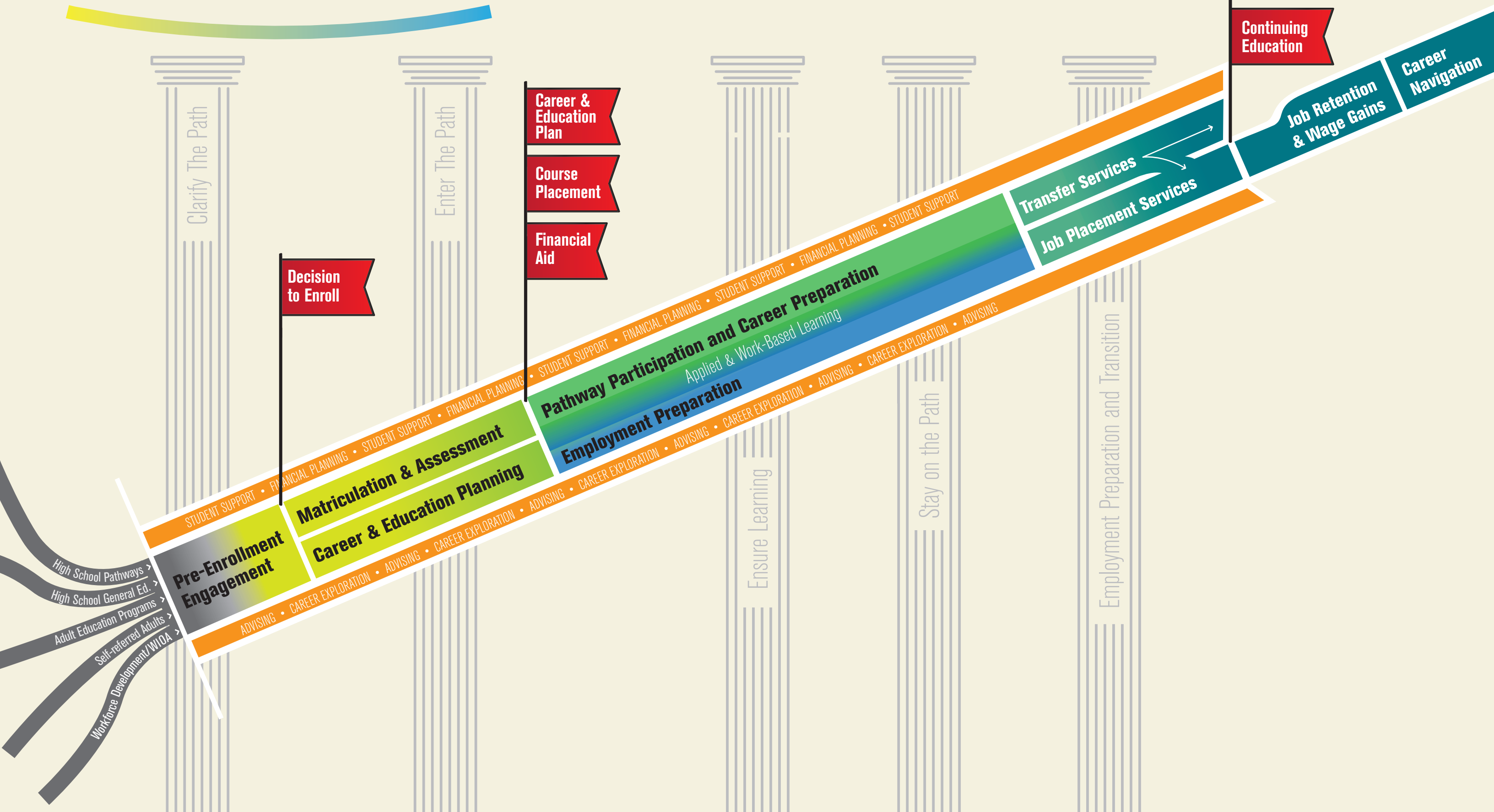


A Community College Student's Road to Success



Appendix B: Road to Success Glossary of Terms

(organized alphabetically)

Term	Definition
Adult Education Programs	In California, adult education programs include all programs offered by K–12 adult schools and community college noncredit programs in the seven program areas defined under AB104 (2015) which created the adult education block grant program. These include Basic Skills, English as a Second Language (ESL), and short-term career-technical education, among others. (See additional details below.)
Advising	Counseling and other staff services that guide students in course selection and selection of career-related experiences throughout the students’ time at the college. The term “intrusive advising” is commonly used in guided pathways and refers to advising that is initiated by staff to proactively support student success.
Applied and Work-Based Learning (WBL)	<p>Applied Learning: Knowledge applied to real-world settings or to real problems, that facilitates understanding by engaging students’ interests and connecting theoretical concepts to familiar or practical situations. Project-based learning (PBL) is one form of applied learning suggested in the Guided Pathways framework. (See additional details below.) Learning can also be “contextualized,” that is, facilitated in such a way that students understand the context in which knowledge and skills are applied; career contexts allow students to understand how knowledge and skills are applied in various career settings.</p> <p>Work-Based Learning: A continuum of experiences that support career awareness, career exploration, and career preparation, through engagement with employers and real work opportunities. Work-based learning experiences range in intensity, from tours and job shadowing, which expose students to career options, to internships, work experience, co-op, and apprenticeships, which teach both general and specific career-related skills through actual work. High intensity WBL can also include projects completed, or services performed, in classrooms, if employers are directly involved, or if the projects and services are being developed/performed for a client outside of class. Examples include a web development project or service for a local nonprofit organization. Any high-intensity WBL experience requires a learning plan, assessment, and adherence to other criteria for high quality and safe practice. Work-based learning, while sometimes coordinated by staff outside the pathway, is integral to both Pathway Participation and Career and Employment Preparation and connects the two.</p>

