



Norco College

Construction Technology Advisory Committee Meeting Minutes

Date: March 13, 2026

Meeting Time: 9:05 a.m. – 10:45 a.m.

Committee Members: Paola Ramos/Grid Alternatives, Jake Weigand/Griffith Company, Shawn Shawmlou/Pankow Builders, Chip McCorkle/Pankow Builders

College Faculty: Dr. Jim Thomas

Note Taker: Stephanie Karnes, CTE Projects Specialist

1. Welcome and Introductions

The Construction Technology Advisory Committee meeting began at 9:15 a.m. Committee members and college representatives introduced themselves and discussed current conditions in the construction industry, program offerings, workforce needs, work-based learning opportunities, and strategies for strengthening student preparation and industry engagement.

2. Regional Trends in the Construction Labor Market

The committee reviewed regional labor-market trends and discussed the continued need for skilled construction workers throughout the Inland Empire/Desert region.

The Inland Empire/Desert Regional Consortium (IEDRC) identifies **Energy, Construction, and Utilities** as an important regional sector. IEDRC labor-market data identifies substantial annual demand for construction-related occupations, including approximately **1,834 annual openings for carpenters, 984 for electricians, 982 for first-line supervisors of construction trades, 686 for heating, air conditioning and refrigeration mechanics and installers, 512 for plumbers/pipefitters/steamfitters, 498 for operating engineers, and 195 for construction and**

building inspectors. The data demonstrates continued demand across both skilled trades and construction management/inspection occupations.

The 2025 Inland Empire/Desert Center of Excellence (COE) subregional analysis also identified **Construction and Extraction** as a significant occupational group. In the San Bernardino Metro subregion, the occupation group represented approximately **14,314 jobs and 1,434 annual openings**, reinforcing the need for community college pathways that prepare students for middle-skill construction careers.

The committee also discussed the cyclical nature of construction employment. Although the Inland Empire/Desert region experienced a decline of approximately 5,400 construction jobs during the first quarter of 2025, construction remains an important regional workforce sector with ongoing replacement and expansion demand. The committee emphasized that students should be prepared for both immediate employment opportunities and long-term career advancement.

The IEDRC and IE/D COE have also identified changes within the sector related to **energy efficiency, renewable energy, technology, and increasingly complex construction requirements**. These trends reinforce the importance of maintaining current technical knowledge while developing adaptable workers who can respond to changing codes, technologies, and project requirements.

3. Current Construction Programs and Stackable Pathways

The committee reviewed Norco College's current Construction Management and Construction Technology pathways for 2025–2026.

Construction Management – Associate of Science / Certificate

The Construction Management pathway prepares students to understand construction project management, planning, estimating, scheduling, supervision, and construction processes.

The **24–25-unit major coursework** includes:

- **CON-62 Print Reading for Construction – 3 units**
- **CON-73 Project Planning for Site Construction – 3 units**
- **CON-74 Construction Estimating – 3 units**
- **CON-80 Construction Scheduling – 3 units**
- **ENE-27 Technical Communications – 3 units**

- **MAG-51 Elements of Supervision – 3 units**
- **6–7 units of electives**, including:
 - CON-63A International Building Code – 3 units
 - CON-64 Office Procedures and Field Inspections – 3 units
 - CON-66 National Electrical Code – 3 units
 - Additional approved electrical and technical electives

The pathway provides students with an opportunity to build progressively toward the Associate of Science degree while developing skills applicable to construction management, estimating, scheduling, supervision, inspection, and related positions.

Construction Technology – Associate of Science / Certificate

The Construction Technology pathway focuses on building construction, construction codes, inspection, materials, energy conservation, accessibility standards, and related technical knowledge.

The **30-unit major coursework** includes:

- **CON-63A International Building Code – 3 units**
- **CON-64 Office Procedures and Field Inspection – 3 units**
- **CON-65 Plumbing Code – 3 units**
- **CON-66 National Electrical Code – 3 units**
- **CON-67 Mechanical Codes – 3 units**
- **CON-68 Simplified Engineering for Building Inspectors – 3 units**
- **CON-70 Fundamentals of Soil Technology – 3 units**
- **CON-71 Energy Conservation Standards – 1.5 units**
- **CON-72 California State Accessibility Standards – 1.5 units**
- **6 units of electives**, including construction introduction, materials, print reading, building-code revisions, project planning, and **CON-200 Construction Work Experience (1–4 units)**.

The committee discussed the value of these stackable pathways in allowing students to obtain career-focused credentials while progressing toward an Associate of Science degree. The inclusion of construction work experience provides an additional opportunity to connect classroom learning with employment.

