Updates to the Illinois Model Programs of Study Guides

May 21, 2024
Please…

● Share your name, title, and organization in the chat

● Post any questions in the Q&A or chat throughout the presentation

Note…

● This webinar is being recorded and shared with the slides

● The draft guides and public comment survey are available at EdSystemsNIU.org

Agenda

● Welcome

● Background and Structure of Original Guides

● New Labor Market Information Approach

● Revisions to Pathway Maps

● Next Steps
→ Reflect on living wage and labor market information and how it interacts with pathway design

→ Collect feedback that will be embedded in the revised guides for broad Illinois and national dissemination
Our Mission
Shape and strengthen education and workforce systems to advance racial equity and prepare more young people for productive careers and lives in a global economy.

Focus Areas: What We Do

- Bridges to Postsecondary
- College & Career Pathways
- Data Impact & Leadership

Geographic Focus: Where We Work
- Statewide
- Community Networks
Background on the State of Illinois Model Programs of Study Guides
The Why

Audiences

• High school faculty working in college and career pathways
• Community college faculty and staff (e.g., academic deans & department heads, early college liaisons, etc.)
• Education for Employment directors

Purpose

• Provide guidance and exemplars for local programs
• Identify priority dual credit courses
• Define the competencies that should be sequenced
Role of Advisory Committee

Expertise and guidance:
- What industry trends aren’t reflected in the labor market information?
- What credentials are emerging as most promising?
- How does our desk analysis relate to implementation?
- What are the future of work implications?

Inform key decision points:
- Pathway map approach
- Selecting strategic early college credit courses
- Identifying key competencies (building from IL’s existing technical competencies)
Original Development of the Guides
Mapping the Model Programs of Study

1. Identify high-priority occupations
2. Determine promising credentials & map stackable degrees/certificates
3. Identify strategic community college courses
4. Map secondary to postsecondary sequence
5. Define related technical competencies

6 month process
High Priority Occupations & Promising Credentials

- Defined **high priority occupations** using Department of Labor data and the MIT Living Wage Calculator for IL
  - Positive growth outlook
  - Salaries near or greater than the living wage of 1 adult + 1 child in Illinois

- **Promising credentials** = degrees or college certifications that prepare individuals for immediate entry into a high-priority occupation
  - Focus on credentials available in typical Illinois community colleges
  - May be a clear precursor to or stackable credential for a high-priority occupation
<table>
<thead>
<tr>
<th>Job Title</th>
<th>Median Wage Hourly</th>
<th>Living Wage?</th>
<th>Growth?</th>
<th>Entry Education</th>
<th>Annual Job Openings</th>
<th>Percentage Growth (2016-2026)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accountants and Auditors</td>
<td>33.89</td>
<td>Yes</td>
<td>Yes</td>
<td>Bachelor's Degree</td>
<td>5,510</td>
<td>8%</td>
</tr>
<tr>
<td>Business Operations Specialist</td>
<td>36.81</td>
<td>Yes</td>
<td>Yes</td>
<td>Bachelor's Degree</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Financial Analyst</td>
<td>39.29</td>
<td>Yes</td>
<td>Yes</td>
<td>Bachelor's Degree</td>
<td>1,310</td>
<td>7%</td>
</tr>
<tr>
<td>Actuary</td>
<td>49.34</td>
<td>Yes</td>
<td>Yes</td>
<td>Bachelor's Degree</td>
<td>140</td>
<td>23%</td>
</tr>
<tr>
<td>Market Research Analysts and Marketing Specialists</td>
<td>29.15</td>
<td>Yes</td>
<td>Yes</td>
<td>Bachelor's Degree</td>
<td>2960</td>
<td>22%</td>
</tr>
<tr>
<td>Human Resource Specialist</td>
<td>28.79</td>
<td>Yes</td>
<td>Yes</td>
<td>Bachelor's Degree</td>
<td>2230</td>
<td>6%</td>
</tr>
<tr>
<td>First-Line Supervisor of Retail Sales Workers</td>
<td>18.74</td>
<td>No</td>
<td>Yes</td>
<td>High school diploma</td>
<td>5,620</td>
<td>3%</td>
</tr>
<tr>
<td>First-Line Supervisor of Office &amp; Administrative Support Workers</td>
<td>28.3</td>
<td>Yes</td>
<td>No</td>
<td>High school diploma</td>
<td>4,450</td>
<td>0%</td>
</tr>
<tr>
<td>First-Line Supervisor of Non-Retail Sales Workers</td>
<td>34.04</td>
<td>Yes</td>
<td>Yes</td>
<td>High school diploma</td>
<td>1,070</td>
<td>3%</td>
</tr>
<tr>
<td>Human Resource Assistant</td>
<td>19.49</td>
<td>No</td>
<td>No</td>
<td>Postsecondary nondegree award</td>
<td>380</td>
<td>-4%</td>
</tr>
<tr>
<td>Lodging Manager</td>
<td>21.62</td>
<td>No</td>
<td>Yes?</td>
<td>High school diploma or equivalent</td>
<td>180</td>
<td>9%</td>
</tr>
<tr>
<td>Insurance Claims and Policy Processing Clerks</td>
<td>19.94</td>
<td>No</td>
<td>Yes</td>
<td>High school diploma or equivalent</td>
<td>1090</td>
<td>10%</td>
</tr>
</tbody>
</table>
Community College Programs ➡️ Leading to Occupations/Careers