Term	Definition
<p>Career and Education Planning</p> <p>Career and Education Plan</p>	<p>Career Planning: The process of developing a Career Plan, which includes the following components: A student’s interests, skills, and values; the career options that the student is interested in pursuing; and the educational and work-related experiences that will lead to one or more long-term career goals. A Career Plan should be updated with successive educational, life, or work-related experiences that may impact the student’s interests or goals.</p> <p>The career planning process includes the following steps, among others:</p> <ul style="list-style-type: none"> • Self-assessment of interests, needs, and values, through the use of validated assessments, reflection, and other activities • Assessment of career options through research and career exploration, as well as understanding of labor market data and economic forecasts • Understanding of educational and work-related requirements for various options • Guidance and coaching from a counselor, staff member, or mentor, as appropriate • Identification of goals based on assessments and coaching • Identification of steps to attain goals <p>Education Planning: The process of developing an Education Plan, which includes the documentation of the courses needed for a student to complete a specific degree, certificate, or transfer program of study and fulfill their educational goals, both at the community college and beyond. While often prepared separately from the student’s Career Plan, it can also be considered a subset of a student’s Career Plan, to the extent that it serves to advance the student’s long-term career goals.</p>
<p>Career Exploration</p>	<p>The process of learning about career options through workshops, classes, tours, career-related research projects, informational interviews, and job shadows, based on identified interests and goals. Career exploration experiences <i>that involve employer engagement</i> are considered to be early-stage work-based learning. (See “Applied and Work-Based Learning.”)</p>
<p>Career Navigation</p>	<p>The process of making one’s way through a workplace and successive workplaces over time. Career navigation skills include the following, among others:</p> <ul style="list-style-type: none"> • Understanding and implementing workplace practices in a given industry and workplace (e.g., hiring and human resource practices) • Developing in a job or across multiple jobs (such as how to negotiate salary increases) • Learning continuously at work (by accessing available resources) • Effectively using the social networks within an industry and across industries • Responding flexibly to change — whether internal (new interests), economic (off-shoring), or circumstantial (a spouse’s move or natural disaster) — through the transfer of skills to new settings or further training

Term	Definition
Continuing Education	Ongoing engagement in postsecondary education beyond the initial certification or degree to realize career advancement or to fulfill continuing education requirements in a given profession such as nursing or public safety. Continuing education pertains to four-year institutions, the military, or specialized education and training programs. This term is being used generically, not only in relation to “continuing education units.”
Course Placement	Traditionally, placement in the community college system refers to the placement of students into the appropriate level of math, English, or ESL course based on multiple measures including cut scores on a college placement test.
Decision to Enroll	This first flag on the Roadway marks the first proactive decision that students make, based on knowledge of their own interests and understanding of the college’s pathways, course offerings, experiences, and services.
Degree, Certificate, or Skills	<p>Culminating awards or the attainment of skills needed for further education or employment. Awards may include:</p> <ul style="list-style-type: none"> • Two- and four-year degrees offered by accredited postsecondary institutions • Certificates of Achievement, Completion, and Competency as defined by Community Colleges Chancellor’s Office • Locally approved certificates • Postsecondary Credentials (WIOA definition – also adopted by AEBG) • Third-party industry certification (NIMS, CompTIA, etc.) <p>Some adults attend community college in a CTE program for the purpose of increasing their skills to realize career or wage advancement without necessarily the intent to complete a certificate or degree. These students are called “skill-builders.”</p>
Employment	Securing a job with an employer, or becoming self-employed in a profession of one’s choosing.
Employment Preparation	Preparation that focuses on the tools and logistics needed to find and retain immediate employment, such as resume-writing, mock interviews, and networking skills.
Financial Aid	The package of financial assistance provided to students through federal, state, and local sources. Examples include federal Pell grants, student loans, work-study, State of California Cal Grants, and Community College Board of Governor (BOG) fee waivers.

Term	Definition
Financial Planning	Documentation of one's financial circumstance and the resources needed to cover educational and life-related costs and help support financial stability. Financial planning is needed to apply for financial aid, but continues beyond the financial aid process, as financial circumstances impact all aspects of educational and career decision-making. Financial planning provides support to students in analyzing risk as they engage in various educational and career pursuits (e.g., whether to quit their job to pursue full-time course-taking) and consider various future options (e.g., whether to take out a loan to pursue a baccalaureate degree versus going straight to work with a community college degree); labor market information is critical to students' financial planning.
High School General Education	The course of study offered by high schools from 9th to 12th grade that, upon completion, leads to the award of a high school diploma recognized by the appropriate cognizant state agency that oversees K12 education. In common usage, General Ed refers to general education requirements for graduation (math, science, English, social sciences) that are NOT CTE courses. Students in general education high school programs may not always be exposed to college and career options.
High School Pathways	The courses and experiences offered in high school career pathway programs that expose students to careers and may be linked to community college pathways through articulation agreements or dual enrollment opportunities. Regardless of dual enrollment status, students would be expected to arrive at the community college at least somewhat knowledgeable about their own interests and skills, and about the college's pathway opportunities.
Job Placement Services	Services that facilitate identification of opportunities (from job boards to targeted identification of opportunities for specific students), matching of students to the opportunities, securing of interviews and successful employment, and coaching through successive interviews if needed.
Job Retention and Wage Gains	<p>Job Retention: Students keeping a position once employed and earning salary increases over time. For Strong Workforce and WIOA, retention is measured as "employed in the second and fourth fiscal quarters after exit."</p> <p>Wage Gains: Wage gains are defined as "Median change in earnings: Percentage change in earnings for exiting students, one year before and one year after exiting the California community college system (based on a match to the state unemployment insurance wage file)." See below for other Strong Workforce Metrics.</p>

Term	Definition
Matriculation and Assessment	<p>The process of enrolling in a community college and completing the necessary assessments and plans to pursue a pathway. Steps include application; orientation (to the college, pathway, and other services); assessment of academic, career, 21st century employability, and other interests, skills, and needs; and access to financial aid, financial planning, and financial literacy services, as well as labor market information, that will help secure students' financial stability, both during and after college. Educational and Career Planning are generally included in the matriculation process, but have been separated in the Roadway and this Glossary to spotlight their importance in the Strong Workforce and Guided Pathways initiatives.</p>
Pathway Participation and Career Preparation	<p>Pathway Participation: Engagement with the courses and experiences offered in a career pathway. Work-based learning, while sometimes coordinated by staff outside the pathway, is integral to pathway participation as an instructional strategy.</p> <p>Career Preparation: A stage in the career development process when a student is learning through hands-on experience or work-based learning, ideally in a workplace; it also includes courses, workshops, or other activities that strengthen "21st century employability skills" (especially higher-order thinking skills) and career navigation skills, and that impart knowledge about a career area and about workplace practices and ethics in a given industry. (See also Employment Preparation, above.)</p>
Pre-Enrollment Engagement	<p>Outreach or early engagement with prospective students including services that help them understand the educational options, pathways, and services available to them, and provide information needed to facilitate enrollment. Examples include:</p> <ul style="list-style-type: none"> • Articulated or dual enrollment career exploration and college readiness courses offered at local high schools or adult schools • College or career success modules or workshops offered at local high schools, adult schools, community-based organizations, adult jails or other environments • Online or print college and career exploration resources encouraging independent exploration and planning for college • "College Days," which may include campus tours, meeting with faculty or other early engagement strategies which help students identify their interests and programs that may be aligned with their goals • College outreach activities, including pre-enrollment orientations; information about pathways, courses, learning experiences, financial aid, and services; sessions with parents as appropriate • Opportunities for students to share information about their goals and needs

