Labor market rationale in curriculum
Session Learning Outcomes

• Describe the requirements for labor market analysis for new CTE programs

• Compare sources of labor market information

• Discuss limitations and challenges of LMI
Requirements for LMI

• **Education Code 78015 (a) (1)** The governing board of a community college district, prior to establishing a vocational or occupational training program, shall conduct a job market study of the labor market area, as those terms are defined in Section 52301.5, in which it proposes to establish the program.

• **Title 5, Section 55130** (a) Before offering any credit course as part of an educational program at a college, the governing board of a district shall obtain approval of the educational program from the Chancellor in accordance with the provisions of this article. Approval shall be requested on forms provided by the Chancellor. (b) The application for approval shall contain at least the following: (C) Relation of the proposed program to job market analysis, where applicable;

• **PCA, 5th Edition**, pp. 85-88
Perspectives on Labor Market Information (LMI)

• Student
• College
• Labor economist
  – Demand
  – Supply
• Economic developer
  – Workforce that supports sectors
DOING What Matters ™ for Jobs & the Economy

• **1A.** Consider labor market needs when making local decisions: budgets, programs, course offerings.
• **1B.** Decide on program capacity as a region.

• **2.** Retool programs that are not working or not meeting a labor market need so that students can study what matters.

• **3A.** Adopt common metrics and skills panels in CCCCO RFAs.
• **3B.** Strengthen regions with four skillsets: data mining, convening, technology, and curriculum approval.

• **4.** Solve a complex workforce training need so that our system can better deliver for employers and sectors

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- **GIVE PRIORITY** to what matters to jobs & the economy
- **MAKE ROOM** for what matters to jobs & the economy
- **INNOVATE** what matters to jobs & the economy
- **STUDENT SUCCESS** matters to jobs & the economy

**GIVE PRIORITY:**
- Consider labor market needs when making local decisions.
- Decide on program capacity as a region.

**MAKE ROOM:**
- Retool programs not working or not meeting labor market needs.

**INNOVATE:**
- Solve complex workforce training needs.

**STUDENT SUCCESS:**
- Ensure matters to jobs and the economy.
Evaluating Demand Side

- Bureau of Labor Statistics (National)
  
  http://www.onetonline.org

- EDD Labor Market Data (State)
  
  www.labormarketinfo.edd.ca.gov
  
  - LMI by customer, LMI by geography, LMI by industries and occupations
  
  - Labor Market Consultants – by region – monthly reports, some custom work possible

- Proprietary LMI providers
  
  - Economic Modeling Specialists (EMSI) www.economicmodeling.com
  
  - Burning Glass http://www.burning-glass.com/

- Doing What Matters
  
  http://doingwhatmatters.cccco.edu/ResourceMap.aspx
  
  http://doingwhatmatters.cccco.edu/LaunchBoard.aspx
  
  http://www.coeccc.net/
Evaluating Supply Side

• Curriculum Inventory
  – http://curriculum.cccco.edu/

• Datamart
  – http://datamart.cccco.edu/

• Regional Consortium

• Proprietary and online training
Economic Modeling Specialists, Inc. (EMSI)

• Proprietary resource/ traditional LMI
• Combines multiple sources of data; requires subscription to access online
• Provides data for a custom region (ZIP code or county level)

• Outputs Include:
  o Industry & Occupational Employment Reports
  o Various Economic Indicators (unemployment, export, import, etc.)
  o Economic Impact Analysis
  o Basic Demographic Reports
  o Program Completion Reports (uses IPEDS data)
  o GIS Mapping
  o New Gainful Employment feature for colleges
## Economic Modeling Specialists, Inc. (EMSI)

### Benefits
- Occupational reports (customized projections)
- Staffing patterns reports (what occupations are employed in an industry)
- IPEDS data conveniently packaged
- Provides multiple data elements in one place
- Easy to use and quick to share

### Limitations
- Cost – but can access through TAP
- Data limitations (e.g. reports data for 2-digit “catch-all” Government NAICS code; no breakdown for public education and other public services)
- No data for emerging industry or occupation
- Projections are based on historic data
New and Emerging Health Informatics Titles in 2011

- Medical Coding Auditor: 1,114
- Epic Trainer: 444
- Clinical Informatics Specialist: 358
- Clinical Documentation Specialist: 298
- Health IT Analyst: 275
- Coding Compliance Manager: 253
- Clinical Documentation Manager: 241
- Clinical Informatics Analyst: 223
- Coding Educator: 213
- Coding Compliance Specialist: 182
- Coding Compliance Auditor: 166
- Director of Clinical Documentation: 151
- Chief Medical Information Officer: 137
- Clinical Informatics Educator: 113
- Epic Programmer: 102
- Clinical Documentation Analyst: 98
- Epic Testing Coordinator: 96
- EMR/CPOE Implementation Consultant: 90
- Epic Report Developer: 77
- Epic Interface Developer/Engineer: 71
- Electronic Health Record Developer: 61
- Director of Clinical Information Systems: 61
- Coding Compliance Director: 42
- EMR Implementation Consultant: 36
- Clinical Documentation Improvement Consultant: 28
- EMR Analyst: 27
Emerging Jobs, New Skills and Certifications: The Case of Health Informatics