Guided transfer
- Business AA ** ^^
- Accounting AA ** ^^
- Actuary AA ^^

Business AAS, with specialities/certs ^^
- General **
- Insurance
- HR **
- Entrepreneurship **
- Management **
- Marketing **
- Hospitality **

Supply chain
- Supply Chain AAS, AA/AS ^^

Accounting
- Accounting AAS ** ^^

Entry-level bachelor’s degree positions
- Business operations specialist, financial analyst, market research analysts
- HR specialist
- Accountants, auditors, actuary

Small/local business
- First-line supervisor of retail or non-retail sales workers
- Office & administrative support, HR assistant
- Lodging manager
- Insurance claim clerk

Supply chain
- Supply chain manager
- Production, planning, & expediting clerks

Clerk roles
- Payroll & timekeeping, bookkeeping, accounting, & auditing, billing and posting

** Aligns with ISBE CTE Program of Study Matrix

^^ Degree Stacks
# SELECTED OCCUPATIONS, WAGES, & JOB GROWTH

<table>
<thead>
<tr>
<th>Program</th>
<th>Typical Job</th>
<th>Near or Above Living Wage Threshold for 1 Adult + 1 Child ¹</th>
<th>Median Hourly Wage ²</th>
<th>Growth in Illinois: Annual Job Openings ²</th>
<th>Growth in Illinois: % Change Over 10 years ²</th>
<th>Stackable?</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Pre-Professional Track</td>
<td>Pediatricians, General</td>
<td>Y</td>
<td>$66.93</td>
<td>30</td>
<td>2%</td>
<td>Typically Requires Bachelor’s Degree &amp; Prof. School</td>
</tr>
<tr>
<td></td>
<td>Dentists</td>
<td>Y</td>
<td>$68.79</td>
<td>190</td>
<td>9%</td>
<td></td>
</tr>
<tr>
<td>2 Nursing / Registered Nurse</td>
<td>Nursing Assistants</td>
<td>N</td>
<td>$13.72</td>
<td>7,340</td>
<td>5%</td>
<td>Typically Required for LPN or RN Can Stack to RN at Select IL Colleges</td>
</tr>
<tr>
<td></td>
<td>Licensed Practical and Licensed Vocational Nurses</td>
<td>Y</td>
<td>$24.24</td>
<td>1,640</td>
<td>2%</td>
<td>Can Stack to BSN at Select IL Colleges</td>
</tr>
<tr>
<td></td>
<td>Registered Nurses</td>
<td>Y</td>
<td>$34.74</td>
<td>8,690</td>
<td>15%</td>
<td></td>
</tr>
<tr>
<td>3 Surgical Technology</td>
<td>Surgical/Pharmacy Technicians</td>
<td>Y</td>
<td>$15.44 – $23.05</td>
<td>220 – 1,600</td>
<td>1 – 5%</td>
<td></td>
</tr>
<tr>
<td>Medical &amp; Laboratory Tech.</td>
<td>Medical and Clinical Laboratory Technologists</td>
<td>Y</td>
<td>$34.44</td>
<td>410</td>
<td>4%</td>
<td></td>
</tr>
<tr>
<td>Radiography</td>
<td>Radiologic Technologists</td>
<td>Y</td>
<td>$30.52</td>
<td>380</td>
<td>2%</td>
<td></td>
</tr>
<tr>
<td>Respiratory Therapy</td>
<td>Respiratory Therapists</td>
<td>Y</td>
<td>$28.62</td>