Term	Definition
Self-Referred Adults	<p>Students entering community college on their own under various circumstances, each calling for variation in the kinds of guidance provided. For example:</p> <ul style="list-style-type: none"> • Entering for first time after a gap in education after high school • Returning to finish a degree started at the same or different community college • Entering for specific skills, with or without prior degrees or certificates; not necessarily seeking a degree or certificate (also see “Skill Building” below) • Entering for retraining, due to changes in career prospects, which may be related to economic or other circumstances — with distinct implications; may apply to professions of all kinds • Entering for career advancement, seeking further certifications
Student Support	<p>The full range of student services that support students’ ability to successfully complete their pathway. These may include:</p> <ul style="list-style-type: none"> • Logistical and life-related support services, often called “Supportive Services,” such as <ul style="list-style-type: none"> ○ financial assistance and financial planning services to help ○ housing ○ access to food and nutrition ○ physical and mental health services ○ transportation ○ child care ○ parking ○ books and materials • Academic support, such as tutoring, or testing for special education, and peer study groups <p>Note: In the Strong Workforce and Guided Pathways initiatives, career-related services are considered integral to pathway participation and instruction, and therefore are not included as “support.” They are defined separately.</p>
Transfer Services	<p>Services that prepare students for transferring to a four-year college or university, including application preparation, college tours, transcript services, and related services. Transfer services appear at the end of the Roadway graphic, but begin early in the student’s time at the college, as students select courses and experiences that will prepare them for further education beyond the community college.</p>
Workforce Development/ WIOA Programs	<p>Programs administered by organizations under the Workforce Innovation and Opportunities Act (WIOA) that refer students to community colleges for training.</p>

Other Key Terms Not in Roadway Graphic

Term	Definition
21st Century Employability Skills	A set of relevant and in-demand knowledge, skills, work habits, and character traits important to success in contemporary careers and workplaces. These include all the skills provided in the Partnership for 21st Century Skills (P21) Framework (see http://www.p21.org/our-work/p21-framework), with the most frequently cited being “the 4 Cs”: Critical Thinking, Creativity, Collaboration, and Communication, clustered under the heading “Learning and Innovation Skills.” These evolved from the skills identified in the 1990s, by the Secretary’s Commission on Achieving Necessary Skills, also called the SCANS skills. They are also sometimes called “employability skills,” “essential skills,” and “soft skills,” but the latter term may refer primarily to behaviors such as punctuality and conscientiousness, which are only a small subset of the skills presented in the P21 Framework.
Adult Education Programs (detail)	<p>Adult Education programs include:</p> <ul style="list-style-type: none"> • Adult basic and secondary education • ESL and EL Civics • Adults with disabilities • Short-term CTE programs leading to employment • Adults in programs designed to help them enter or reenter the workforce • Adults in training programs that provide skills so they can help K12 students achieve academic success • Pre-apprenticeship training aligned to a formal DAS approved apprenticeship program <p>For-credit developmental education programs and for-credit CTE programs are not considered adult education programs under current definitions, although transition to for-credit pathways and postsecondary education are captured as outcomes for these programs.</p>
Alumni Engagement	Strategies to engage alumni for a) peer guidance to students; b) feedback to faculty and staff; c) work-based learning opportunities, including job shadowing and internships, among others, for students.
Career Development	The process of building self-knowledge, awareness of occupations in the local, national, and global economy and the educational steps needed to prepare for these careers, and taking of successive steps in education and work over time to achieve one’s career-related goals.
Career Education (CE), AKA Career Technical Education (CTE)	Programs, courses, and services that support students’ career development. These programs are also called Career Technical Education (CTE) programs; the designation was changed to simply Career Education in 2017, but CTE is still widely used.

Term	Definition
Career Pathway	A series of courses and experiences with a career theme, with additional services to support student success, that enable students to attain a degree or certificate in a field of interest and pursue further education or work after community college. In the “Guided Pathways” approach, all courses are organized according to broad themes, and student services are integrated within the pathway, offering students a roadmap of courses and services that help them attain their goals —whether those are degrees, certificates, skills, or transfer, for immediate or long-term employment.
Guided Pathways	Pathways, including both Career Education (CE) and non-CE courses, and relevant experiences and services, organized by broad themes, to support students in attaining their goals. The four “pillars” of Guided Pathways are: 1) clarifying the path; 2) helping students enter the path; 3) helping students stay on the path; and 4) helping students learn on the path. Combining the goals of the Guided Pathway initiative with the Strong Workforce initiative, a fifth pillar is suggested: 5) employment preparation and transition.
Project-Based Learning	PBL is a teaching method in which students gain knowledge and skills by working for an extended period of time to investigate and respond to an authentic, engaging, and complex question, problem, or challenge (Buck Institute for Education, n.d.). In high-quality PBL, projects are focused on student learning goals and include specific design elements (see http://www.bie.org/about/what_pbl).

Term	Definition
Strong Workforce Metrics	<p>Metrics: All metrics are disaggregated by race, gender, and age grouping, and are available in the LaunchBoard.</p> <ul style="list-style-type: none"> • Number of course enrollments: The number of registrations in courses (may include duplicated students)** • Number of students who got a degree or certificate: Unique individuals who completed a credit or noncredit local certificate, credit or noncredit Chancellor’s Office-approved certificate, associate degree, or applied bachelor’s degree* • Number of students who transferred: Unique individuals who transferred to a four-year institution • Employed in the second fiscal quarter after exit: Employment rate for exiting students in the second fiscal quarter after leaving the community college system (based on a match to the state unemployment insurance wage file)* • Employed in the fourth fiscal quarter after exit: Employment rate for exiting students in the fourth fiscal quarter after leaving the community college system (based on a match to the state unemployment insurance wage file)* • Job closely related to field of study: The proportion of students who reported that their current job is close or very close to their field of study (based on responses in the CTE Outcomes Survey) • Median earnings in the second fiscal quarter after exit: Earnings for exiting students in the second fiscal quarters after leaving the community college system (based on a match to the state unemployment insurance wage file)* • Median change in earnings: Percentage change in earnings for exiting students, one year before and one year after exiting the California community college system (based on a match to the state unemployment insurance wage file)** • Attained a living wage: Proportion of exiting completing and skills-builder students who attained the living wage for a single individual in the college’s Doing What Matters region (based on a match to the state unemployment insurance wage file and Insight Center for Community Economic Development data) <p>* WIOA metrics ** additional metrics flagged in the legislation</p>