Relative Distribution of Health Informatics Jobs by Type: 2007 vs 2011

- Medical Coders
  - 2007: 30%
  - 2011: 32%

- Health Information Technicians
  - 2007: 25%
  - 2011: 26%

- Clinical Documentation & Improvement Analysts
  - 2007: 15%
  - 2011: 9%

- Medical Records & Coding Department Supervisors & Managers
  - 2007: 8%
  - 2011: 8%

- Health Information Managers
  - 2007: 7%
  - 2011: 6%

- Coding Compliance & Review
  - 2007: 6%
  - 2011: 6%

- Health Information Clerks
  - 2007: 13%
  - 2011: 5%

- Clinical Application Developers & Implementation Specialists
  - 2007: 4%
  - 2011: 2%
Top Certs For Medical Records and Health Info Techs

Certifications: number of job openings

- Registered Health Information Technician
- Registered Health Information Administrator
- Certified Coding Specialist
- Medical Billing And Coding Certification
- Epic Certification
- Certified Coding Associate
- Certified Tumor Registrar
- Certified Coding Specialist - Hospital
- Certified Procedural Coder
- Cisco Certified Security Professional
- Clinical Documentation Specialist

36% of the 5900 job postings required a certification
# COE Reports

## Example: Recycling Scan 2013

### Table 5. Estimated Employment Projections by Occupation, 2013-2015

<table>
<thead>
<tr>
<th>Occupation</th>
<th>Current employment</th>
<th>Employment in 2 years</th>
<th>2-year projected growth</th>
<th>% 2-year growth</th>
</tr>
</thead>
<tbody>
<tr>
<td>Recycling and Reclamation Worker</td>
<td>10,960</td>
<td>13,610</td>
<td>2,640</td>
<td>24%</td>
</tr>
<tr>
<td>Refuse and Recyclable Material Collector</td>
<td>9,550</td>
<td>11,040</td>
<td>1,490</td>
<td>16%</td>
</tr>
<tr>
<td>Hazardous Materials Removal Worker</td>
<td>3,380</td>
<td>5,550</td>
<td>1,250</td>
<td>37%</td>
</tr>
<tr>
<td>Manufacturing Production Technician working with recycled materials</td>
<td>4,480</td>
<td>5,640</td>
<td>1,160</td>
<td>26%</td>
</tr>
<tr>
<td>Recycling Coordinator</td>
<td>2,570</td>
<td>3,320</td>
<td>750</td>
<td>29%</td>
</tr>
<tr>
<td>Commercial/Industrial Designer working with recycled materials</td>
<td>670</td>
<td>810</td>
<td>140</td>
<td>21%</td>
</tr>
</tbody>
</table>

**Total:** 31,610 to 39,050 (7,440) 24%
## Summary Comparison

<table>
<thead>
<tr>
<th>Access/ Cost</th>
<th>O*NET/EDD</th>
<th>EMSI/BG</th>
<th>COE Scans</th>
<th>COE Reports</th>
</tr>
</thead>
<tbody>
<tr>
<td>Public Access</td>
<td>Public Access</td>
<td>Annual Subscription</td>
<td>Public Access</td>
<td>Customized/ Cost Varies</td>
</tr>
<tr>
<td>Data Sources</td>
<td>Multiple public sources including EDD</td>
<td>More limited public sources. Some data suppression</td>
<td>Many sources</td>
<td>EMSI GIS Business Analyst Real time LMI</td>
</tr>
<tr>
<td>Content</td>
<td>2010-2020 Projections: Employment Demand</td>
<td>Employment Projections + College Supply</td>
<td>Industry Drivers, Employer Surveys, Supply and Demand Gap Analysis</td>
<td>Varies based on Client Need</td>
</tr>
<tr>
<td>Caveats</td>
<td>Further analysis needed</td>
<td>Accuracy of supply side data</td>
<td>Regional or statewide focus on one industry</td>
<td>Data has not been validated by industry</td>
</tr>
</tbody>
</table>
Parting Thoughts

✓ There is no single tool that works for every purpose

✓ Choose from the toolbox based on the problem you need to solve
  
  ✓ New and emerging may require surveys, custom reports

✓ ALWAYS use multiple data sources

✓ Outsource when necessary, but be clear in what you ask for
Special Thanks to:

• Elaine Gaertner
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  – Director Labor Market and Workforce Research, Jobs for the Future

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  – Career Education and Economic Development, Cabrillo College