

COMMUNITY COLLEGE BACCALAUREATE (CCB) IN ILLINOIS: FAQs, DATA, AND POLICY PROSPECTS

Illinois Community College Trustees Association
December 15, 2023

Introductions	Jim Reed, Executive Director, ICCTA
The Joyce Foundation's 2024 investment in CCB in Illinois	Emily Goldman, Program Officer, the Joyce Foundation
Overview of Phase 2 Research	Tim Harmon, Workforce Enterprise Services
Frequently Asked Questions about CCB	Dr. Debra Bragg, Bragg & Associates
CCB Occupational Briefs	Tim Harmon
Perspectives from Advisory Committee	Dr. Juan Salgado, Chancellor, City Colleges of Chicago
Questions and Discussion	

Agenda

The Joyce Foundation's 2024 Investment in CCB in Illinois

Emily Goldman

Program Officer, the Joyce Foundation

- Lorenzo Baber, Professor UIUC and Director, OCCRL
- Lisa Castillo-Richmond, Executive Director, PCC
- Brian Durham, Executive Director, ICCB
- Sarah Hartwick-Vice President Education and Workforce Policy, IMA
- Bill Kelley, CCB Committee chair, ICCTA
- Ginger Ostro, Executive Director, IBHE
- Juan Salgado, Chancellor, CCC
- Terry Wilkerson, President, ICCCP

CCB Advisory Committee Members

January	Introduction to CCB, CCBs in other states, discussion of project goals and agenda
March	Review of labor market considerations for baccalaureate programs, results of supply and demand analysis for Information Systems Analyst and Respiratory Therapist
April	Review of CCB equity questions, results of equity analysis for Information Systems Analyst
June	Panel of Ohio colleges, discussion of next steps
October	Discussion of next phase and policy options for CCB

CCB Advisory Committee Meetings

From The Truman Report of 1947:

Whatever form the community college takes, its purpose is educational service to the entire community, and this purpose requires of it a variety of functions and programs. It will provide college education for the youth of the community certainly, so as to remove geographic and economic barriers to educational opportunity and discover and develop individual talents as low cost and easy access.

Truman Report (1947)

Extent to which the CCB degree addresses a substantial workforce need, including high demand, well paid occupations and key sectors

Strongest Case

Extent to which the CCB degree provides equitable access to baccalaureate completion for students who would not otherwise be likely to attain the degree

Two Dimensions of Case-making for CCB Degrees

- Continued development of the case-making methodology, including supply and demand analysis and equity analysis
- Completion of *Twenty Frequently Asked Questions about Community College Baccalaureate (CCB) Degrees in Illinois*
- Completion of Three CCB Occupational Briefs:
 - *Information Security Analyst/ Bachelor of Applied Science in Computer and Information Systems Security*
 - *Respiratory Therapist/ Bachelor of Applied Science in Respiratory Therapy*
 - *Advanced Manufacturing/Bachelor of Applied Science in Industrial Production Management/Bachelor of Applied Science in Engineering Technology*
- Consultation with stakeholders via CCB Advisory Committee

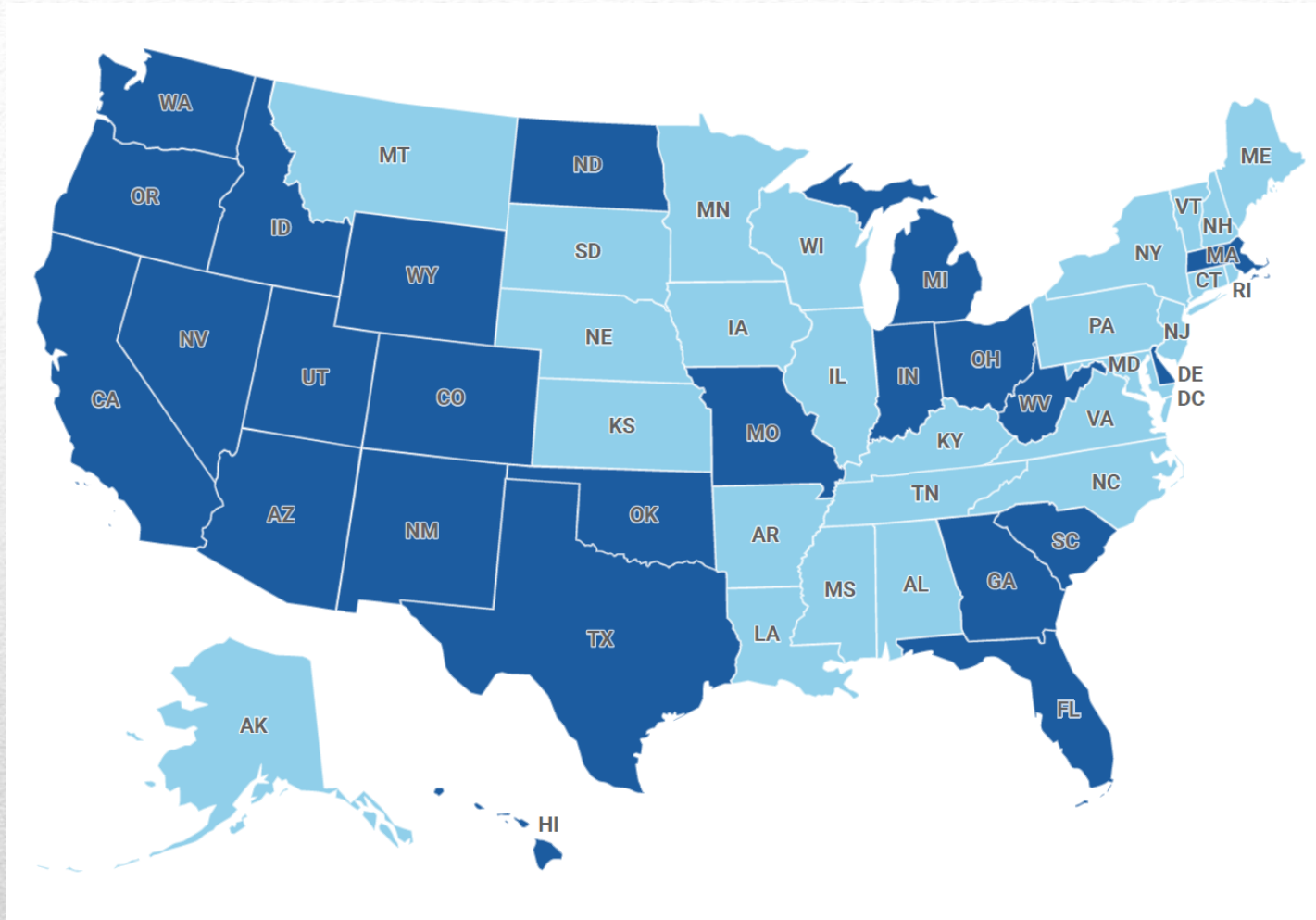
Phase 2 Research

FAQ Highlights

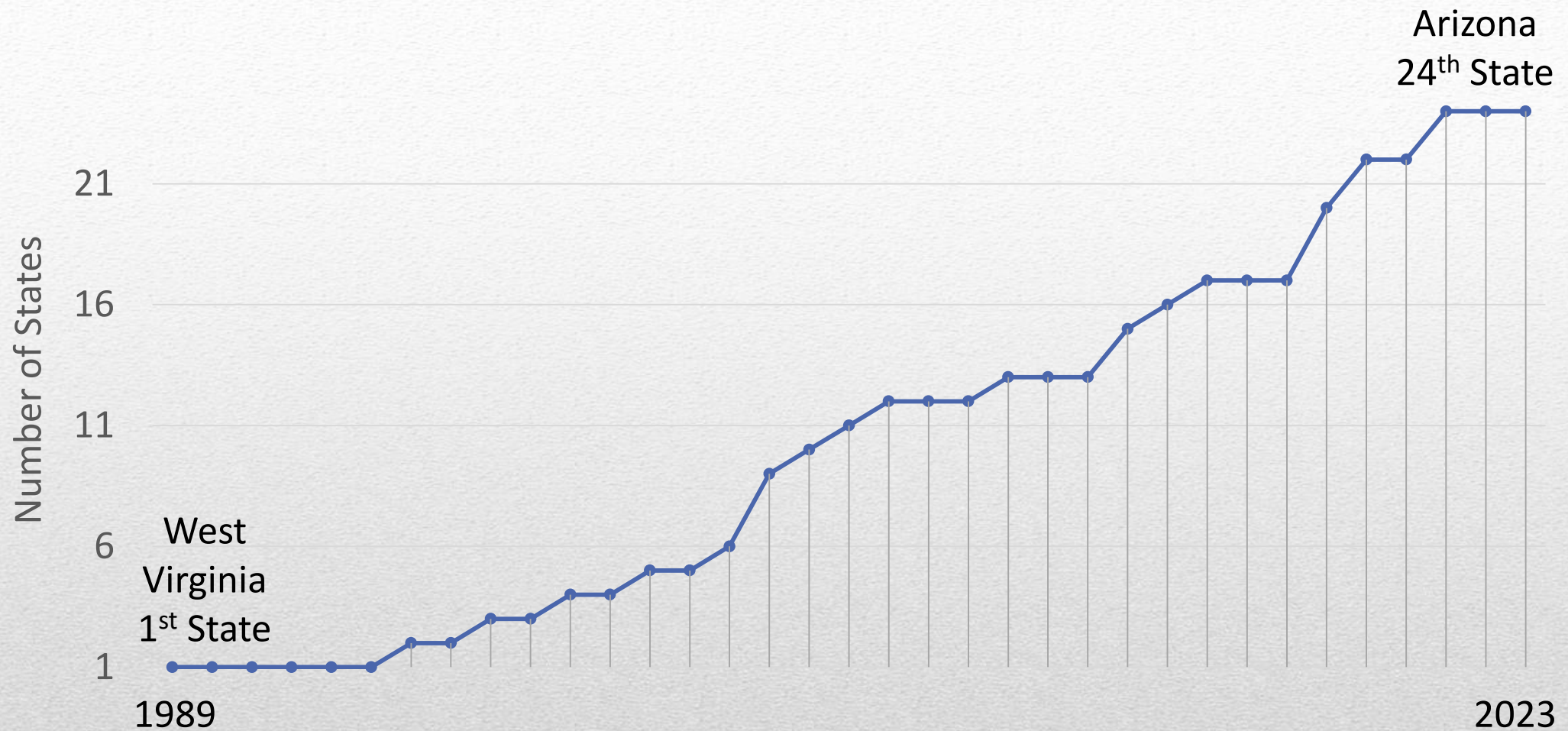


- National trends in CCB adoption
- Factors influencing CCB adoption
- Higher education sector concerns
- CCB students and graduates
- Access and equitable outcomes
- Program design and implementation
- Lessons for Illinois
- *More*