SAN DIEGO AND IMPERIAL COUNTIES STRONG WORKFORCE PROGRAM RECOMMENDATIONS

Career Pathways

Employment Readiness

Job Placement

Marketing

Work-based Learning

SUMMARY OF PATHWAY ELEMENTS, GOALS, AND RECOMMENDATIONS

REGIONAL EXECUTIVE LEADERSHIP		
Pathway Elements	SWP Metrics	Recommendations
Career Pathways Work-based Learning Employment Readiness Job Placement	Increase Enrollment Retention Success Completion Job Placement Job Retention Earning Gains	<ul style="list-style-type: none"> Establish SDICCCA as the primary driver leading the career pathways, employment readiness, and job placement assimilation into the Guided Pathways initiative in the San Diego and Imperial Counties Colleges. Engage business and industry within the region to develop work-based learning and employment opportunities for students.
Marketing	Increase Enrollment	<ul style="list-style-type: none"> Provide leadership for regional Career Education marketing at all colleges. Provide direction for colleges to implement student friendly landing pages, webpage templates and tools to successfully onboard students.

REGIONAL K-14 CAREER EDUCATION PATHWAYS FRAMEWORK		
Pathway Elements	SWP Metrics	Recommendations
Career Pathways	Increase Enrollment Retention Success Completion Job Placement	<ul style="list-style-type: none"> Establish the role and responsibilities of all leadership levels in the adoption of streamlined regional processes for building career pathways within high school, adult schools and community colleges. (CP Recommendation 1)
Employment Readiness and Job Placement	Increase Enrollment Retention Success Completion Job Placement	<ul style="list-style-type: none"> Integrate career preparation and job placement as a central purpose within the Guided Pathways framework on campuses. (ERJP Ex Summary p. 5-6) <ul style="list-style-type: none"> Integrate career preparation and job placement into college planning and evaluate metrics on an ongoing basis. Assign campus leadership to work with other college leaders to implement objectives of employment readiness and job placement initiative.

	Job Retention Earning Gains	<ul style="list-style-type: none"> Engage business and industry to develop in-demand career education programs and employment readiness curriculum. Work with business and industry to develop work-based learning opportunities and facilitate transition to employment. Create a regional communications plan to disseminate recommendations to regional and college leadership and staff. Establish regional goals for work-based learning and job placement metrics (e.g., numbers or percent of students that will participate in work-based learning opportunities at each level). Evaluate ongoing progress of implementation at each college. (ERJP Ex Summary p. 13-15)
Technology	Retention Success Completion Job Placement	<ul style="list-style-type: none"> Endorse the adoption of work-based learning and job placement technology that will serve all students and employers in the region. (ERJP Ex Summary p. 10)
Marketing	Increase Enrollment	<ul style="list-style-type: none"> Implement a three-year marketing plan to increase enrollment in Career Education programs in all colleges within the region.

BUILD AND CLARIFY THE PATH		
Pathway Elements	SWP Metrics	Recommendations
Career Pathways Work-based Learning	Increase Enrollment Retention Success Completion Job Placement	<ul style="list-style-type: none"> Engage business and industry to develop in demand programs. Document the existing career pathways within the region and define the regional career pathways design and outcomes and metrics. Provide adequate support for K-12, Adult Education and community college staff to conduct career pathways development. Increase awareness of career options in middle school and awareness and engagement in high schools. Align career pathways curriculum and course sequences with high schools, adult schools, colleges and regional sectors to create relevant meta-majors pathways. Build relevant work-based learning events into career pathways. Build awareness, knowledge, and technical skills to support career pathways development. (CP Recommendations 2 to 9)
Marketing	Increase Enrollment	<ul style="list-style-type: none"> Build the Career Education brand and awareness of career pathways across the region.

ENTER THE PATH		
Pathway Elements	SWP Metrics	Recommendations
Pre-Enrollment Engagement	Increase Enrollment	<ul style="list-style-type: none"> Develop connections with high schools and adult schools to ensure students have clear goals before they come to the college. (ERJP Recommendations 1.1 to 1.3) Develop strategies to ensure incumbent workers have clear goals when they enter a program of study.
Matriculation and Comprehensive Assessment	Increase Enrollment Retention	<ul style="list-style-type: none"> Expand and target matriculation and assessments to include differentiated orientation, multiple measure assessments, and consistent and coordinated advising with a focus on supporting student career goals. (ERJP Recommendations 2.1 to 2.3)
Career and Education Planning	Retention Success Completion Job Placement	<ul style="list-style-type: none"> Provide intentional career and education planning that include early career exploration, career plans before education plans, and career preparation orientation courses. (ERJP Recommendations 3.1 to 3.5)
Technology	Increase Enrollment Retention Success	<ul style="list-style-type: none"> Employ technology to inform students of pathway options and to manage career/education planning and support services; pilot existing and proposed tools before adoption. (ERJP Ex Summary p. 10-11)
Marketing	Increase Enrollment	<ul style="list-style-type: none"> Ensure easy navigation of college registration and enrollment.

ENSURE LEARNING

Pathway Elements	SWP Metrics	Recommendations
Pathway Participation and Career Preparation	Retention Success Completion	<ul style="list-style-type: none"> Embed intentional career preparation into existing pathway courses with support for faculty. (ERJP Recommendations 4.1 to 4.2)
Applied and Work-Based Learning	Retention Success Completion Job Placement	<ul style="list-style-type: none"> Ensure ALL students have access to a full range of high-quality, rigorous applied and work-based learning experiences, including employability skills. (ERJP Recommendations 5.1 to 5.10)
Technology	Retention Success Completion Job Placement	<ul style="list-style-type: none"> Employ technology to support students' access to career exploration and applied and work-based learning opportunities linked to their pathway curricula; pilot existing and proposed tools before adoption. (ERJP Ex Summary p. 10-11; 14) Employ technology to track student progress and provide kudos/alerts as needed. (ERJP Ex Summary p. 10)

