The Coleridge Initiative's Applied Data Analytics Class at Indiana University-Purdue University Indianapolis

State Talent Retention—Team 3

RESEARCH QUESTION

What are the characteristics of bachelor's degree earners at Indiana public colleges who gain employment within one year of graduation in Indiana versus Ohio, Illinois, and Missouri?

Cohort:

This group defined their cohort as Indiana graduates who received bachelor's degrees between 2010 and 2014.

Outcome of Interest

Post-secondary education graduates from Indiana with bachelor's degrees that left Indiana for full-time employment within one year of graduation.

Metrics:

- The group started measuring employment two quarters after graduation for an entire year.
- Full-time employment: Full-quarter employment with an annualized wage at or above the federal minimum wage threshold given a 35-hour workweek.

Data Providers/Sources

Indiana Commission on Higher Education

- Post-Secondary Education Enrollment data
- Post-Secondary Education Completion data

Indiana Department of Workforce Development

Unemployment Insurance wage records

Ohio Department of Job and Family Services

Unemployment Insurance wage records

Illinois Department of Employment Security

Unemployment Insurance wage records

Missouri Division of Employment Security

Unemployment Insurance wage records

Example: Employment Location Determination

	Represent	arters post graduation			
	Employment Location				Employment Location Group
	GraduationQ+3	GraduationQ+4	GraduationQ+5		*Need to have at least 3+ quarters of non-zero wages to be considered employed
Person1	Indiana	Indiana	null	Indiana	IN
Person2	null	Indiana	Indiana	Indiana	IN
Person3	Indiana	Indiana	Ohio	Ohio	Multiple States (IN, OH)
Person4	Ohio	Ohio	Ohio	Ohio	Out of State (OH)
Person5	null	null	null	null	No Employment
Person6	Illinois	Illinois	Illinois	null	Out of State (IL)
Person7	null	null	Indiana	Indiana	No Employment
Person8	Indiana and Illinois	Indiana	Indiana	Indiana	Multiple States (IN, IL)

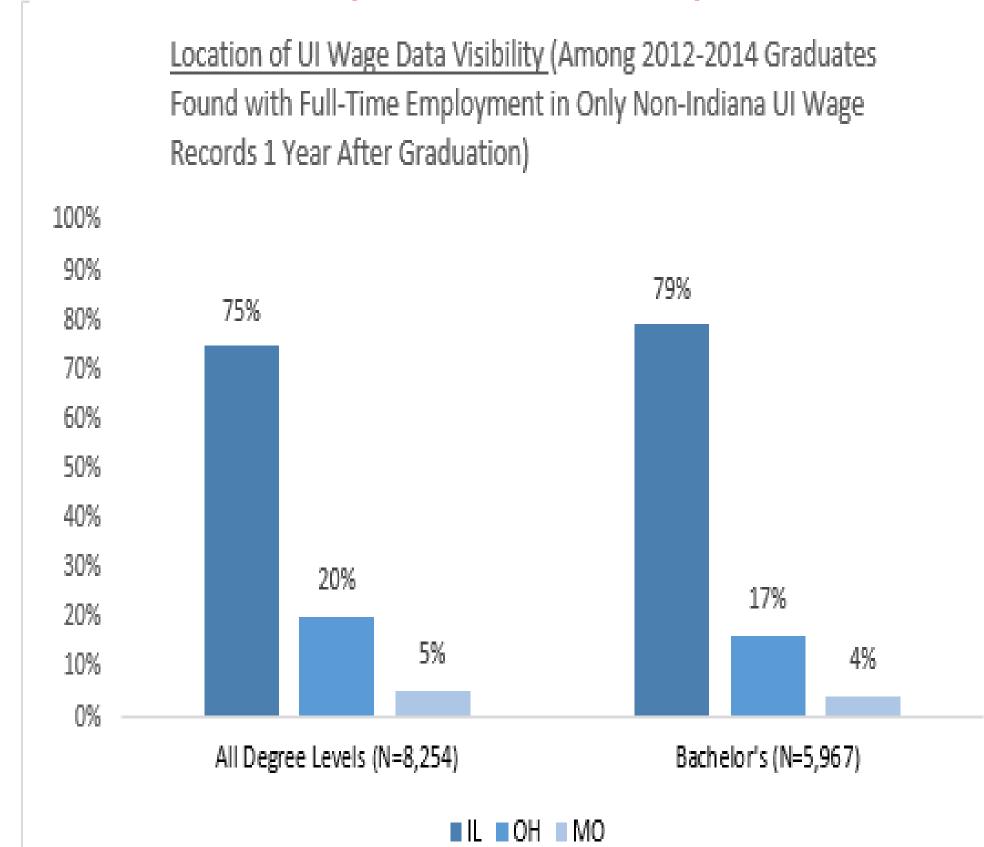
As demonstrated in the example above, a member of this cohort must have at least three quarters of any employment to be designated as employed. Within those 3+ quarters, it is possible for one to be designated as working in multiple states if they received wages from an employer in another state at a point within the quarters in question.