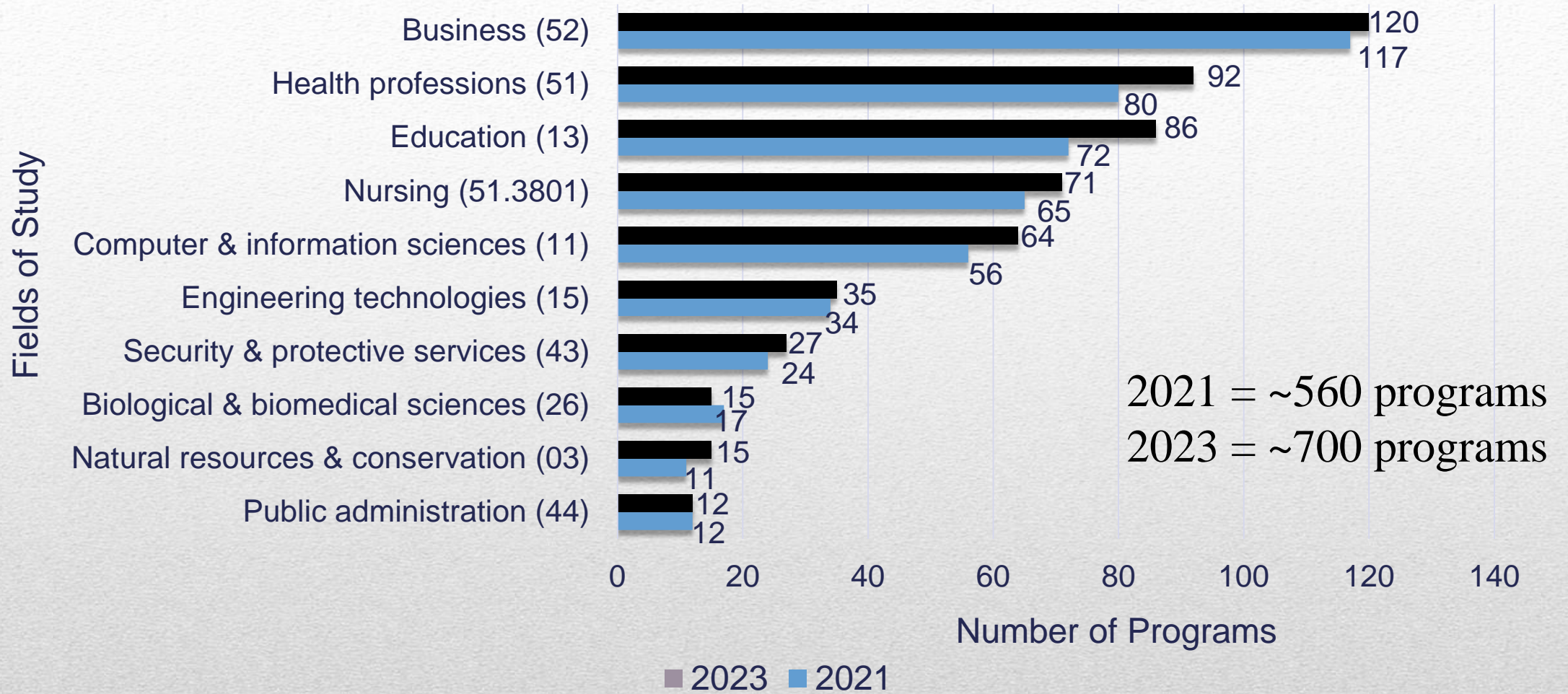
20 Frequently Asked Questions on ICCTA Website at:
<https://iccta.memberclicks.net/assets/docs/FAQ-ICCTA-12.12.23.pdf>



CCB-Conferring States



State Adoption 1989 to Present

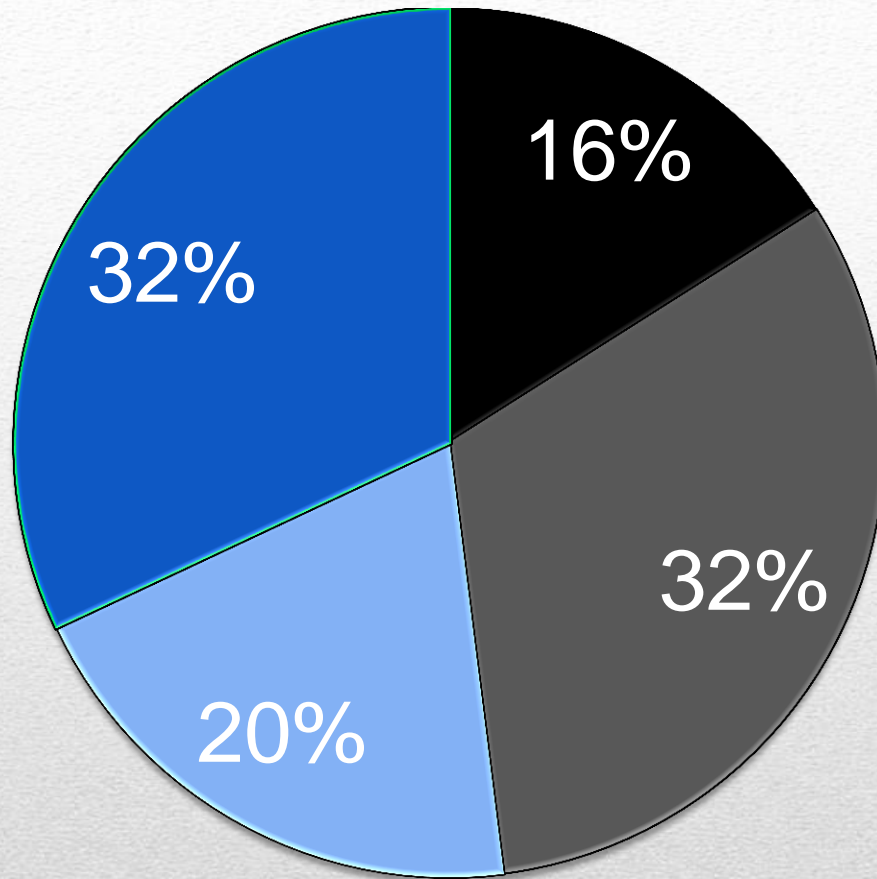


Top Fields of Study

- Average age 31-32 years
- Racially and ethnically diverse
- First-generation college
- Working learners
- Dependent responsibilities
- Rooted in their community
- Limited financial resources



Who Are the Students?



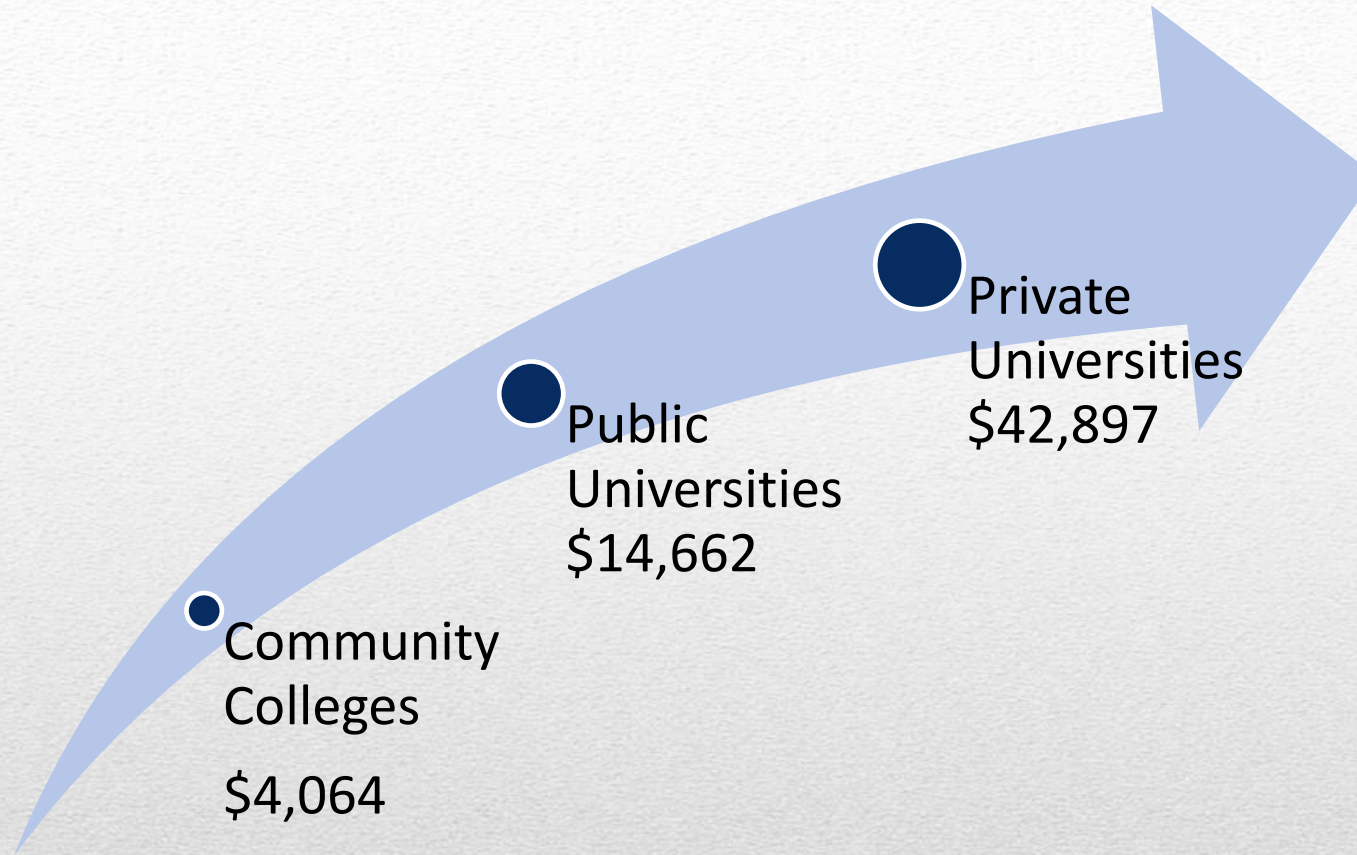
■ No CC or Public U in the CZ (4)