<td>350</td>
<td>17%</td>
<td>Not Typically Stackable</td>
</tr>
<tr>
<td>Physical Therapist Assistant</td>
<td>Physical Therapist Assistants</td>
<td>Y</td>
<td>$28.60</td>
<td>730</td>
<td>20%</td>
<td></td>
</tr>
<tr>
<td>Occupational Therapy Assistant</td>
<td>Occupational Therapy Assistants</td>
<td>Y</td>
<td>$29.75</td>
<td>380</td>
<td>21%</td>
<td></td>
</tr>
<tr>
<td>3 Dental Hygiene</td>
<td>Dental Hygienists</td>
<td>Y</td>
<td>$35.68</td>
<td>580</td>
<td>9%</td>
<td>Not Typically Stackable</td>
</tr>
</tbody>
</table>

¹ Living wage calculations are based on MIT’s Living Calculator (livingwage.mit.edu), where the “Living Wage” for 1 Adult + 1 Child is $26.27/hour for the state of Illinois. “Near” defined as 85% of the statewide living wage, which is $22.33/hour

² U.S. Department of Labor, CareerOneStop (careeronestop.org/explorecareers)
Concerns with Approach

- **Living wage benchmark** (1 adult + 1 child) was so high that it suppressed consideration of many roles that are otherwise in high demand and promoted by local employers
  - Example: Medical assistant

- Many occupations had positive growth but **relatively low volume** in Illinois
  - Example: Pediatrician

- **Occupations chart** created a binary judgement for living wage

- **Meaning of stackability** could be unclear and unaligned to the narrative
New Approach for Occupations and Labor Market Information
Using Growth + Relative Volume Employment Projections

IDES publishes all employment projections; which we downloaded for analysis.

**PREVIOUS APPROACH**
Focus on occupations with positive growth

**NEW APPROACH**
Focus on occupations with positive growth + relatively high volume for 2030

+ Reasoning: Avoid highlighting occupations with low possibility of accessing
Updating the Living Wage Benchmarks

MIT Living Wage Calculator, Illinois wage data - downloaded for analysis

**PREVIOUS APPROACH**
Single median hourly wages near or above the living wage for 1 adult + 1 child

*In 2019 = $26.27, lessened to $22.33 (75%)*

**NEW APPROACH**
Multiple benchmarks: 1 adult + 1 child as “high” living wage potential; 1 adult, no children as “medium”

- 1 adult = $22.86
- 1 adult + 1 child = $39.63

+ Reasoning: Better representation of career arcs for industry sectors
### Selected Occupations, Wages, and Job Growth Chart for IT

- Occupations are now shown on a scale from high to low living wage potential.
- Stackability replaced with education requirements.
- Reasoning: Avoid suppressing entry-level occupations, show wage realities, and realistic educational attainment competitors.

