Understanding Life-Long Learning
Transitions to Careers for IL High School Seniors

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Overview

• Governor’s Cabinet on Children and Youth: Provide information to students and parents on how learning pathways impact workforce outcomes
  – Post-secondary graduates
  – High School graduates

• Partnership
  – Illinois Department of Employment Security
  – Illinois State Board of Education
  – Illinois Student Assistance Commission
  – Illinois State University

• Mobile App context: For HS graduates like me ...
  – What are their post-secondary learning pathways?
  – What kinds of jobs do they get?
  – What are their typical early-career and mid-career salaries?
Primary Data Linkages

• 2003-2007 High School Seniors
  – Count: 675,000 records
  – Source: IL High School Scholars Program (ISAC)

• 2004-2008 FAFSA Application Completers
  – Source: U.S. Department of Education

• 1998-2017 Post-Secondary Enrollment/Completion
  – Source: National Student Clearinghouse

• 2004-2017 Career Job Profile and Earnings
  – Source: Unemployment Insurance Wage Records (IDES)
Project Scope

• Student subpopulations
  – Student (demographics), family (first generation, Map/Pell), and high school characteristics ...

• Life-long learning Pathways
  – Postsecondary enrollment/completion
    • 2- and 4-year colleges
    • Completion by program of study
  – Pathways (examples)
    • Never enrolled in postsecondary
    • Enrolled in postsecondary while in high school
    • Delayed enrollment in postsecondary or enrolled immediately following high school
    • Enrolled in 2-year or 4-year and never completed
    • Enrolled/completed in 2-year and matriculated to enroll in 4-year but never completed
    • Enrolled/completed in 2-year and matriculated to enroll/complete in 4-year

• Career Outcomes
  – Intergenerational mobility
  – Career job profiles
  – Career earnings
Presentation Visualizations

• Intergenerational mobility
  – Start point: high school student (demographics, family attributes, high school characteristics …)
  – End point: 10-year window on workforce outcomes (career jobs, career job flows, and career job earnings)

• Learning pathways as intermediate frame
  – Delineate empirically “well-trodden” and “less well-trodden” life-long learning pathways
  – Limitations
    • 2-year and 4-year post-secondary schools
    • 2003 High School cohort
Data Infrastructure

SAS / Visual Analytics

Microsoft Azure Cloud
Microsoft Azure Government Cloud

- Infrastructure as a Service
- Provides security, privacy, control
- Instantly expands IT capabilities
- Allows us to scale immediately, as needed
- Avoids high capital costs
- Pay for what is used
- Requires less in-house staffing & support
SAS Visual Analytics

• Allows Institutional Researchers to gain powerful insights into existing data

• Provides users with secure access only to authorized data

• Ability to disclosure proof data by adding filters and cell size constraints

• Provides in-memory computation for very large data sets (120GB+)

• Sized to allow 200+ explorer users