■ CC in CZ but no Public U in CZ or within 50 miles of CC (8)

■ CC in CZ and no Public U in CZ but Public U within 50 miles of CC (5)

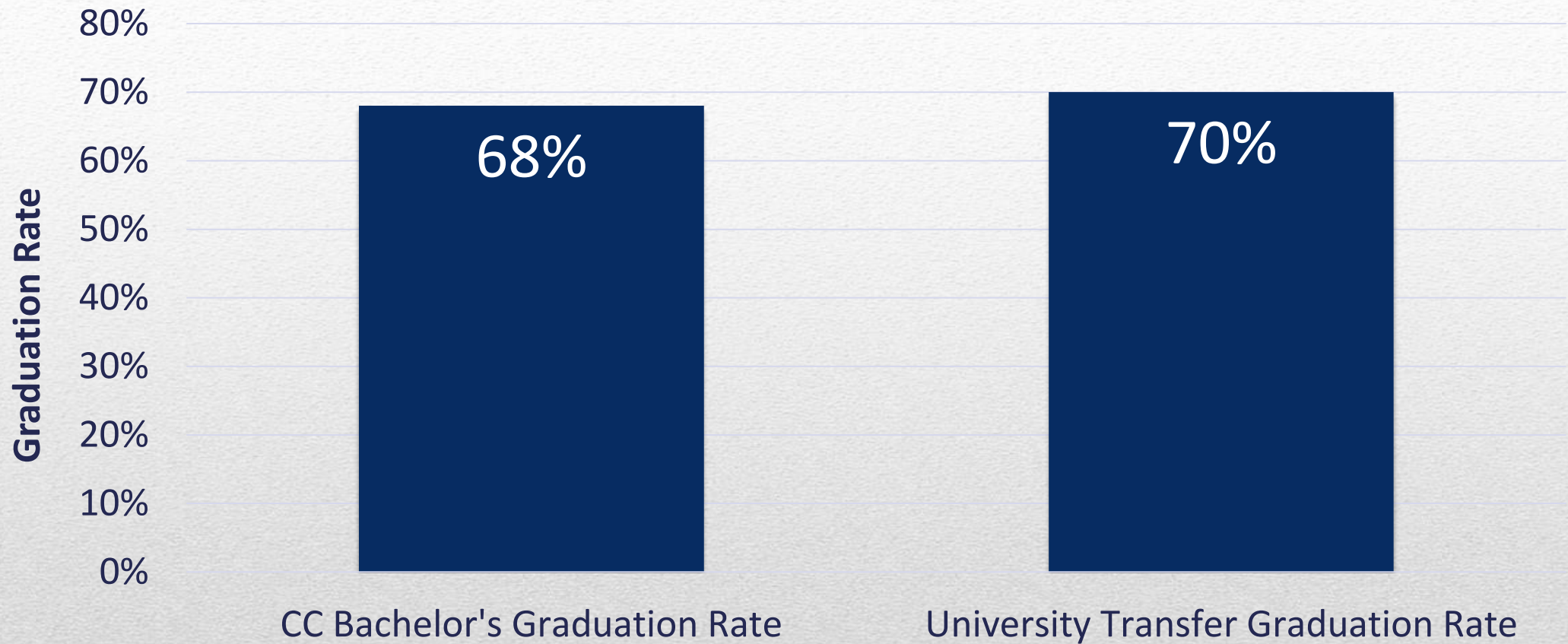
■ CC in CZ with 1 or more Public U in CZ within 50 miles of CC (8)

Geographic Access: Community Colleges & Public Universities in Illinois' 25 Commuting Zones



Annual Average Tuition & Fees by Illinois Higher Education Sector

Source: https://www.iccb.org/wp-content/pdfs/faqs/Cost_FY23.pdf



Graduation Rates in Washington State

Supply and Demand Highlights

- Supply and Demand Data and Methods
 - Information Security Analyst
 - Respiratory Therapist
 - Advanced Manufacturing
-

Supply and Demand Data and Methods

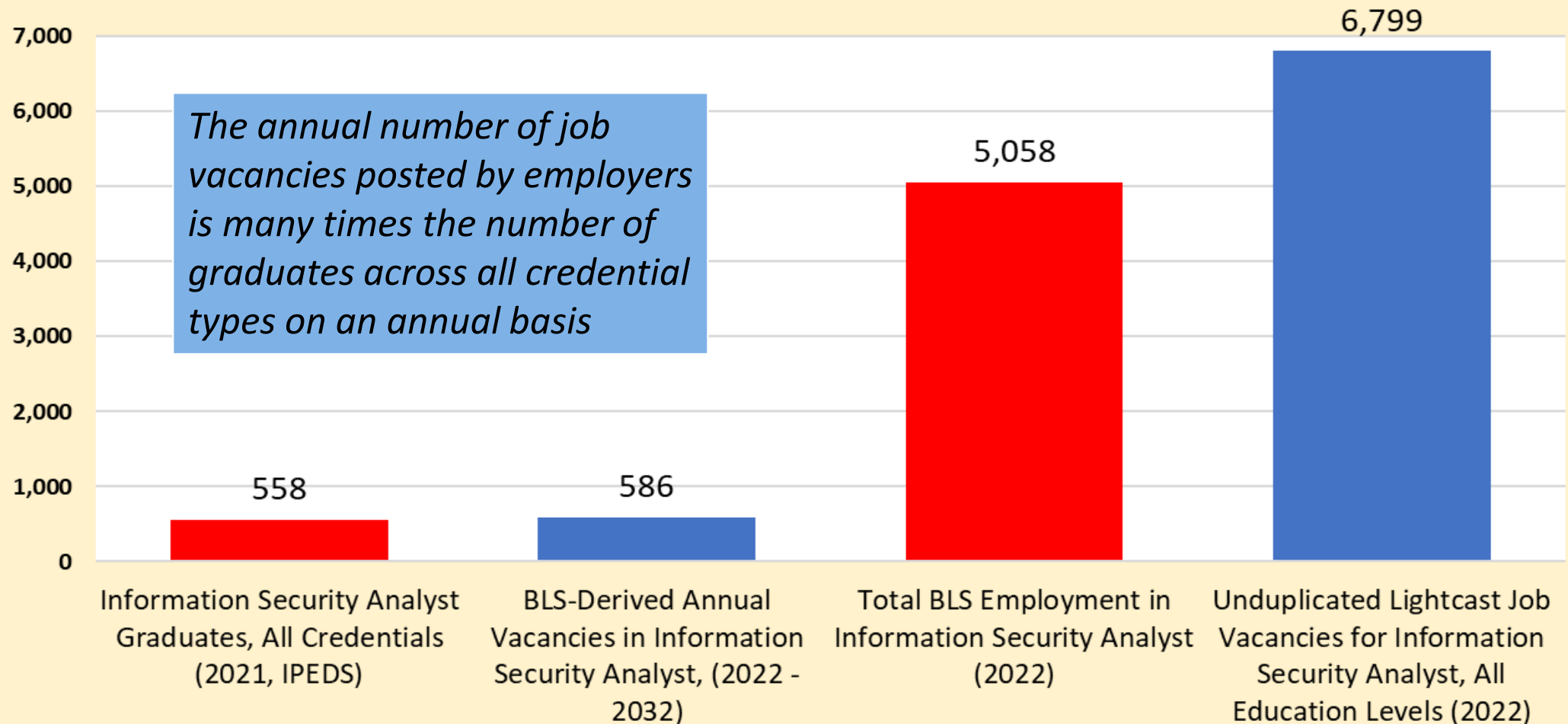
Questions we looked at:	Data and Methods we used to do so:
<i>What occupations should we analyze, and what are the related programs of study for each?</i>	Criteria for selecting occupations/occupational areas to included: strong demand, good wages, demand for bachelor's degrees, CCB program development in other states, and Associate degree programs in Illinois.
<i>What geographic area(s) should we use for the analysis?</i>	We used the ten state economic development regions for Illinois, but other regions could be used.
<i>Is there substantial current and projected demand for workers in the occupation?</i>	<ul style="list-style-type: none">• Bureau of Labor Statistics (BLS) Occupational Employment Statistics projections• Lightcast Job Postings Analytics (JPA)
<i>Can workers in these occupations expect to be well-paid?</i>	<ul style="list-style-type: none">• BLS median earnings data• JPA advertised median salary data.