<table>
<thead>
<tr>
<th>Program</th>
<th>Typical Job(s)</th>
<th>Living Wage Potential</th>
<th>Median Hourly Wage</th>
<th>IL Growth: Change over 10 years</th>
<th>IL Annual Job Openings</th>
<th>Typical Educational Requirements</th>
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<tbody>
<tr>
<td>Guided Transfer</td>
<td><strong>Computer and Information Systems Managers</strong></td>
<td>High</td>
<td>$78.01</td>
<td>8.0%</td>
<td>1,828</td>
<td>Bachelor's Degree</td>
</tr>
<tr>
<td></td>
<td><strong>Software Developers or Software Quality Assurance Analysts and Testers</strong></td>
<td>High</td>
<td>$52.44</td>
<td>18.0%</td>
<td>6,256</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Database Architects</strong></td>
<td>High</td>
<td>$66.32</td>
<td>5.6%</td>
<td>526</td>
<td></td>
</tr>
<tr>
<td>Computer Information Systems &amp; Programming</td>
<td><strong>Computer User Support Specialists</strong></td>
<td>Medium</td>
<td>$27.93</td>
<td>4.1%</td>
<td>1,539</td>
<td>Some College</td>
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<td><strong>Database Administrators</strong></td>
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<td><strong>Computer Systems Analysts</strong></td>
<td>High</td>
<td>$49.45</td>
<td>4.2%</td>
<td>2,306</td>
<td></td>
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<tr>
<td>Web Development</td>
<td><strong>Web and Digital Interface Designers</strong></td>
<td>Medium</td>
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<td>7.3%</td>
<td>548</td>
<td>Bachelor's Degree</td>
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<tr>
<td>Networking, Cloud Computing, &amp; Cybersecurity</td>
<td><strong>Computer Network Support Specialists</strong></td>
<td>Medium</td>
<td>$33.95</td>
<td>3.4%</td>
<td>999</td>
<td>Associate Degree</td>
</tr>
<tr>
<td></td>
<td><strong>Network and Computer Systems Administrators</strong></td>
<td>High</td>
<td>$42.72</td>
<td>3.1%</td>
<td>804</td>
<td>Bachelor's Degree</td>
</tr>
<tr>
<td></td>
<td><strong>Information Security Analysts</strong></td>
<td>High</td>
<td>$54.18</td>
<td>25.3%</td>
<td>428</td>
<td></td>
</tr>
</tbody>
</table>

* Living wage potential is based on MIT’s Living Calculator (livingwage.mit.edu) for Illinois in 2024. Occupations with median salaries higher than the living wage for 1 adult + 1 child ($39.63/hour) are considered as having a “high” living wage potential. Occupations with median salaries only higher than the living wage of 1 adult, no children ($22.86/hour) are considered as having a “medium” living wage potential, and occupations with median salaries below the living wage of 1 adult, no children (less than $22.86/hour) are considered as having a “low” living wage potential.


Applied to 8 of the 10 Guides
Revisions to Pathway Maps

Sample: Information Technology
# Model Programs of Study in Information Technology

## Recommended Courses

<table>
<thead>
<tr>
<th>Orientation</th>
<th>Skill Development</th>
<th>Capstone</th>
<th>Postsecondary</th>
<th>1st Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>Grades 9-10</td>
<td>Grades 10-12</td>
<td>Grade 12</td>
<td></td>
<td>1st Year</td>
</tr>
</tbody>
</table>

- **Orientation**: Grades 9-10
- **Skill Development**: Grades 10-12
- **Capstone**: Grade 12
- **Postsecondary**: 1st Year

### Core Courses
- Computer Applications for Business
- Information Systems & Programming
- Computer Science
- Database Design
- Information Ethics

### Elective Courses
- Web Development
- Mobile Applications
- Information Security
- Networking

### Skills
- Media Production
- Programming
- Cybersecurity

## Postsecondary Opportunities

<table>
<thead>
<tr>
<th>Certifications</th>
<th>Associate Degree</th>
</tr>
</thead>
<tbody>
<tr>
<td>Computer Information Systems &amp; Programming</td>
<td>Associate of Science</td>
</tr>
<tr>
<td>Industry Certifications</td>
<td>Web Development</td>
</tr>
</tbody>
</table>

