

Using Labor Market Data to Develop & Improve Programs of Study

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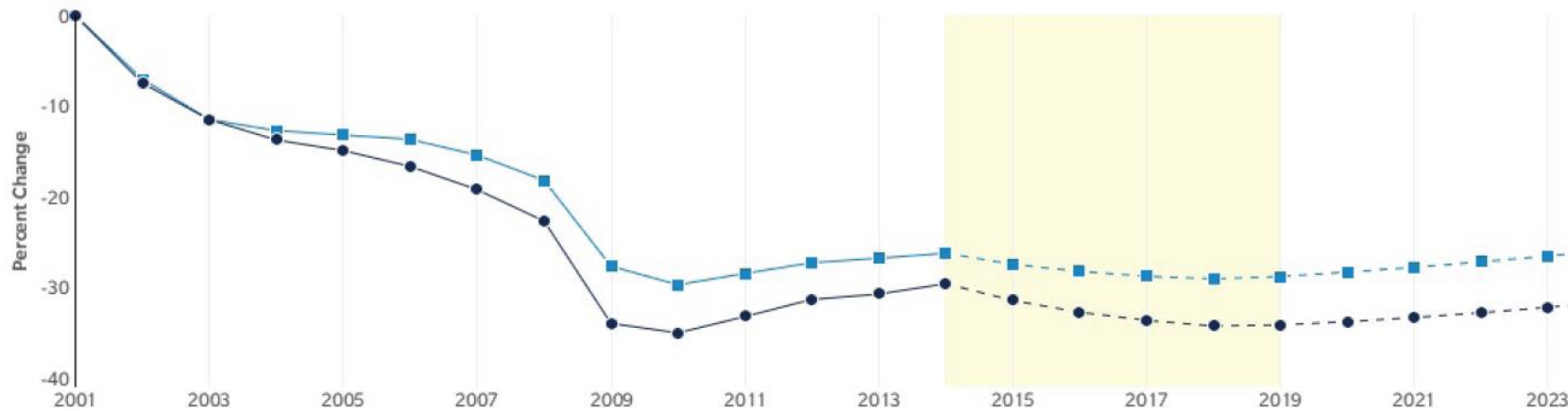
LMI: What is LMI?

- Narrow view: Data collected from public sources used to describe trends and projections for standardized industries and occupations.
- Broad view: Facts or statistics about jobs that help us understand the economy. Opens the door to all kinds of data like job postings.
- Lots of confusion about which view to embrace: more on that later.

Why should we care about LMI?

- Program development. [Major part](#) of new OBR approval forms.
- Program review. Should be right there with assessment and program efficiency data.
- Grants and foundation. Just not DOL grants anymore – becoming more common for state of Ohio grants and donors.

Not a magic bullet ☹️



Region	2014 Jobs	2019 Jobs	% Change
● Region	681,108	637,199	-6.4%
■ Nation	12,290,634	11,863,292	-3.5%

Ohio manufacturing employment versus the nation. Who could have predicted this?

Our journey today

- Core data perspectives to comprehend LMI
- Accessible sources of LMI data
- Practical applications of LMI data

Core data perspectives

- Industry: Groups of similar coded employers (eg, manufacturing)
- Occupations: Coded jobs within industry (eg, production occupations)
- Program data: Completers by program code (eg, Engineering Technologies 15.0 CIP) Also, make sure to accurately map occupation codes to academic program. Don't just rely on [default](#).

Core data perspectives: regions

- Traditional regions include counties and “MSA”, which are both [Metropolitan](#) and [Micro-politan](#) statistical areas.
- More recently, seeing regions through JobsOhio [lens](#).
- But what if my “region” is my college service area or other mix not covered under standard categories? Or what if academic program output data doesn’t match up with my region?

Core data perspective: coding

- Industry, occupation and program codes all cascade from low to high levels of detail. Example:
 - ❑ 15-000 – Computer & Math Occupations
 - ❑ 15-1100 – Computer Occupations
 - ❑ 15-1130 – Software Developers
 - ❑ 15-1134 – Web Developers
- When thinking about research, need to consider how detailed you want to go. Depends on who is asking.

Core data perspectives: LMI vs. job postings

- LMI: Start here. This is strategic and comprehensive in that these are standardized measures based on employment and earnings all businesses have to report.
- Job postings is more of a tactical intensity measure. They can indicate a company's intention to hire or the skills sought by the employers.

Sources of LMI data

- Best place to start is [Ohio LMI page](#) from the Ohio Department of Job and Family Services. Key queries or links:
 - ❑ [Occupational Trends Pamphlet](#) is a great document to start understanding key concepts.
 - ❑ [Ohio Job Outlook](#) and [Industry Snapshots](#) are also good, but limited to larger MSAs or JobsOhio regions.
 - ❑ [Occupational Wages and Employment](#) is great for a snapshot of regional wages by occupation, but again regions are limited.

Sources of LMI data

- [Bureau of Economic Analysis](#) is a good site to get “industry” data down to the county level. Excellent graphic tools.
- [Stats America](#) is a really good free tool with multiple applications including:
 - [Industry](#) and [occupation](#) clusters for flexibly defined regions
 - County [side-by-side](#) analysis on various LMI-related measures
 - [Cluster mapping](#) tool down to the county level which is very slick

Sources of LMI data

- OACC/EMSI partnership. Community colleges can directly access EMSI through at the OACC office or they can submit a [ticket](#).
- We have served seven colleges through the ticketing system – many repeat customers. Other colleges are repeat users of direct access.
- Intending to run partnership through June 2015.

Sources of LMI data

- [Wage and employment dashboard](#) from the Ohio Education Research Center. This is a searchable dashboard of actual Ohio wages earned by graduates, BY PROGRAM, their first year after graduation. Note that it excludes any program with less than 10 annual grads.
- There are limits to wage match data, especially in that it does not identify what job they were actually employed in.
- Note that colleges can make individual contracts with ODJFS for more detailed wage and employment matches.

Sources of program output data

- The HEI query is probably a better tool for this type of analysis than IPEDS. Biggest reason is that researchers can filter down to graduates by county of residence as well as by local school. This is very helpful in reviewing associate degrees in regions where several colleges may be producing graduates.
- There is also more flexibility in selecting programs for query purposes.
- Downsides: no adult career center or private colleges within query.

Practical applications

- Let's do a quick demonstration showing importance of some of these concepts and applications
- How does the NC State Manufacturing Technology program employment prospects appear? Where might graduates work?
- Use the occupation to industry staffing pattern, then use a local [library tool](#) to look up actual companies by industry code

Practical applications

- How can we use LMI as a recruiting or advising tool?
 - ❑ Develop data sheets by overall [focus area](#) or actual program
 - ❑ Partner with career advising office to develop [program-specific data](#)
 - ❑ Integrate LMI within student success classes

Practical applications

- Example employed through OACC EMSI partnership. Requested to list “Top 50” occupations in a region by various metrics, including
 - Overall number of jobs
 - Percentage growth
 - Median wage
 - Concentration compared to nation
 - Local growth compared to national averages (competitive effect)

Practical applications

- Integrating actual wage and employment data for program review purposes.
- Research question. Several community colleges around Ohio partner with Miami University for a distance degree completion program in electromechanical engineering technology. How do graduates fare in wages?
- This is even more compelling when you realize the low cost of this program. It is both a 3+1 and is based on Miami's regional campus cost which is very inexpensive.

Let's end where we started

- This is an [EXCELLENT video](#) that captures that uses LMI to convey the need for “middle skill” jobs in the new economy.
- Our recruiting department is actively using it and stating they are getting very positive response from high school groups.