4. Underrepresentation in Construction and Increasing Female Participation

The committee discussed the continued underrepresentation of women in construction and the importance of developing intentional strategies to increase female participation in Construction Technology and Construction Management programs.

IE/D COE apprenticeship data shows a significant gender disparity in the region. In September 2024, women represented only **5% of active apprentices in Riverside County and 7% in San Bernardino County**, compared with 9% statewide. Within **Building and Construction specifically, female apprentices represented only 1.7% in Riverside County and 1.8% in San Bernardino County**, compared with 3.3% statewide.

Committee discussion emphasized the importance of changing perceptions of construction careers and making students aware of the broad range of occupations available beyond traditional field trades. Construction offers opportunities in project management, estimating, inspection, scheduling, administration, technology, drafting, code compliance, and supervision.

Potential strategies identified for Perkins-supported recruitment and retention include:

- Increase outreach to female students through **high school CTE events, campus tours, career exploration activities, and construction demonstrations**.
- Highlight successful women working in construction, management, inspection, engineering, and related occupations as **career role models and guest speakers**.
- Develop targeted marketing that presents construction as a career that includes **technology, management, problem-solving, leadership, and professional occupations**, in addition to skilled trades.
- Provide female students with opportunities to participate in **hands-on construction activities and work-based learning** in supportive environments.
- Strengthen employer partnerships that can provide internships, job-shadowing, mentoring, and career exposure for female students.
- Incorporate female alumni and industry professionals into recruitment activities to demonstrate achievable career pathways.
- Monitor participation, completion, and employment outcomes by gender to identify barriers and measure progress.

The committee agreed that increasing female representation should be viewed as both an **equity strategy and a workforce-development strategy**, particularly as employers continue to need qualified construction professionals.

5. Work-Based Learning and Employer Expectations

Work-based learning was identified as an important component of preparing students for successful transition into construction employment.

Advisory members discussed the value of **internships, job-shadowing, work experience, employer projects, and other opportunities that allow students to observe and participate in real construction environments**. Members noted that employers benefit when students enter the workplace with an understanding of professional expectations and basic industry knowledge.

The committee identified the following skills and behaviors as particularly important when employers evaluate students and new employees:

- **Reliability and punctuality:** Being on time, prepared, and dependable.
- **Professional communication:** Communicating clearly with supervisors, coworkers, contractors, clients, and other project stakeholders.
- **Building-code knowledge:** Understanding construction codes and being able to locate and interpret applicable requirements.
- **Computer skills:** Comfort using computers and technology used in construction-related offices and project environments.
- **Technical knowledge:** Understanding plans, specifications, materials, construction processes, and project documentation.
- **Problem-solving:** Applying classroom knowledge to unexpected workplace situations.
- **Professionalism:** Demonstrating a positive attitude, willingness to learn, accountability, and respect for workplace expectations.
- **Teamwork:** Working effectively with individuals across different construction trades and professional roles.

The committee emphasized that technical knowledge alone is not sufficient. Students must also demonstrate workplace behaviors that establish trust with employers and contribute to successful project teams.

6. Advisory Feedback and Program Implications

Based on the discussion, the committee identified several priorities for continued program development:

Industry Need/Trend

Program Response

Continued demand for skilled construction workers	Maintain strong construction pathways aligned with regional labor demand.
Increasing technology in construction	Strengthen computer and technology skills within coursework and work-based learning.
Changing building codes and standards	Continue emphasizing current construction codes, inspection, accessibility, and energy standards.
Employer demand for work-ready students	Expand internships, work experience, job-shadowing, and employer-connected projects.
Need for professional skills	Reinforce punctuality, communication, reliability, teamwork, and professionalism.
Female underrepresentation	Develop targeted recruitment, mentoring, role-model, and work-based learning strategies for women.
Need for career advancement	Promote stackable certificate-to-degree pathways and opportunities for advancement into management, inspection, estimating, and supervisory roles.

7. Actions and Next Steps

The committee recommended continued focus on:

1. Expanding employer partnerships to create additional **internship and work-experience opportunities**.
2. Exploring additional ways to embed **work-based learning** into Construction Technology and Construction Management coursework.
3. Strengthening student preparation in **building codes, computer skills, communication, punctuality, and professional workplace expectations**.
4. Increasing outreach and recruitment efforts targeting **female students and other populations underrepresented in construction**.
5. Utilizing female construction professionals, alumni, and industry partners as mentors and guest speakers.
6. Continuing to monitor regional labor-market data from the **IEDRC and IE/D COE** to ensure curriculum remains aligned with industry demand.
7. Promoting the **stackable certificate and degree pathways** as accessible routes into construction employment and advancement.

8. Adjournment

The Construction Technology Advisory Committee meeting adjourned at **10:45 a.m.**