Key Findings

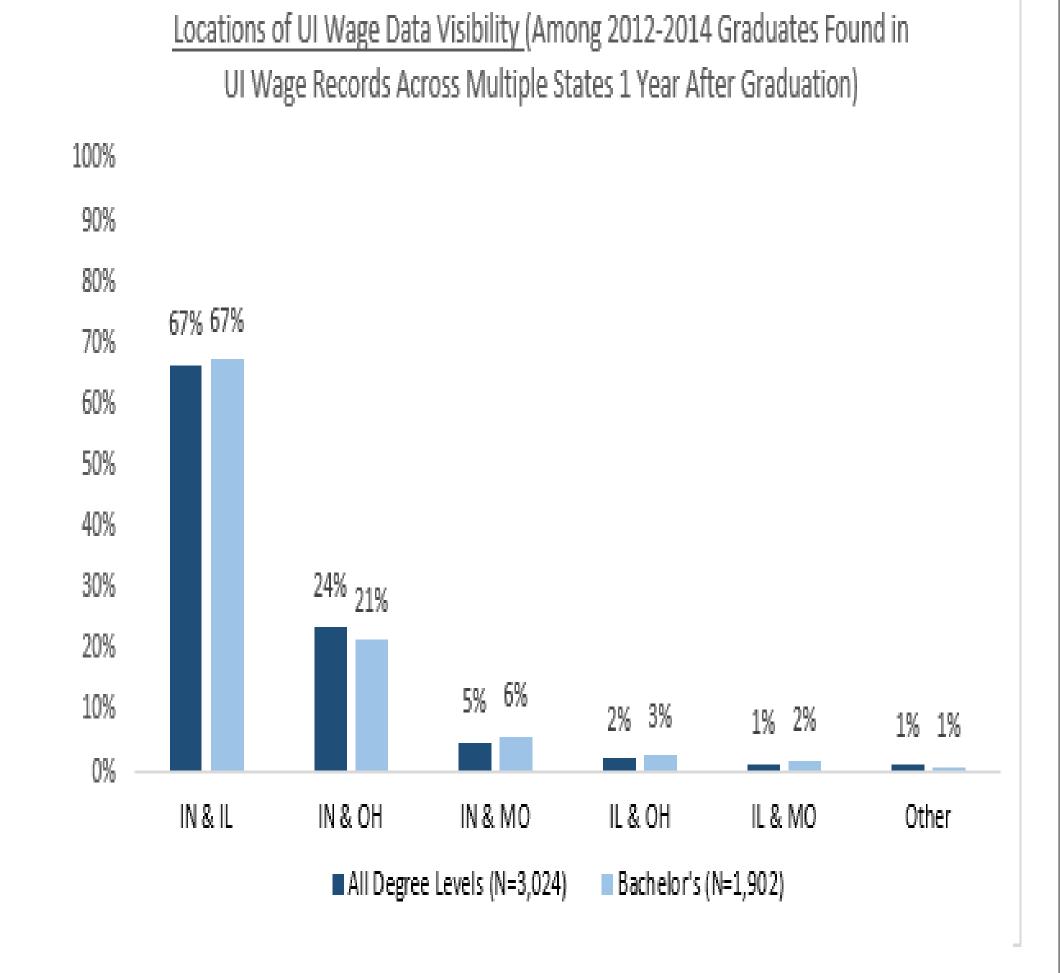
Of this cohort:

- Graduates earning credentials in engineering, business, computer science, communications/journalism and transportation/materials moving were more likely to be employed out of state after graduation.
- Non-residents, those of Asian descent, and graduates in Q2 were less likely to be employed in Indiana one year after graduation.