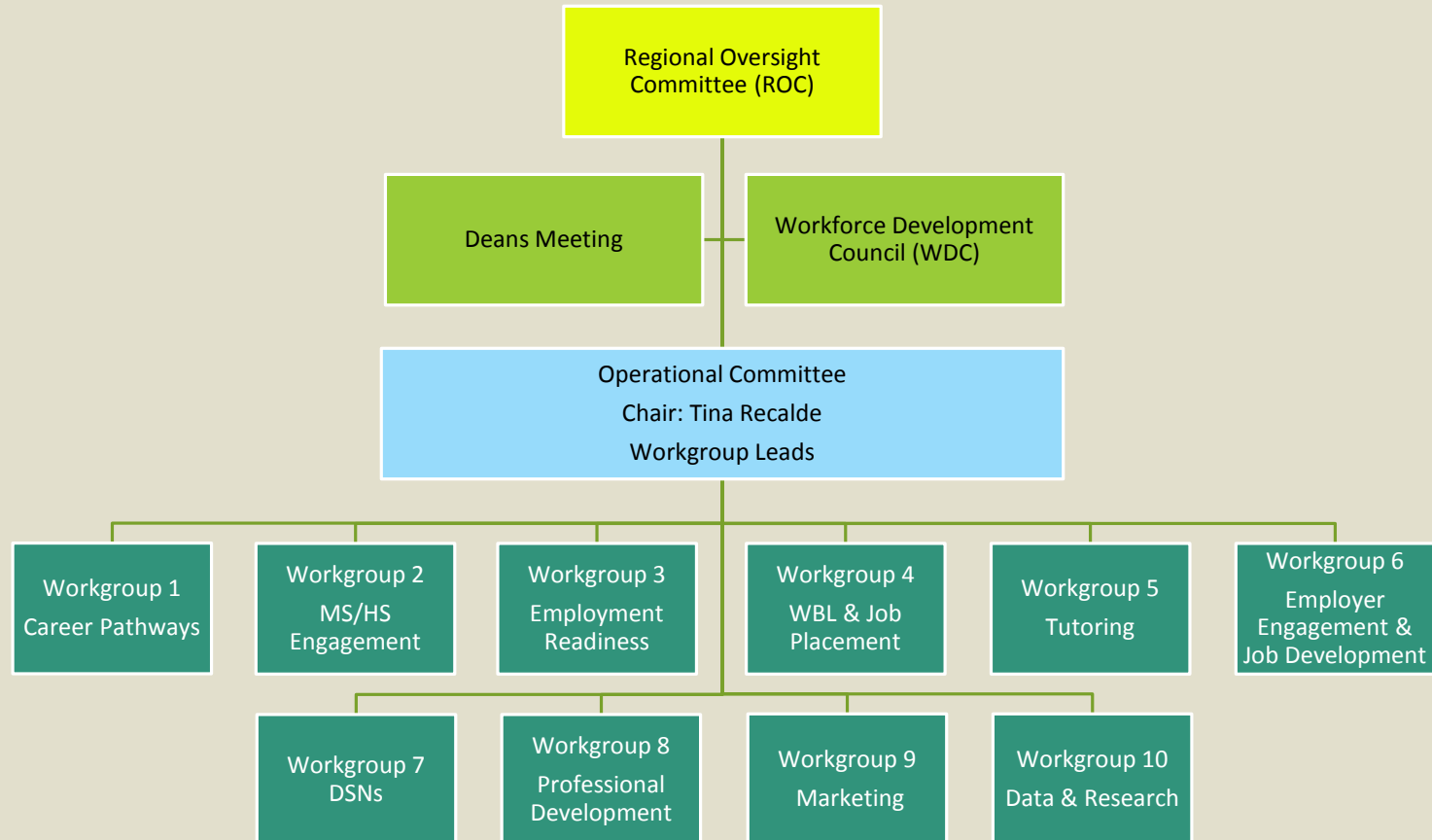
STAY ON THE PATH

Pathway Elements	SWP Metrics	Recommendations
Academic Supports and Career Exploration	Retention Success Completion	<ul style="list-style-type: none"> Provide students with targeted and academic and career exploration support to ensure their success in course and program completion. (ERJP Recommendations 6.1 to 6.3)
Financial Planning and Other Support Services	Retention Success Completion	<ul style="list-style-type: none"> Provide financial planning services to all students, as needed. (ERJP Recommendation 7.1) Create a comprehensive service and referral system-with feedback-that provides students with adequate support such as transportation, childcare, housing, health services, food security, and other needed services. (ERJP Recommendations 7.2 to 7.4) Encourage the use of zero or low cost materials, such as OER.
Technology	Retention Success Completion	<ul style="list-style-type: none"> Employ technology to manage student access to support services; and encourage students to take action when appropriate. (ERJP Ex Summary p. 10)

EMPLOYMENT PREPARATION AND TRANSITION

Pathway Elements	SWP Metrics	Recommendations
Employment Preparation and Job Placement Services	Job Placement Job Retention Earning Gains	<ul style="list-style-type: none"> Provide employment preparation, advising, and placement services for all students. (ERJP Recommendation 8.1 to 8.3)
Transition Services	Job Placement Job Retention Earning Gains	<ul style="list-style-type: none"> In partnership with business, industry and universities, ensure successful transitions to further education, employment and other opportunities. (ERJP Recommendation 9.1 to 9.3)
Technology	Job Placement Job Retention Earning Gains	<ul style="list-style-type: none"> In partnership with business and industry, employ technology to support students' access to job and to facilitate job placement services. Pilot existing and proposed tools before adoption. (ERJP Ex Summary p. 10)

Strong Workforce Program Regional Implementation



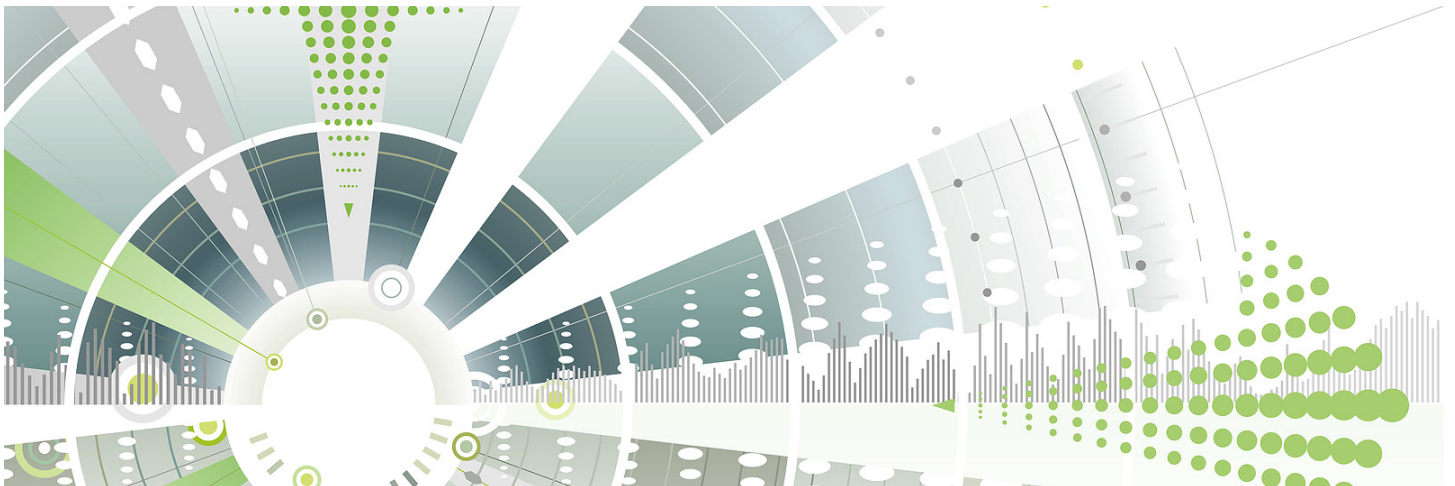
**Strong Workforce Implementation
Projects by Workgroup 2017-18**