Supply and Demand Data and Methods

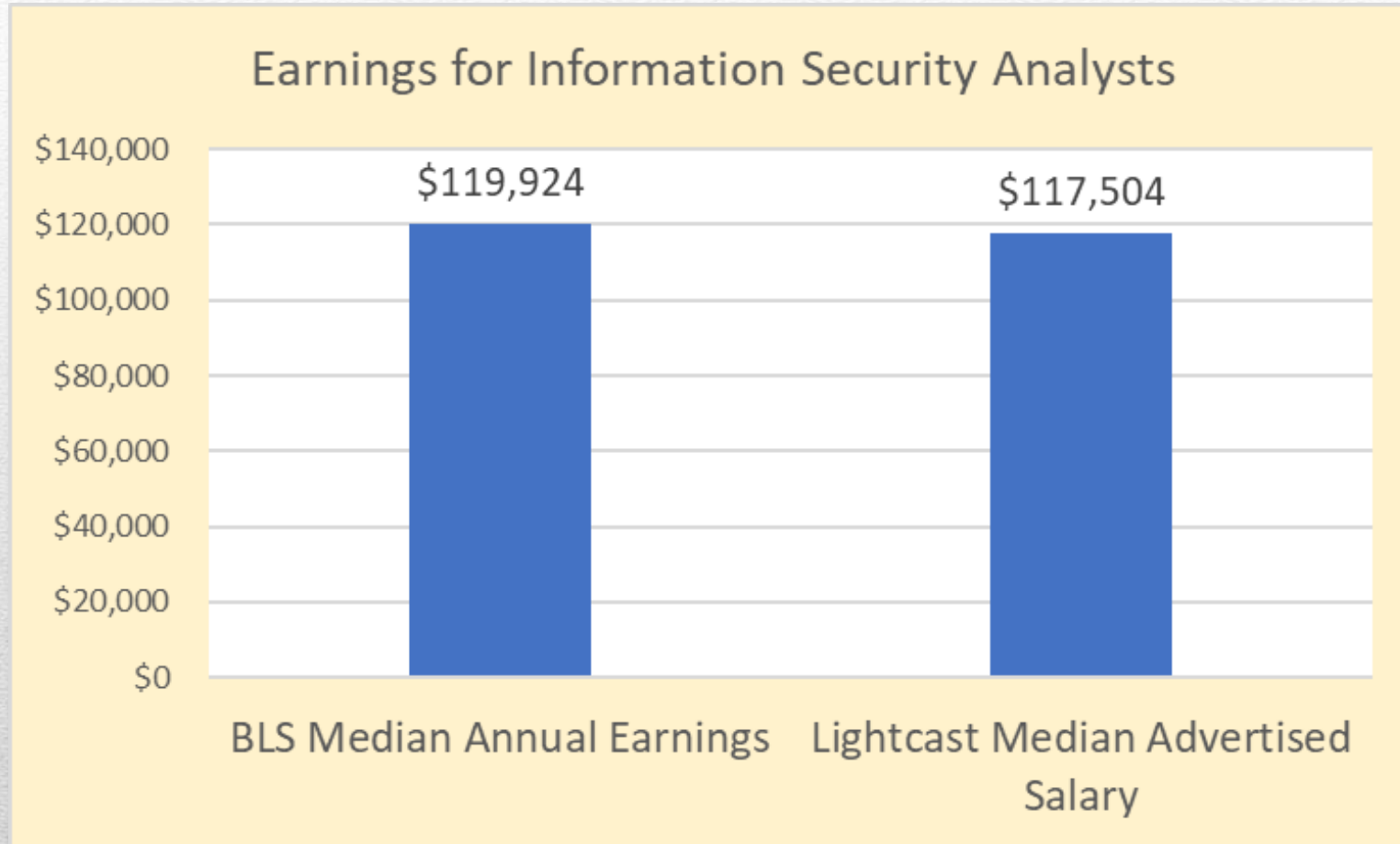
Steps in Analysis	Data and Methods Used for Each Step
<i>Is there substantial demand for employees with a baccalaureate degree or higher?</i>	<ul style="list-style-type: none">• Lightcast JPA Report to determine the minimum and preferred employer educational requirements in online job openings
<i>Is there sufficient supply of graduates to meet current and projected needs? Are community colleges positioned to contribute to CCB development?</i>	<ul style="list-style-type: none">• Integrated Postsecondary Education Data System (IPEDS) for graduates by Classification of Instructional Program (CIP) categories• Comparison to the measures of demand to arrive at an overall assessment of the supply and demand balance
<i>What are the key skill requirements?</i>	<ul style="list-style-type: none">• Lightcast JPA Report to identify skill requirements
<i>How do student demographics compare across sectors? Are community colleges positioned to contribute to improvement in equitable access and completion?</i>	<ul style="list-style-type: none">• IBHE graduate characteristics data by CIP code

Information Security Analyst

Figure 1. Key Supply and Demand Indicators
Information Security Analyst, Illinois Statewide Results



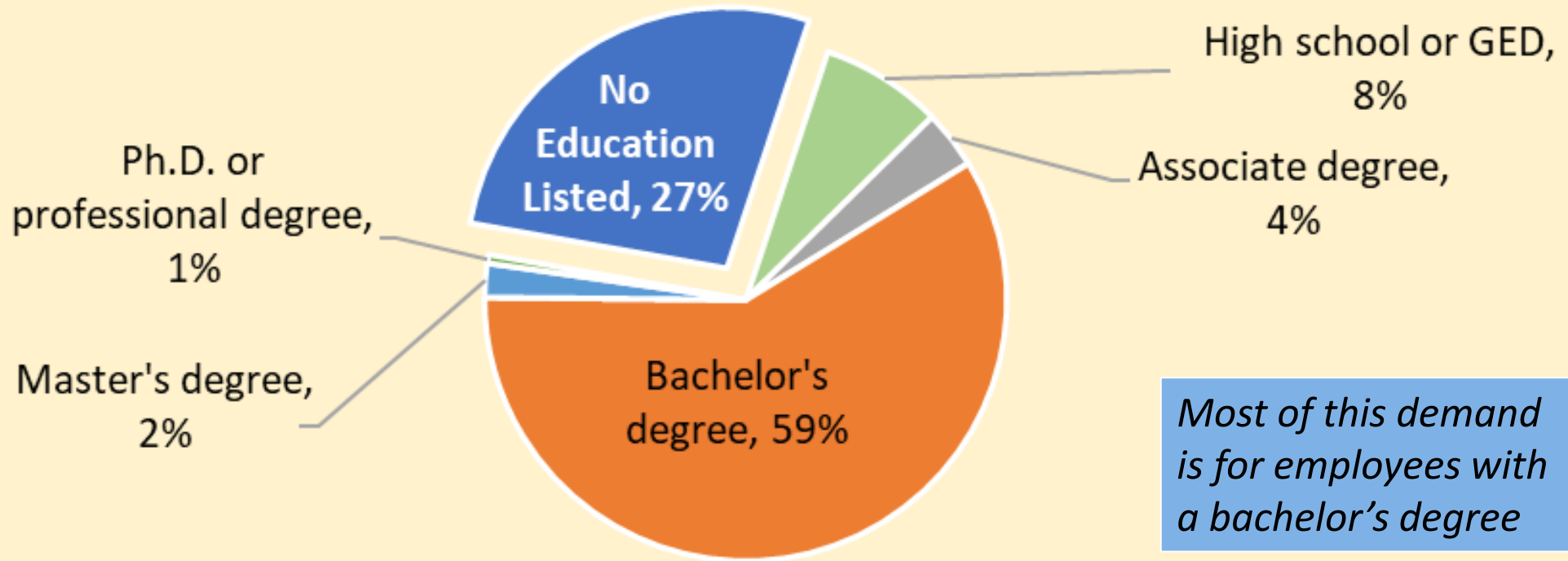
Information Security Analyst



Information security analyst in Illinois can expect to earn nearly \$120,000 per year.

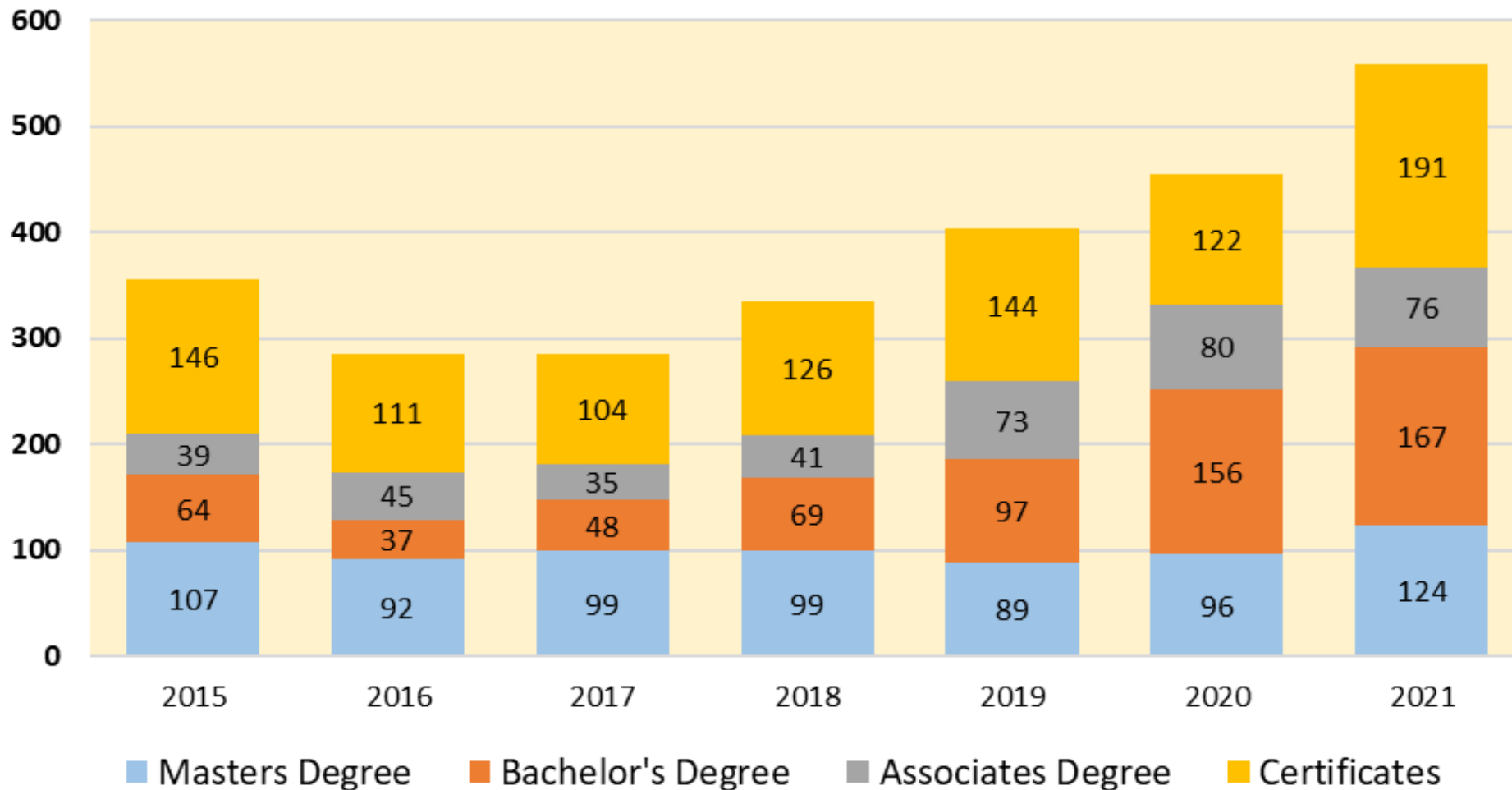
Information Security Analyst

Figure 3. Minimum Education Requirements for Information Security Analysts, Illinois Lightcast Job Postings, 2022