### Bachelor's Degree

<table>
<thead>
<tr>
<th>Bachelor's Degree</th>
</tr>
</thead>
<tbody>
<tr>
<td>Computer Science</td>
</tr>
</tbody>
</table>

### Selected Occupations, Wages, and Job Growth

<table>
<thead>
<tr>
<th>Program</th>
<th>Typical Salary</th>
<th>Median Weekly Wage</th>
<th>IL Grad: Change over 10 years</th>
<th>IL Annual Avg</th>
<th>Typical Educational Requirements</th>
</tr>
</thead>
<tbody>
<tr>
<td>Systems Analyst</td>
<td>$62,44 10%</td>
<td>$36,130 6%</td>
<td>$6,250 6%</td>
<td>Bachelor's Degree</td>
<td></td>
</tr>
<tr>
<td>Computer Network Support Specialist</td>
<td>$56,10 4%</td>
<td>$32,850 4%</td>
<td>$4,150 4%</td>
<td>Bachelor's Degree</td>
<td></td>
</tr>
<tr>
<td>Information Security Analyst</td>
<td>$65,34 4%</td>
<td>$39,400 4%</td>
<td>$5,200 4%</td>
<td>Bachelor's Degree</td>
<td></td>
</tr>
</tbody>
</table>

*Living wage portion is based on MIT Living Calculator (http://mitlivingcalculator.com) for a single adult. Occupations with hours below the living wage for a single adult are not considered to be having a living wage. Data is based on Bureau of Labor Statistics data for IL occupation wage and occupations with higher incomes below the living wage for a single adult are not included in the analysis. Living wage is calculated using the living wage calculator (http://mitlivingcalculator.com) for a single adult. Data is based on Bureau of Labor Statistics data for IL occupation wage and occupations with higher incomes below the living wage for a single adult are not included in the analysis.*
Recommended Courses for IT

**Orientation**
Grades 9–10
- Computer Applications for Business

**Skill Development**
Grades 10–12
- Choose 1:
  - Introduction to Computer Information Systems
  - AP Computer Science Principles
- Mobile Applications or Web Development Courses
- Hardware or Operating System Courses

**Capstone**
Grade 12
- Choose 1:
  - Computer Science I
  - Computer Science II
- Intro to Networking

**Postsecondary 1st Year**
- Continue Course Sequence

**Work-Based Learning**
- Career Exploration (2)
- Career Development Experience or Youth Apprenticeship
- Team-Based Challenge (2), may be offered through Career and Technical Student Organizations

**Maths**
- Math Sequence: Highest-Level Course Possible

**English**
- English Sequence

**Science**
- Science Sequence

**Social Science**
- Social Science Sequence

**Key:**
- AP or Dual Credit Course
- Course Prepares for Industry Credential
- College & Career Pathway Endorsements
- Dual Credit Course with IAI
- Postsecondary Course with IAI

*If courses were accomplished through early college credit, take the next required course in the sequence or, if none, additional AAS or major courses.*
Postsecondary Opportunities for IT

Certifications

Guided Transfer
Computer Information Systems & Programming
Web Development
Networking, Cloud Computing & Cybersecurity

Associate Degree

Industry Certifications
Computer Information Systems AAS
Industry Certifications
Web Development AAS or AS
Industry Certifications
Networking AAS
Cybersecurity AAS

Bachelor’s Degree

Associate of Science
Bachelor of Science

* * * * Bachelor's degree is not required for employability
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Next Steps for Feedback

Public Comment Survey
Your Next Steps

• Download the draft guides
• Submit public comment by June 21.
• We would want to hear about:
  • Strengths
  • Changes and additions
  • Feedback on new approach
• Incorporate into your work

Our Next Steps

• Incorporate feedback from public comment and publish resource
• Share throughout Illinois and nationally via:
  • Agency websites
  • EdSystems communications
  • Presentations and conferences
  • Technical assistance to communities
Today's discussion squares with my thinking because...

Something still circling in my head is...

One important point from today is...