Project	Lead	Recommendations	Budget
Workgroup 1 Career Pathways	Jennifer Patel Region Staff: Leslie WestEd	<ol style="list-style-type: none"> 1. Convene CP stakeholders to build a CP regional model and associated policies, processes, and resources 2. Hire a consultant to map existing career pathways from HS to CC's and AE to CC's (identifying gaps and opportunities) 	\$140K
Workgroup 2 Middle/High School Engagement	Sonia Lira Region Staff: Molly	<ol style="list-style-type: none"> 1. Conduct middle and high school engagement activities 2. Present a K-14 counselor conference annually 	\$40K
Workgroup 3 Employment Readiness	Claudia Estrada Staff: Leslie WestEd	<ol style="list-style-type: none"> 1. Establish pre-enrollment engagement 2. Differentiated orientation, comprehensive assessment, coordinated advising. 3. Career & education planning 4. Embed 21st Century employability skills into career exploration and curriculum (MiraCosta) 	4. \$125K
Workgroup 4 Work-based Learning & Job Placement	Ben Gamboa Colleges Region Staff: Leslie & Molly WestEd	<ol style="list-style-type: none"> 1. Assess WBL activities at each college 2. Create WBL and job placement work processes 3. Provide staffing to support employment readiness, WBL and placement functions, including linking with WBL coordination 4. Choose/purchase WBL and job placement platforms 	\$200K \$1.5 mil \$125K
Workgroup 5 Tutoring	Monica Romero Mesa Staff: Molly	<ol style="list-style-type: none"> 1. Hire researcher and faculty expert to conduct CE tutoring research, analysis and recommendations. Faculty will lead project, provide CE context and develop PD learning activities for CE faculty. 	\$135
Workgroup 6 Employer Engagement & Job Development	Margie Fritch Region/Colleges Staff: Leslie WestEd	<ol style="list-style-type: none"> 1. Convene regional EDC's and employers in the region to create a plan for engaging employers and creating WBL and jobs for students. Hire staff to lead employer engagement. 	\$750K

		2. Develop employment opportunities for students.	
Workgroup 7 DSN's	Mollie Smith Region	1. Create strategies and opportunities to convene faculty to align curriculum, provide professional development, meet sector employment gaps, improve sector performance, and convene advisories.	\$350K
Workgroup 8 Professional Development	College	1. Hire a faculty member and/or consultant to coordinate, implement, and deliver PD offerings within the region for AE, HS and CC's 2. Provide remuneration to faculty for participation in professional development	\$150K

April 2018

SUMMARY



OPPORTUNITIES FOR CAREER EDUCATION TO CLOSE THE MIDDLE-SKILL JOBS GAP

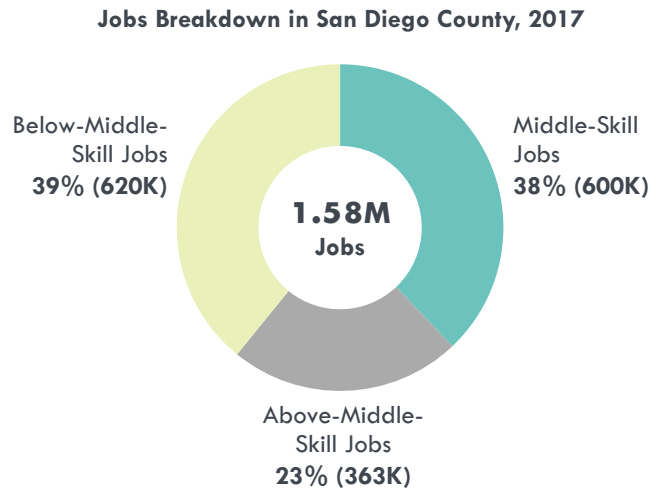
SAN DIEGO COUNTY



THE MIDDLE-SKILL JOB MARKET IN SAN DIEGO COUNTY

This summary highlights key points from the study, Opportunities for Career Education to Close the Middle-Skill Jobs Gap. The study explores where the middle-skill job opportunities are in San Diego County and identifies job gaps that could potentially be filled with public Career Education programs.

Middle-skill jobs constitute a significant portion of the San Diego labor market. In 2017, 38% of the 1,583,115 jobs in San Diego County were middle-skill jobs.



What is a Middle-Skill Job?

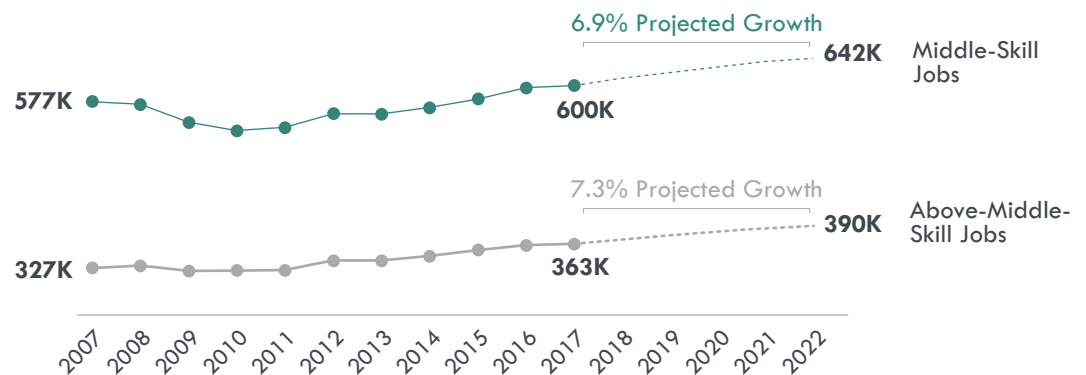
A middle-skill job has the following training requirements:

- > Some college coursework, a postsecondary certificate, and/or an associate degree; or
- > High school diploma or equivalent with on-the-job training greater than 12 months; or
- > Apprenticeship; or
- > Bachelor's degree if at least 33% of workers in the occupation, age 25 or older, have completed, as their highest level of education, some college coursework or an associate degree.