Information Security Analyst

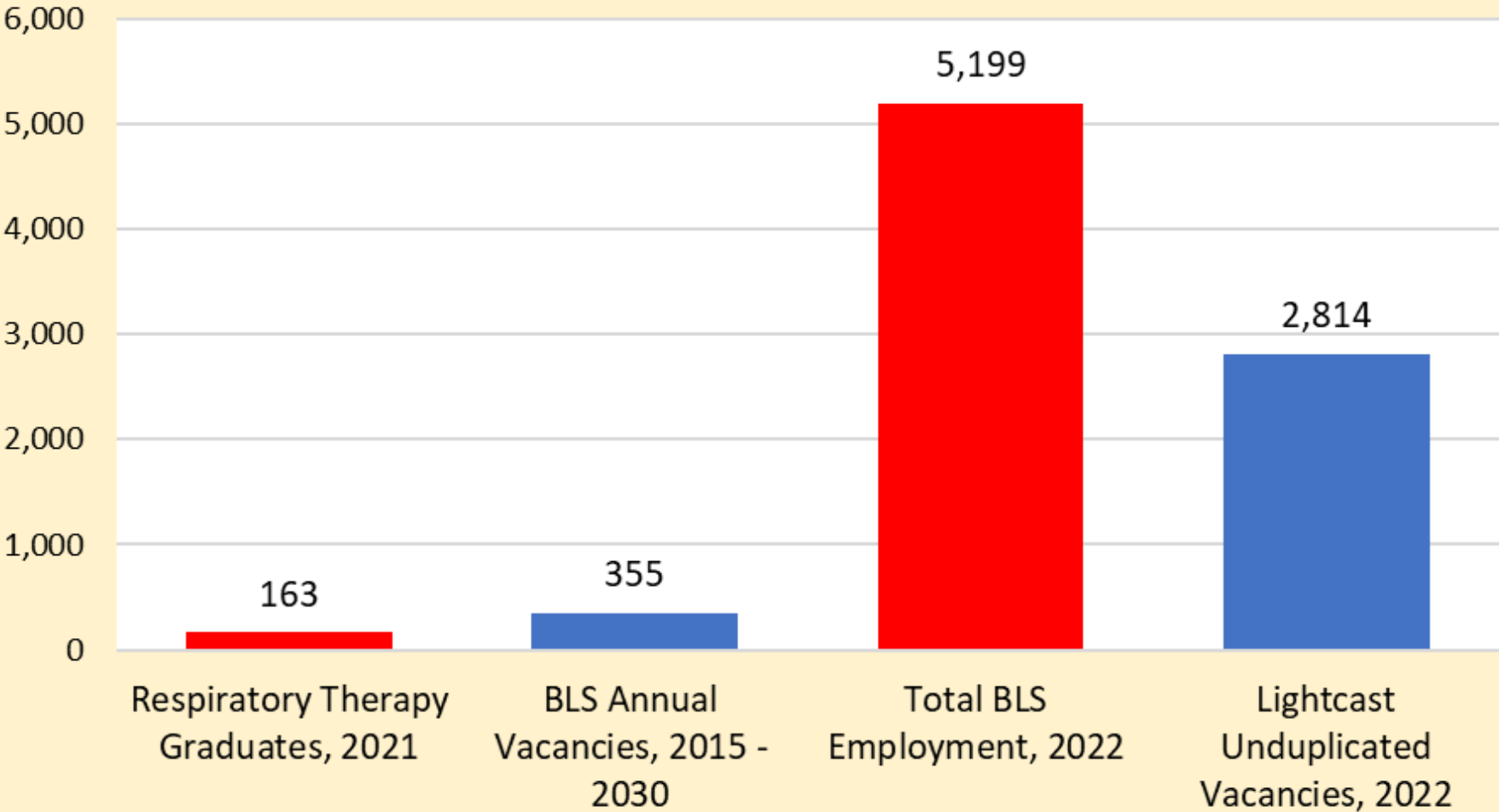
Figure 4. Graduates, Computer and Information Systems Security, Illinois Institutions, 2015 - 2021



The number of graduates in information security programs has increased substantially in recent years but is still well below what is needed

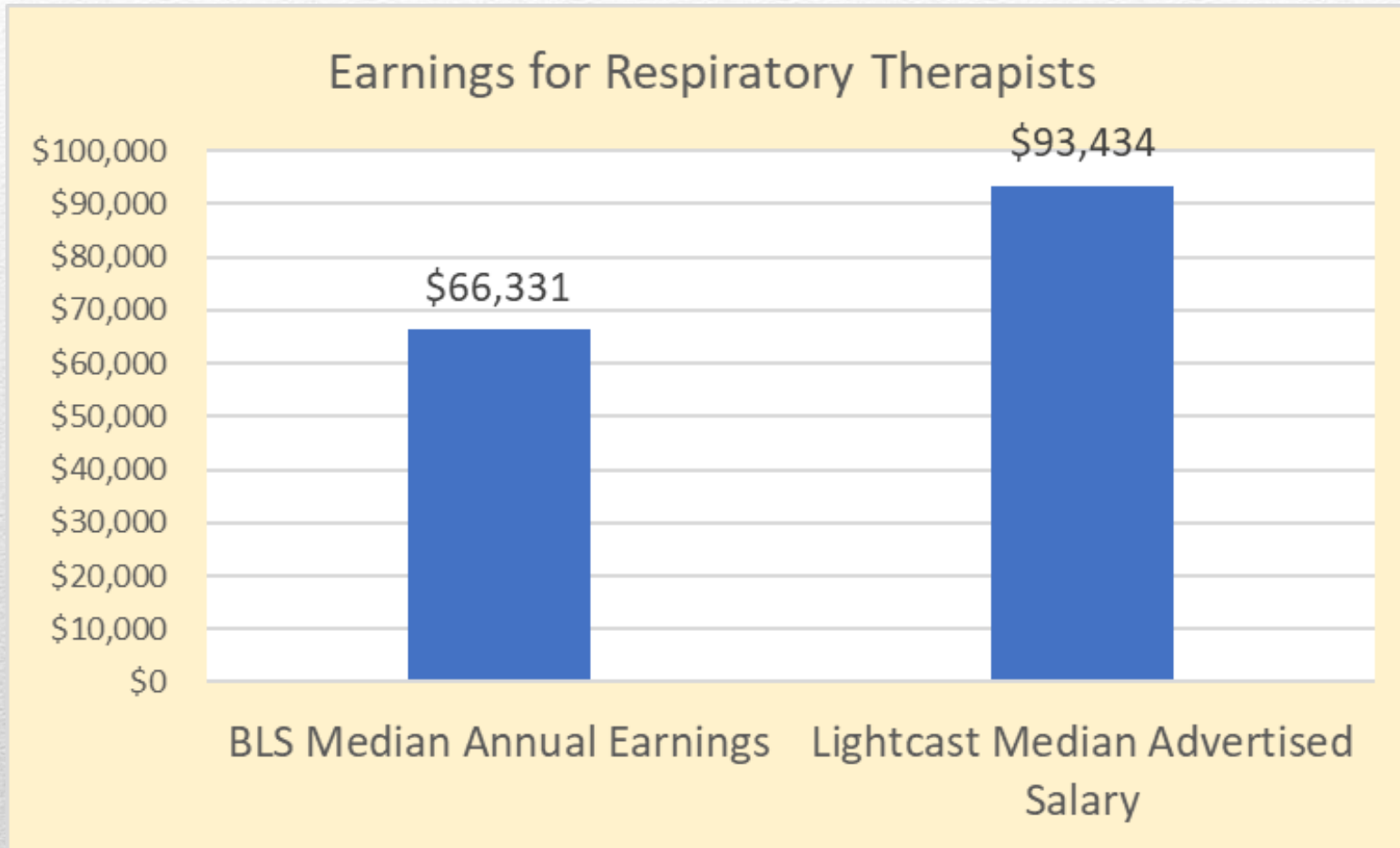
Respiratory Therapist

Figure 1. Key Supply and Demand Indicators, Respiratory Therapists, Illinois Statewide Results



We see the same pattern for respiratory therapist demand vs. the supply of graduates on an annual basis