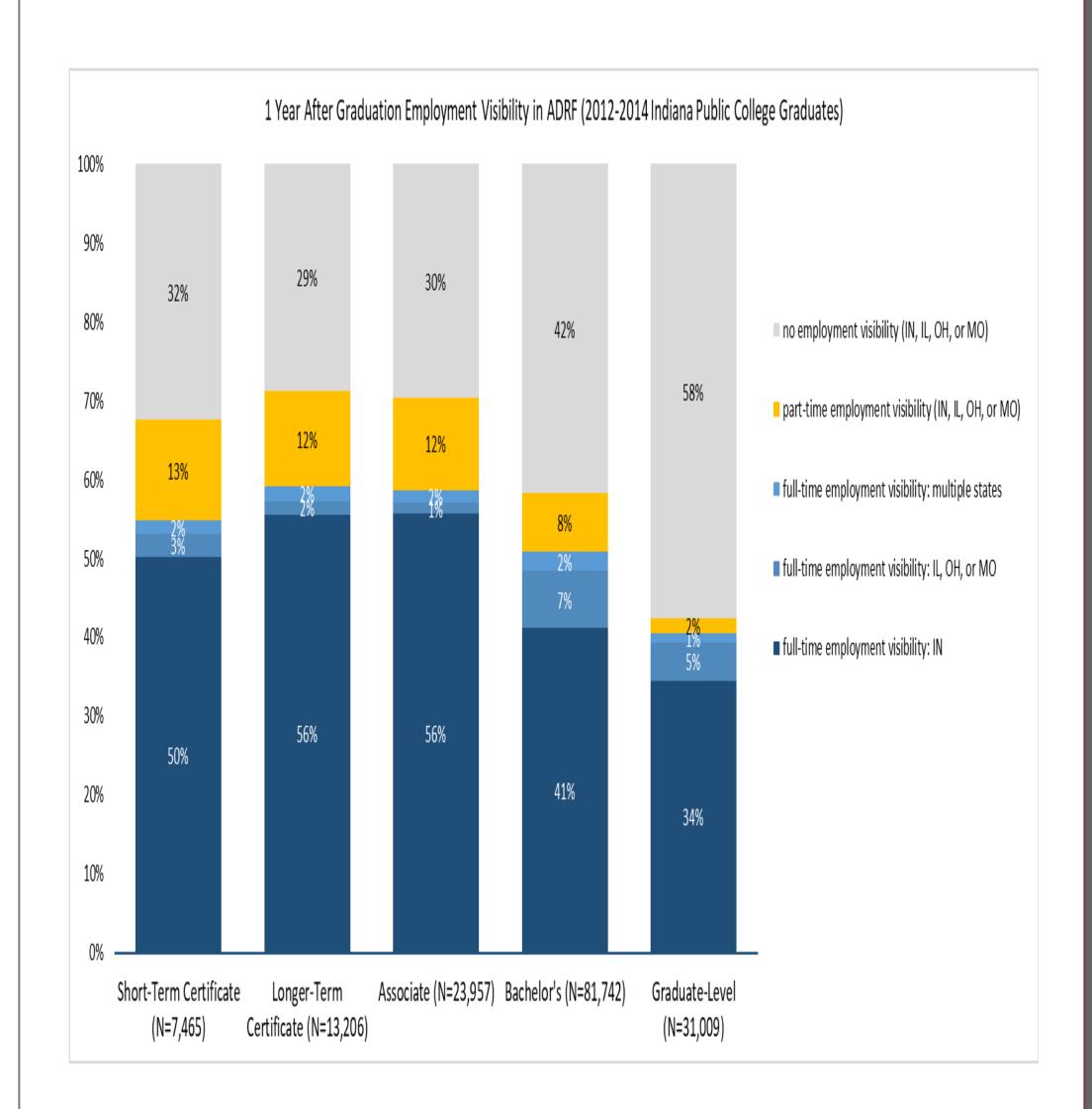
Location of UI Wage Data Visibility (Individual States)



Locations of UI Wage Data Visibility (Multiple States)



1 Year After Graduation Employment Visibility in ADRF



Caveats

Within this study's cohort, the second-largest employment group was no employment under their definition of employment. This group was not included in their analysis, thus ignoring a significant cohort within their original sample.

Possible Extensions

Examine retention beyond one year after college graduation and determine if neighboring states' college graduates often move to Indiana for post-graduation employment opportunities.

SPONSORS

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