Between 2017 and 2022, the number of middle-skill jobs in the region is projected to increase by 41,450 jobs or 6.9%.



Number of People Employed in Middle-Skill and Above-Middle-Skill Jobs in San Diego County



TOP 100 MIDDLE-SKILL JOBS

There are 298 Standard Occupational Classification (SOC) codes that define middle-skill jobs. This study analyzes the top 100 SOC codes for middle-skill jobs that have the most labor market demand, stable employment growth, and entry-level wages at or above the Self-Sufficiency Standard.¹


88

The number of top middle-skill jobs with supply gaps in the region.


45,457

The number of job openings per year between 2017 and 2022 for the top 100 middle-skill jobs.


29,054

The number of awards that training providers will need to generate to close the supply gap for the top 100 middle-skill jobs.

¹ The Self-Sufficiency Standard is the hourly wage (\$13.09) that a single adult (with no family) needs to earn to meet basic needs in San Diego County. selfsufficiencystandard.org

TOP 100 MIDDLE-SKILL JOBS

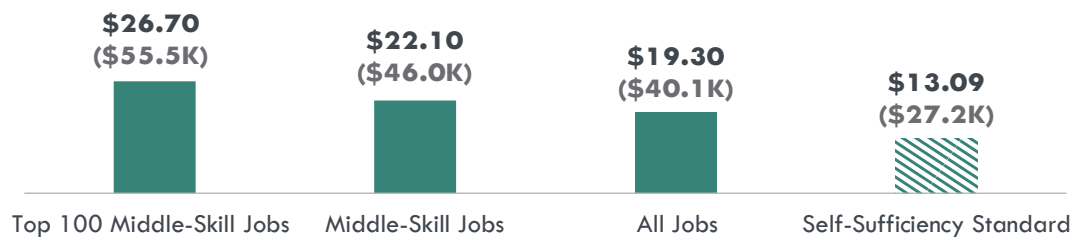
A comparison of labor market demand (annual job openings) with labor supply (program awards) from the region's educational institutions indicates that there are 88 top middle-skill jobs with supply gaps. Occupations with an asterisk (*) indicate an oversupply.

Administrative Services Managers*	Industrial Production Managers
Aircraft Mechanics and Service Technicians	Inspectors, Testers, Sorters, Samplers, and Weighers
Aircraft Structure, Surfaces, Rigging, and Systems Assemblers	Insurance Sales Agents
Architectural and Civil Drafters	Interpreters and Translators
Automotive Body and Related Repairers	Legal Secretaries
Bus and Truck Mechanics and Diesel Engine Specialists	Library Technicians
Bus Drivers, School or Special Client	Licensed Practical and Licensed Vocational Nurses
Business Operations Specialists, All Other	Life, Physical, and Social Science Technicians, All Other
Cargo and Freight Agents	Loan Interviewers and Clerks
Carpenters	Loan Officers
Chefs and Head Cooks*	Lodging Managers
Civil Engineering Technicians	Logisticians
Claims Adjusters, Examiners, and Investigators	Machinists
Computer Network Architects	Maintenance and Repair Workers, General
Computer Network Support Specialists	Medical and Clinical Laboratory Technicians
Computer Occupations, All Other*	Medical and Clinical Laboratory Technologists
Computer User Support Specialists	Medical Assistants*
Computer-Controlled Machine Tool Operators, Metal and Plastic	Medical Records and Health Information Technicians
Construction and Building Inspectors	Medical Secretaries
Construction Managers*	Network and Computer Systems Administrators*
Correctional Officers and Jailers	Operating Engineers and Other Construction Equipment Operators
Cost Estimators*	Paralegals and Legal Assistants
Customer Service Representatives	Payroll and Timekeeping Clerks*
Dental Assistants	Pharmacy Technicians
Dental Hygienists	Phlebotomists
Detectives and Criminal Investigators	Photographers
Electrical and Electronic Equipment Assemblers	Physical Therapist Assistants
Electrical and Electronics Engineering Technicians	Plumbers, Pipefitters, and Steamfitters
Electricians	Police and Sheriff's Patrol Officers
Engineering Technicians, Except Drafters, All Other	Production, Planning, and Expediting Clerks
Executive Secretaries and Executive Administrative Assistants	Property, Real Estate, and Community Association Managers
Firefighters*	Purchasing Agents, Except Wholesale, Retail, and Farm Products
First-Line Supervisors of Construction Trades and Extraction Workers	Radiologic Technologists
First-Line Supervisors of Helpers, Laborers, and Material Movers, Hand	Registered Nurses
First-Line Supervisors of Landscaping, Lawn Service, and Groundskeeping Workers	Reservation and Transportation Ticket Agents and Travel Clerks
First-Line Supervisors of Mechanics, Installers, and Repairers	Sales Representatives, Services, All Other
First-Line Supervisors of Non-Retail Sales Workers	Sales Representatives, Wholesale and Manufacturing, Except Technical and Scientific Products
First-Line Supervisors of Office and Administrative Support Workers	Secretaries and Administrative Assistants, Except Legal, Medical, and Executive
First-Line Supervisors of Personal Service Workers*	Sheet Metal Workers
First-Line Supervisors of Production and Operating Workers	Social and Human Service Assistants
First-Line Supervisors of Retail Sales Workers	Structural Iron and Steel Workers
First-Line Supervisors of Transportation and Material-Moving Machine and Vehicle Operators	Surgical Technologists
Fitness Trainers and Aerobics Instructors	Tax Preparers*
Glaziers	Training and Development Specialists
Health Technologists and Technicians, All Other	Transportation, Storage, and Distribution Managers
Healthcare Support Workers, All Other	Veterinary Technologists and Technicians*
Heating, Air Conditioning, and Refrigeration Mechanics and Installers	Water and Wastewater Treatment Plant and System Operators
Heavy and Tractor-Trailer Truck Drivers	Web Developers
Human Resources Assistants, Except Payroll and Timekeeping	Welders, Cutters, Solderers, and Brazers
Industrial Machinery Mechanics	Wholesale and Retail Buyers, Except Farm Products