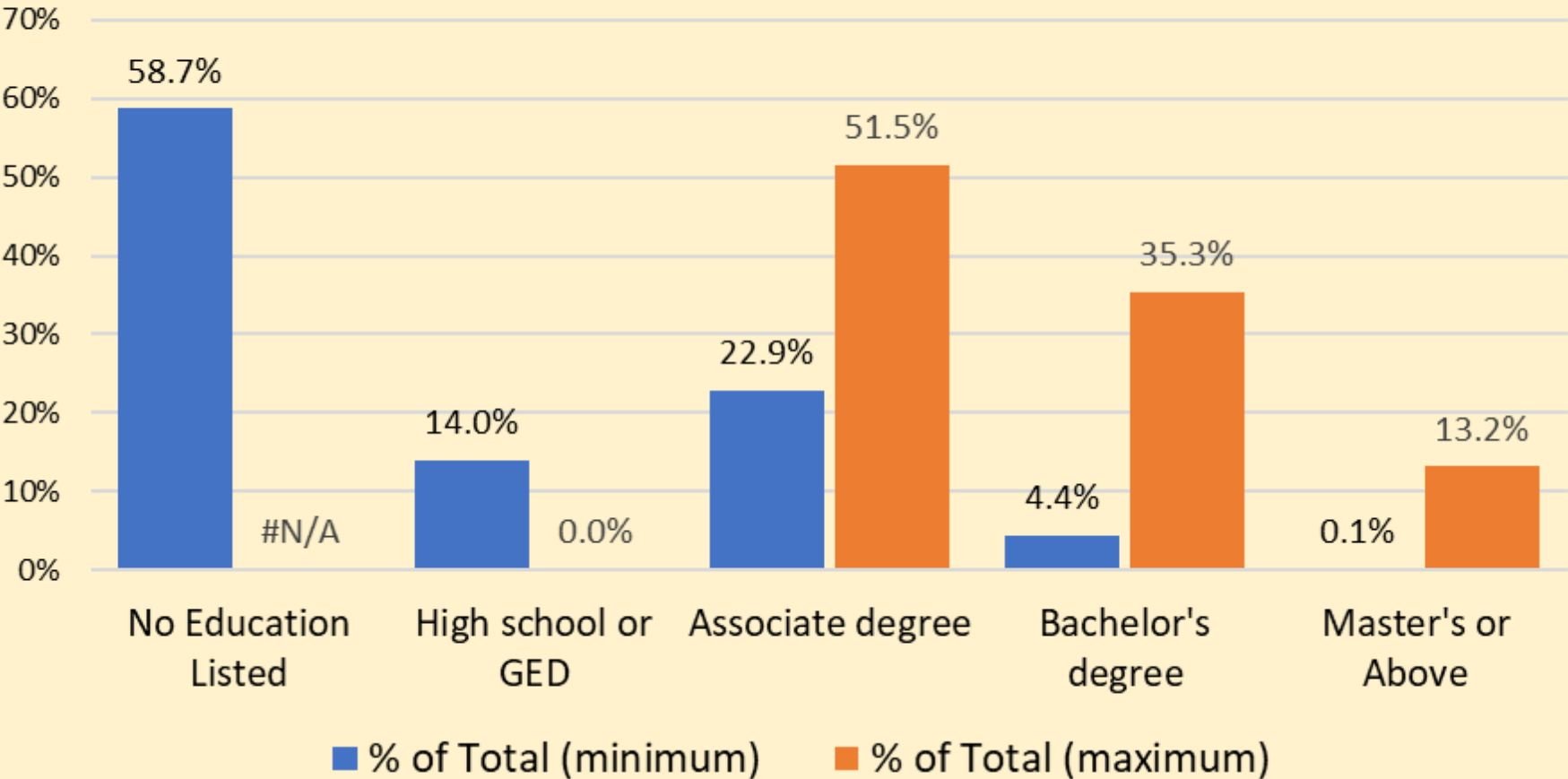
Respiratory Therapist



Respiratory therapists in Illinois can expect to earn over \$66,000 per year. Current online vacancies have advertised earnings of over \$93,000.

Respiratory Therapist

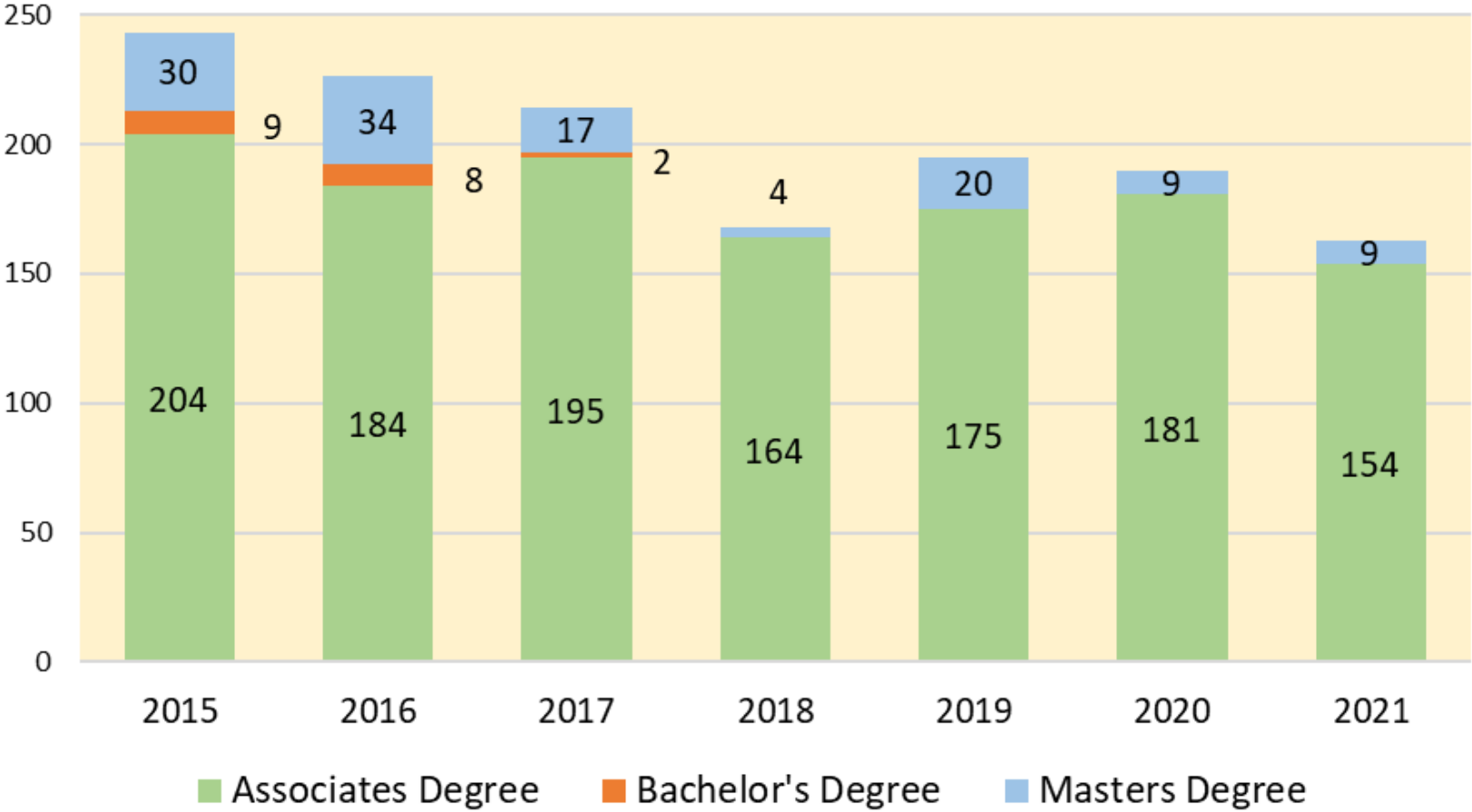
Figure 3. Minimum and Maximum Education Requirements for Job Openings as Respiratory Therapists, Illinois, 2022



While most employers did not specify an educational requirement for this licensed occupation, about a third of those who specified a range of education expressed a preference for a bachelor's degree

Respiratory Therapist

Figure 4. Graduates, Respiratory Therapist Programs, Illinois Institutions, 2015 - 2021



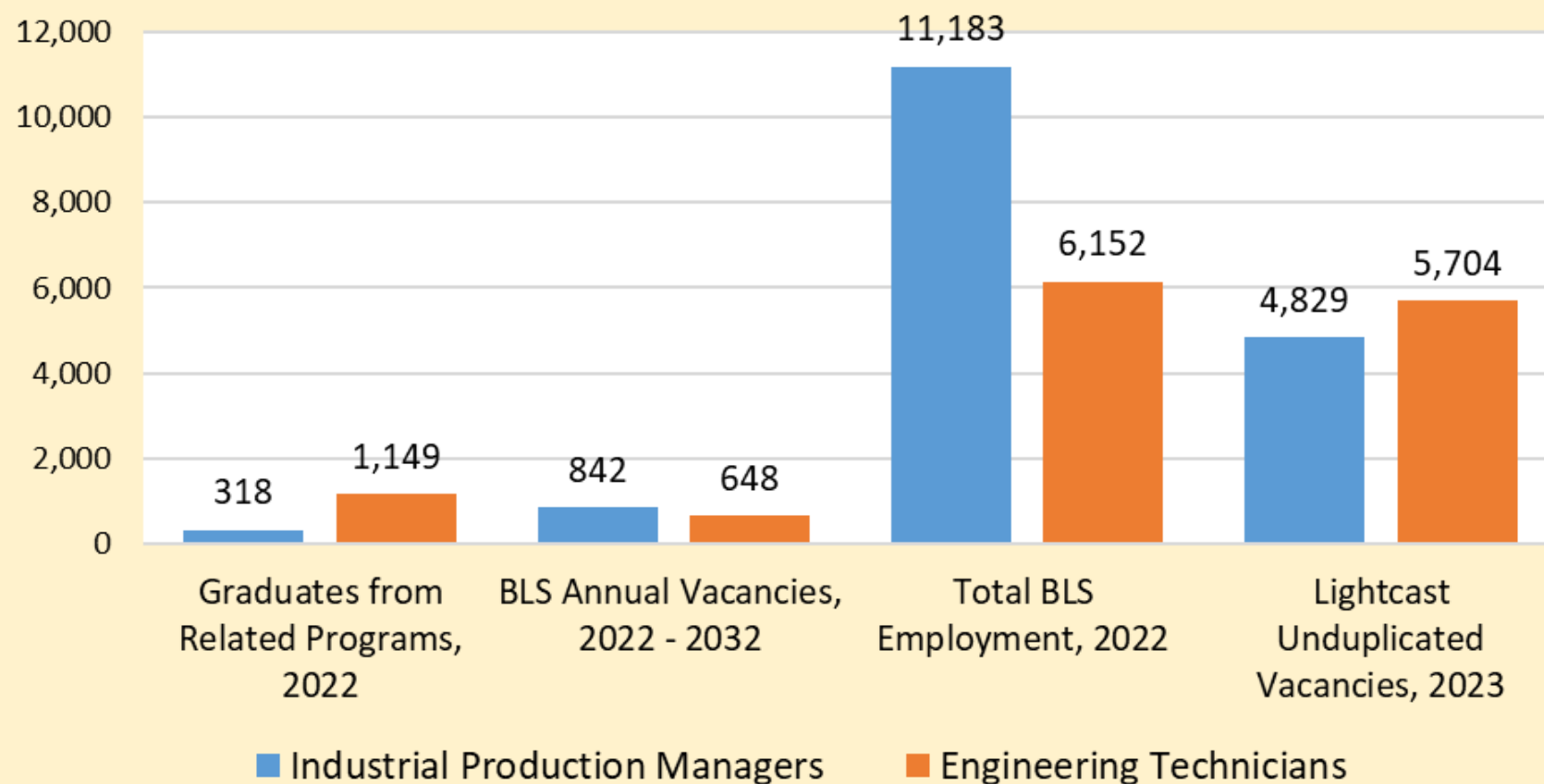
Even though the national accreditor for respiratory therapy programs has signaled an intention to increase educational entry requirements, Illinois is not preparing bachelor's graduates for this occupation

