

Work Plan: Labor Market Information (LMI) Projects for the Strong Workforce Program San Diego-Imperial Region

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The purpose of this document is to outline regionwide LMI projects funded by the Strong Workforce Program (SWP). With SWP funds, the Center of Excellence for Labor Market Research, San Diego-Imperial Region (COE) will complete the following four research projects. The *potential research projects* listed below are included in this document for discussion and prioritization should other funding and resources become available.

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Project 1: Gap Analyses

Overview

This research will assess supply and demand, findings and implications, and recommendations for the workforce and education community to address worker shortages and surpluses.

Research Questions

This project will answer questions such as:

1. Within the region's priority, emergent and regional sectors, what occupations have the greatest labor gaps that could be filled with programs from the community colleges?
2. Is there an oversupply of workers in certain fields? If so, should the community colleges not develop programs for occupations with surpluses?
3. Are there certain occupations where supply gaps no longer exist?

Project Milestones

- Development of an advisory group for the project
- Completion of a basic, preliminary analysis of the demand and supply of labor with publicly available data
- Determination of which supply gaps or oversupplies should be analyzed with a more in-depth methodology
- Revision of gap analyses with data sources that supplement publicly available data
- Final report and presentation

Stakeholders

The advisory group for this project will be responsible for identifying which occupations will be analyzed with a more in-depth methodology. A basic gap analysis uses publicly available data and identifies the difference between the demand and supply of labor for specific occupations. However, this method of using only publicly available data to determine a "labor market gap" is very limited. The data does not include workers who are currently in the labor force that could fill these positions or workers that are not captured by publicly available data. In addition to graduates of training programs, there are other considerations factored into "supply" that remain unknown, such as the number of existing unemployed workers with the needed skills or work experience in the labor pool, influx of graduates from outside the region, migration of graduates to other regions and more. To develop a more well-rounded analysis, the COE proposes analyzing supply data not only from public institutions, but other sources such as proprietary training providers and community programs.

Project 2: Emerging Occupations Research

Overview and Purpose

As technology evolves, new occupations and skills emerge in various industries. This research will determine if new occupations or skills sets will emerge.

Research Questions

This project will answer questions such as:

1. What new skills will emerge as a result of changing technologies the region's priority, emergent and regional sectors?
2. Will there be a growth "new" occupations that did not exist before? Or, will occupations be "repurposed" with new skills (e.g., PV installers vs. roofers)?
3. How will existing occupations be affected by changes in technology?

Project Milestones

- Development of an advisory group for the project
- Completion of secondary research, identifying upcoming trends and technological changes in the priority, emergent and regional sectors
- Comparison between secondary research and online job postings to confirm increasing demand for skills and/or occupations
- Final report and presentation

Stakeholders

The advisory group for this project will be responsible for helping the research team identify technology changes that may affect occupations and skills in the future. This identification process may include, but is not limited to, submission of news articles, recommendations for periodicals and/or brainstorming discussions. Once a list of trends in technology has been developed, the research team will compare this list with real-time labor market data and assess whether certain trends should be observed closely.

Project 3: Incumbent Worker or Upskilling Opportunities

Overview and Purpose

As technology changes the nature of jobs, employers must invest in their workers' professional development to remain competitive in their respective industries. This research will identify if the region's businesses have a need for upskilling their current workers with community college programs.

Research Questions

This project will answer questions such as:

1. Is there a market for the community colleges to develop more programs for upskilling underemployed or current workers?
2. What resources are available for employers to take advantage of to reduce or subsidize the cost of training? How can employers use these resources for community college training?

Project Milestones

- Development of an advisory group for the project
- Preliminary analysis of training resources available for employers
- Recommendations on how to engage and provide employers with training services
- Recommendations on which industries or employers to target with training services

Stakeholders

The advisory group for this project is responsible for brainstorming which programs or courses could be developed for upskilling and introducing the research team to employers who previously took advantage of community colleges trainings. The research team will survey and conduct executive interviews with employers based on this information.

Project 4: Program Evaluation Across Colleges in the San Diego-Imperial Region

Overview and Purpose

This research will analyze the region's community colleges programs across selected key performance indicators, such as Strong Workforce Program metrics.

Research Questions

This project will answer questions such as:

1. How are programs doing in regards to the selected metrics?
2. What programs need their performance data updated? Is the LaunchBoard accurate in its reporting?
3. What narratives could be told with the results?

Project Milestones

- Development of an advisory group for the project
- Preliminary analysis of programs across colleges
- Final report and presentation

Stakeholders

The advisory group for this research will be tasked with the following:

- Finalizing which key performance metrics this research should focus on
- Providing guidance on narrative and explanations of certain data outcomes

Potential Research Projects

Based on discussions with regional stakeholders, the COE identified research projects that the region may want to prioritize should other resources become available.

1. Career Pathways from K-12 to Community Colleges to Universities and/or Careers

Through various initiatives, several organizations created career pathway maps across a variety of platforms. This project aims to consolidate all those efforts and produce a collaborative product that serves the entire region. This research should help with Guided Career Pathways efforts.

Research Questions

- What career pathway maps already exist? What questions do these maps answer?
- What product can we produce that makes it easier for career counselors or case managers to help students and job seekers navigate their career paths?
- What product can we produce that empowers students to determine the best pathway for them?

2. Adult Education Compatibility Skills

This research would further develop the project above, “Career Pathways from K-12 to Community Colleges to Universities and/or Careers.”

Instead of a linear pathway, this project aims to create a map of interventions or resources needed along the career pathway of an adult learner. Adult learners may halt their progress in a career path due to various life circumstances. As a result, re-entering the education system or continuing a career pathway may prove to be difficult. This project’s resulting product should help adult learners understand how to get back on track.

Research Questions

- Based on different individual adult learner profiles, what courses are needed to fill in knowledge or skill gaps?
- What resources are available at different stages of a career pathway?
- What do “nontraditional” career pathways look like? How can one navigate the system to obtain a similar or same career as a traditional career pathway taker?

3. Teacher Pipelines

The public sector faces a teacher shortage across a variety of disciplines. This research aims to identify which fields have the greatest shortages, and makes recommendations on where to focus regional efforts in the teacher talent pipeline.

Research Questions

- Which fields have the greatest gaps for teachers?
- What could be done to increase the number of teachers in identified gaps?

4. Outcomes Data with EMSI

One of the Strong Workforce Program metrics includes, “Job Closely Related to Field of Study,” which is collected through the Career Technical Education Outcomes Survey (CTEOS). This metric identifies the percentage of students who reported that they obtained employment in the same or similar field as their program. However, for the entire San Diego-Imperial region, the CTEOS only collected 921 responses

across all programs in PY2013-14. In order to obtain a greater sample of outcomes data, the COE proposes partnering with Economic Modeling Specialists, Int'l (EMSI). EMSI can scrape websites, resumes and profiles (e.g., LinkedIn) and provide information on students' current whereabouts. EMSI can also provide a profile of the information scraped for each student.

Research Questions

- What percentage of students are currently working in a job closely related to their field of study?
- Are there trends in specific fields that describe what programs, courses, schools or universities that alumni took? Could this information be used to guide current students or create pathways based on alumni's careers?

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