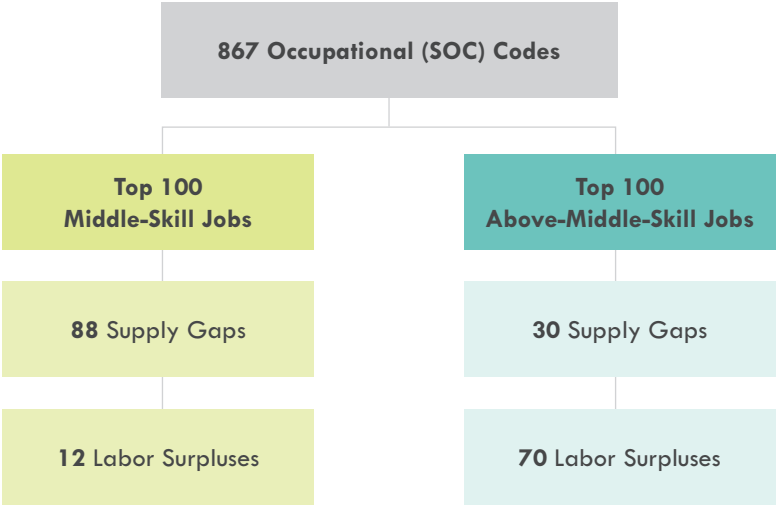
KEY FINDINGS

Training for the top 100 middle-skill jobs can provide job seekers with opportunities for income mobility: The average median hourly wage of all middle-skill jobs is \$22.10, the average median hourly wage of all jobs in the region is \$19.30, and the Self-Sufficiency Standard is \$13.09. The average median hourly wage of the top 100 middle-skill jobs analyzed in this study is \$26.70, which is higher than all three.

Median Hourly Earnings (Annual Salary) vs. Self-Sufficiency Standard



Of the top 100 middle-skill jobs identified in this study, 88 have supply gaps and 12 have labor surpluses (an oversupply of labor). Comparatively, the top 100 above-middle-skill jobs have 30 supply gaps, suggesting that middle-skill jobs have more opportunities to develop programs than above-middle-skill jobs.



The top 100 middle-skill jobs have a labor market demand of 45,457 annual job openings and a program supply of 16,403 awards. That is a difference of 29,054 awards that could be produced by the region to meet labor market demand.

Not all middle-skill jobs require an associate degree. Of the 45,457 annual job openings, 16% are related to supervisorial or management roles, 17% are related to sales roles, and 17% are related to administrative or secretarial roles. The majority of these occupations require less than an associate degree as their typical entry-level education. This suggests that there are opportunities for short-term certificate programs that can fill these roles. Short-term certificate programs require less than two years to complete.

Median Hourly Earnings vs. Self-Sufficiency Standard²



² These percentages have some overlap because an occupation may have more than one role: For example, First-Line Supervisors of Office and Administrative Support Workers are both supervisorial and administrative positions.

RECOMMENDATIONS FOR MORE PROGRAM SUPPLY

Career Education programs can help fill labor supply gaps with short-term certificates or associate degrees. The following list of six-digit Taxonomy of Programs (TOP6) codes are recommended for increased awards to close the supply gap. The TOP system is used at the state level to collect and report information on community college programs. Existing TOP6 programs that train for occupations with a supply gap of at least 100 job openings are included below. The full list of TOP6 programs that train for occupations with supply gaps can be found in the full report. Programs with an asterisk (*) may be suitable for short-term certificate programs.

TOP6	TOP6 Program Title	TOP6	TOP6 Program Title
050400	Banking and Finance	095220	Electrical
050630	Management Development and Supervision*	095230	Plumbing, Pipefitting, and Steamfitting
050640	Small Business and Entrepreneurship	095250	Mill and Cabinet Work
050650	Retail Store Operations and Management	095260	Masonry, Tile, Cement, Lath and Plaster
050800	International Business and Trade*	095280	Drywall and Insulation
050900	Marketing and Distribution*	095500	Laboratory Science Technology
050940	Sales and Salesmanship*	095600	Manufacturing and Industrial Technology
050970	E-Commerce (Business Emphasis)*	095630	Machining and Machine Tools
051000	Logistics and Materials Transportation*	095640	Sheet Metal and Structural Metal
051100	Real Estate	095680	Industrial Quality Control*
051110	Escrow	095720	Construction Inspection
051200	Insurance*	120500	Medical Laboratory Technology
051400	Office Technology/Office Computer Applications*	120510	Phlebotomy
051410	Legal Office Technology*	120820	Administrative Medical Assisting*
051420	Medical Office Technology	120830	Health Facility Unit Coordinator
051440	Office Management*	121100	Polysomnography
070210	Software Applications	121200	Electro-Neurodiagnostic Technology
070730	Computer Systems Analysis	121400	Orthopedic Assistant
070800	Computer Infrastructure and Support	122000	Speech/Language Pathology and Audiology
070820	Computer Support	122100	Pharmacy Technology
092400	Engineering Technology, General	122300	Health Information Technology
093400	Electronics and Electric Technology	122310	Health Information Coding
093410	Computer Electronics	123020	Licensed Vocational Nursing
093430	Telecommunications Technology	123010	Registered Nursing
093440	Electrical Systems and Power Transmission	124010	Dental Assistant
093470	Electron Microscopy	124020	Dental Hygienist
094300	Instrumentation Technology	130320	Fashion Merchandising*
094500	Industrial Systems Technology and Maintenance	140200	Paralegal
094610	Energy Systems Technology	160200	Library Technician (Aide)
094700	Diesel Technology	210210	Public Works
094730	Heavy Equipment Operation	210510	Corrections
094740	Railroad and Light Rail Operations*	210540	Forensics, Evidence, and Investigation
094900	Automotive Collision Repair	210550	Police Academy
095210	Carpentry	300900	Travel Services and Tourism*

RECOMMENDATIONS FOR FURTHER ANALYSIS

Further research coupled with this labor market study may help with decision-making in regard to programs and course offerings:

- **Conduct primary research to validate these recommendations with employers:** This study provides lists of recommended TOP codes for short-term certificate and associate degree programs. However, the recommendations have not been validated by industry or businesses. Collecting primary data directly from employers will help further confirm program recommendations.
- **Examine how well existing programs currently meet labor market needs:** While this study makes recommendations for program development based on labor market information, it lacks information about the programs themselves. By conducting a program evaluation, the community colleges can gain insight as to why so many programs exist in the region for the top 100 middle-skill jobs, but supply from each program is low.
- **Validate whether the recommended TOP codes for short-term certificate programs currently train skills-builders:** Many of the TOP codes that this study recommends for short-term certificate programs may already train for skills-builders in the region. Skills-builders are students who take higher-level Career Education courses, but do not complete a community college program or transfer to a four-year institution. These skills-builders may take a college course to obtain new skills and/or to increase their earnings, but do not need to complete an associate degree program to achieve those goals. By understanding what programs train skills-builders, colleges in the region may want to consider which courses, rather than programs, to market to students and working professionals.

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