Advanced Manufacturing

Occupational Group	SOC Codes	CIP Codes
Industrial Production Managers	<ul style="list-style-type: none">Industrial Production Managers (SOC 11-3051)	<ul style="list-style-type: none">Engineering/ Industrial Management (CIP Code 15.1501)Operations Management and Supervision (CIP Code 52.0205).
Engineering Technicians and Technologists	<ul style="list-style-type: none">Electrical and Electronics Engineering Technologists and Technicians (SOC 17-3023)Electro-Mechanical and Mechatronics Technologists and Technicians (SOC 17-3024)Mechanical Engineering Technologists and Technicians (SOC 17-3027)Engineering Technologists and Technicians, Except Drafters, All Other (SOC 17-3029)	<ul style="list-style-type: none">Engineering Technologies/Technicians, General (CIP Code 15.0000)Electrical, Electronic, and Communications Engineering Technology/Technician (CIP Code 15.0303)Biomedical Technology/Technician (CIP Code 15.0401)Instrumentation Technology/Technician (CIP Code 15.0404)Manufacturing Engineering Technology/Technician (CIP Code 15.0613)Quality Control Technology/Technician (CIP Code 15.0702)Automotive Engineering Technology/Technician (CIP Code 15.0803)Mechanical/Mechanical Engineering Technology/Technician (CIP Code 15.0805)Engineering/Engineering-Related Technologies/Technicians, Other (CIP Code 15.9999)

Advanced Manufacturing

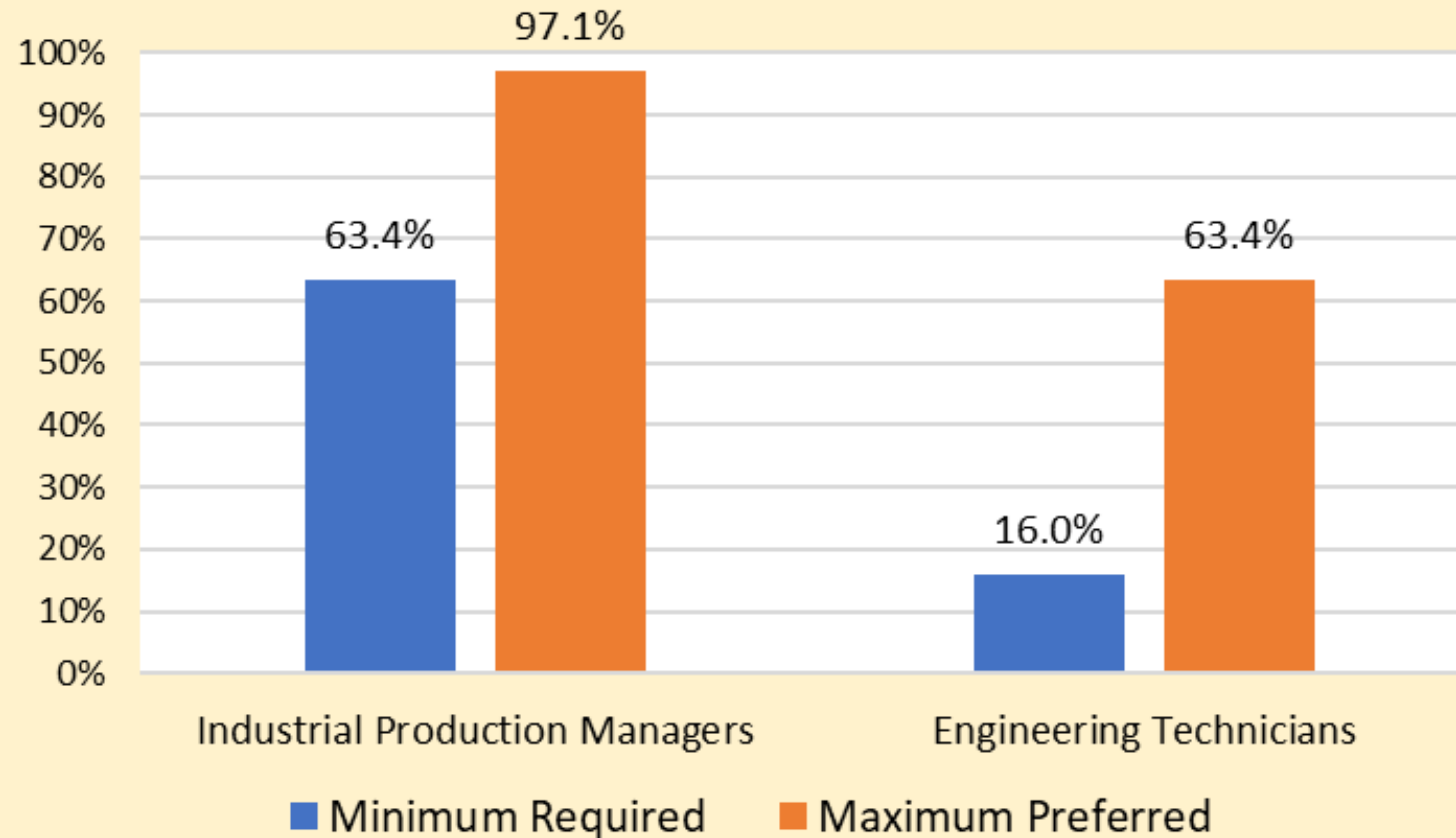
Figure 1. Key Supply and Demand Indicators, Industrial Production Managers and Engineering Technicians, Illinois Statewide Results



The annual number of job vacancies posted by employers is many times the number of graduates across all credential types on an annual basis, for both occupations.

Advanced Manufacturing

Figure 3. Lightcast Job Posting Demand for Baccalaureate Degrees or Above, Illinois, 2023

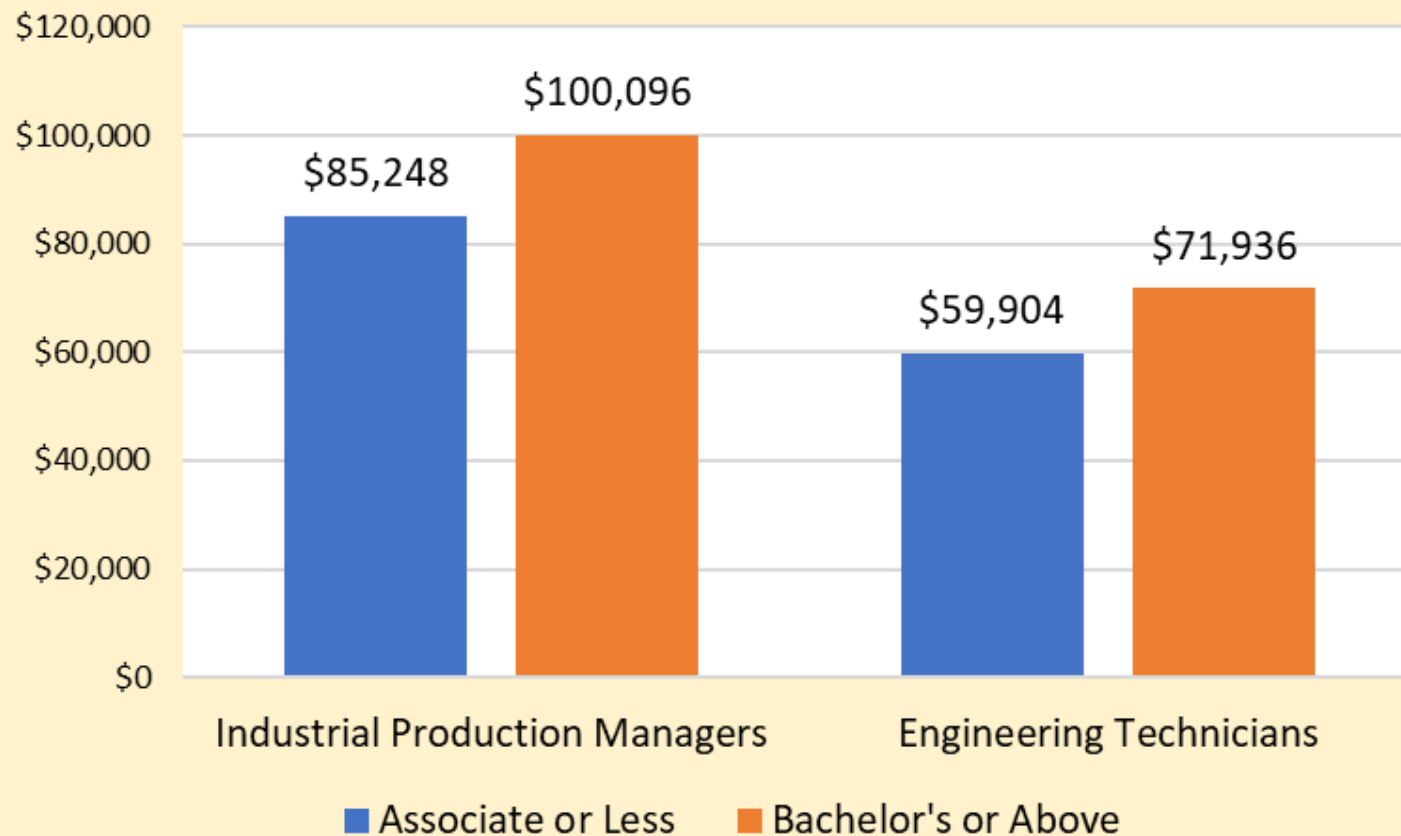


Most Illinois job postings for industrial production managers include a requirement for a Bachelor's degree or above, with universal preference for bachelor's graduates.

While the requirement for bachelor's graduates for engineering technicians is not as strong, there is still a clear preference for these degrees.

Advanced Manufacturing

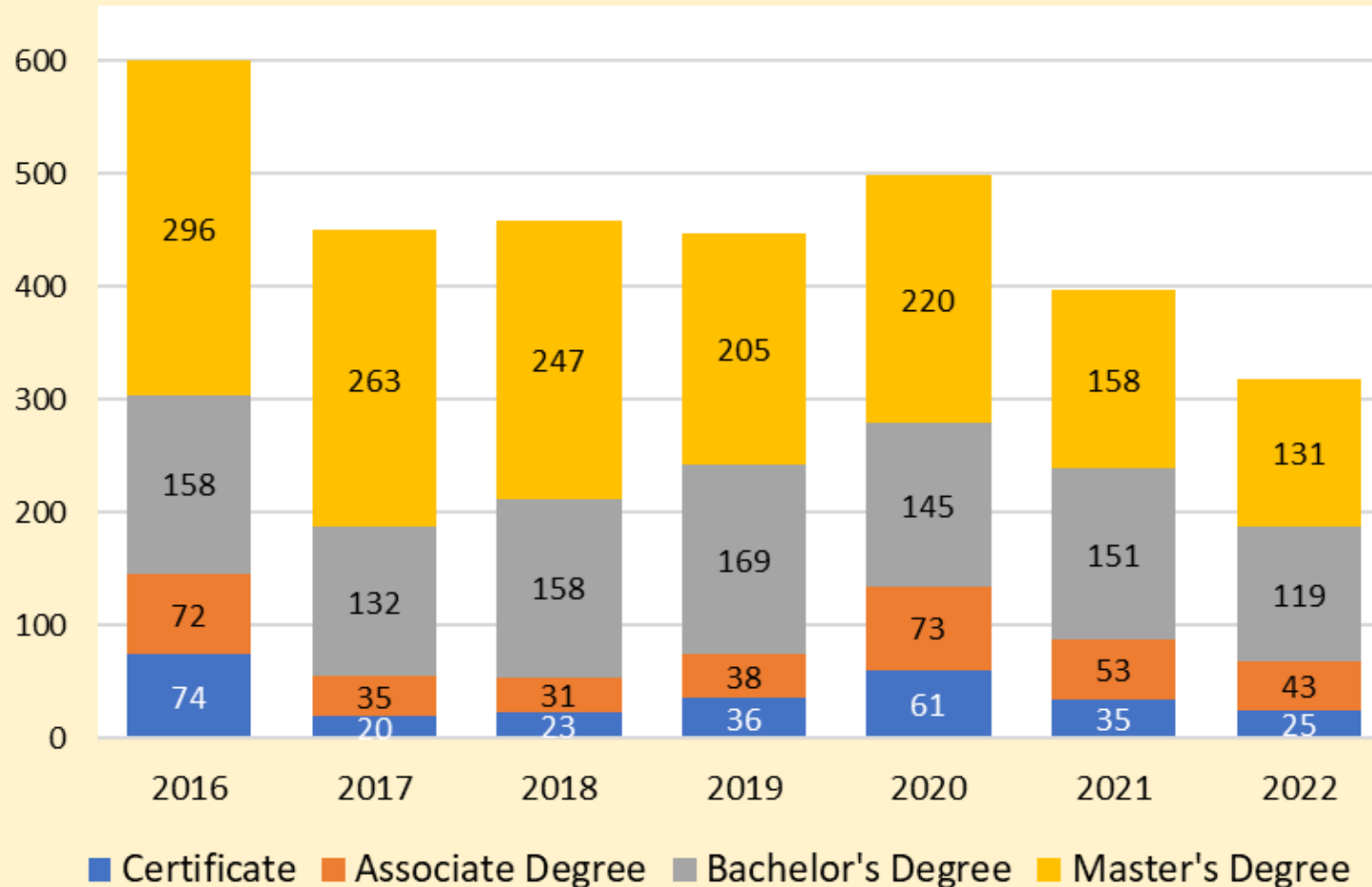
Figure 4. Lightcast Advertised Salary, Industrial Production Managers and Engineering Technicians by Desired Education Level



Employers are willing to pay more for bachelor's graduates for both occupations

Advanced Manufacturing

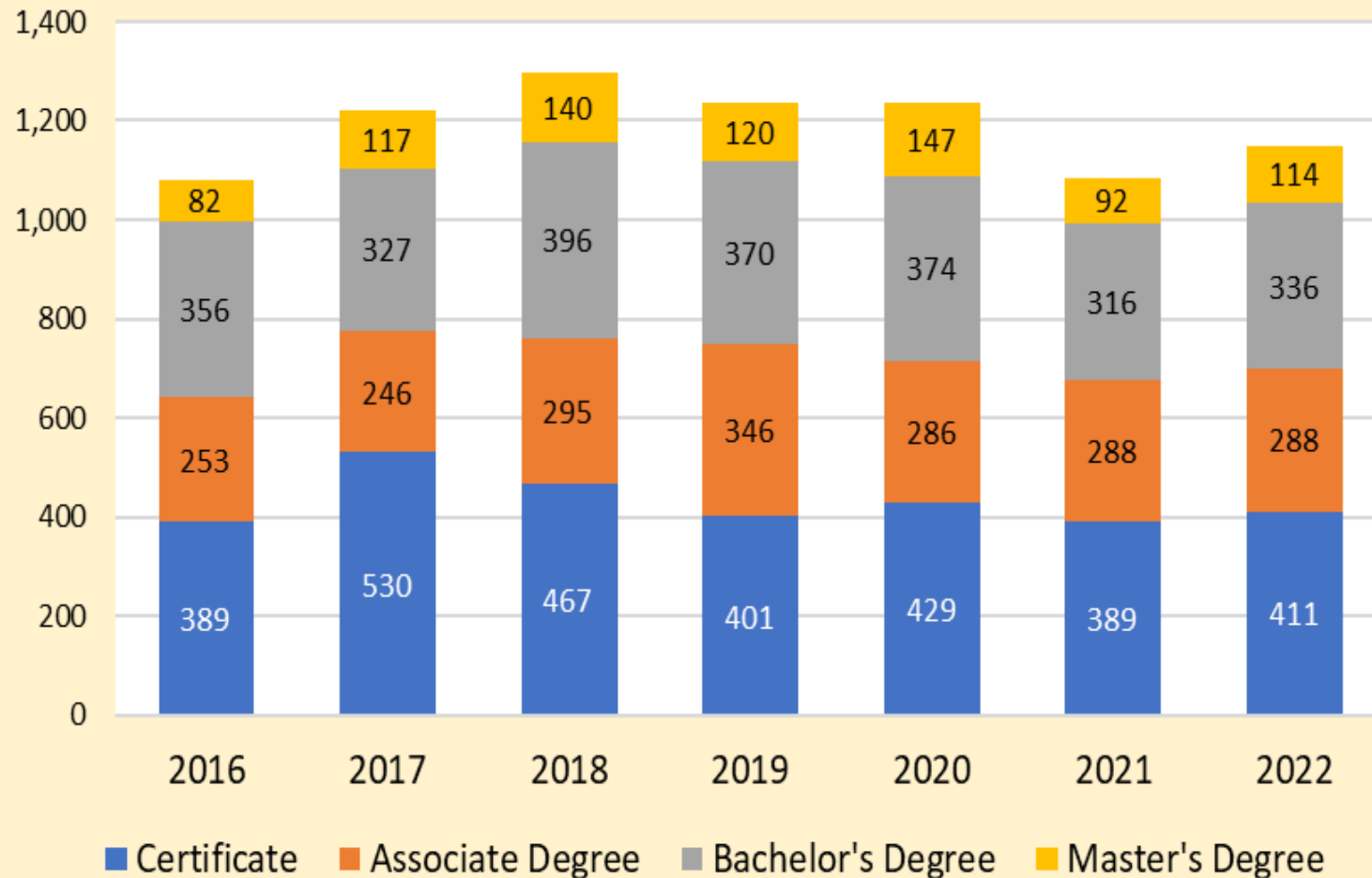
Figure 5. Illinois Graduates, Industrial Production Management Programs by Type of Credential, 2016-2022



Despite strong demand for industrial production managers, the trend in graduates of programs that prepare for this occupation has been declining.

Advanced Manufacturing

Figure 6. Illinois Graduates, Nine Engineering Technician Programs by Type of Credential, 2016-2022



The numbers of Illinois graduates in these Engineering Tech programs increased from 2016 to 2018, then declined somewhat from 2018 to 2020, dropped during the pandemic, and partially recovered in 2022.

Perspectives from Advisory Committee

Dr. Juan Salgado
Chancellor, City Colleges of Chicago

Questions and Discussion
