

December 2022

Hope Morrow

Resident Labor Economist

Regional & Community Workforce
Development

INL Workforce Projections

*5-Year Lab-Wide Occupation Growth and
Replacement Estimates*

Battelle Energy Alliance manages INL for the
U.S. Department of Energy's Office of Nuclear Energy



Idaho National Laboratory

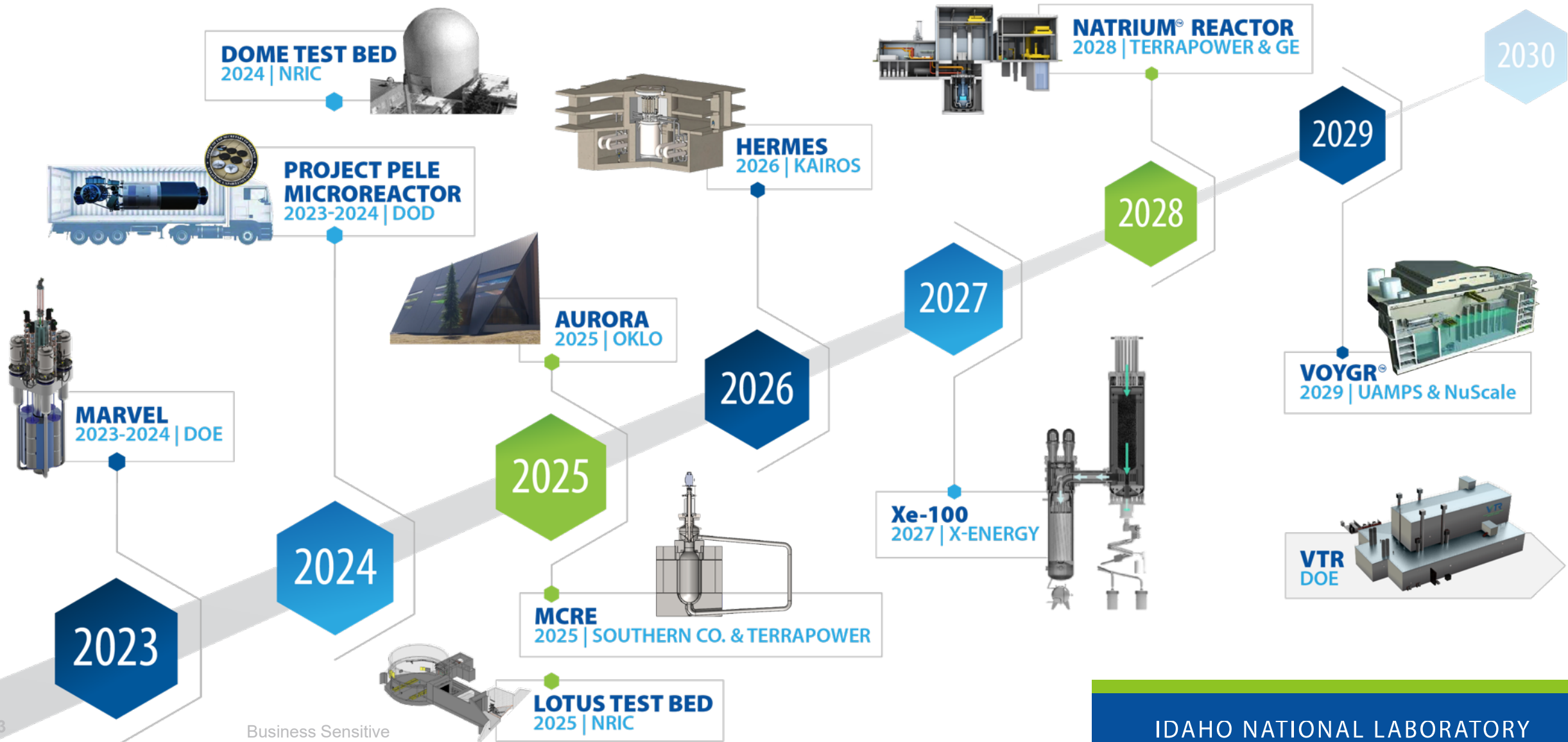
Strategic growth



In order for INL to change the world's energy future, we are taking a **strong, strategic look** at our own future.

All areas of the lab are growing and with an unwaveringly tight labor market, **proactive workforce development** is more important than ever!

Accelerating advanced reactor demonstration & deployment



Nuclear Net Zero: *INL will be powered by 24/7 carbon-free energy by 2031*



INL is conducting advanced nuclear research to develop and integrate microreactors and small modular reactors into microgrids with other renewable energies to produce hydrogen, increase energy storage, and provide reliable, secure, and clean energy first to the INL site and then to communities across the nation.



CITY of BOISE

INL's Research Mission Areas



Energy & Environment S&T

- Advanced transportation
- Environmental sustainability
- Clean energy
- Advanced manufacturing
- Biomass
- Integrated Energy Systems



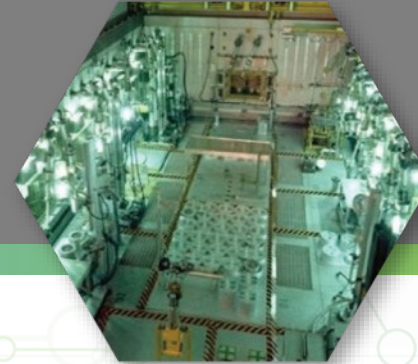
National & Homeland Security S&T

- Critical infrastructure protection and resiliency
- Nuclear nonproliferation
- Physical defense systems



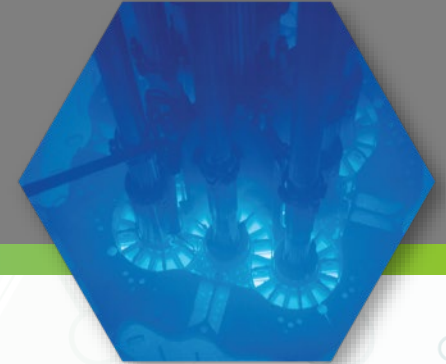
Nuclear S&T

- Nuclear fuels and materials
- Nuclear systems design and analysis
- Fuel cycle science and technology
- Nuclear safety and regulatory research
- Advanced Scientific Computing



Materials & Fuels Complex

- Transient testing
- Analytical laboratories
- Post-irradiation examination
- Advanced characterization
- Fuel fabrication
- Space nuclear power and isotope technologies



Advanced Test Reactor

- Steady-state neutron irradiation of materials and fuels
 - Naval Nuclear Propulsion Program
 - Industry
 - National laboratories and universities

Enabling Areas – Operations and Success Services



Engagement

- Government Affairs
- Communications
- National University Programs
- Industry Engagement
- K-12 STEM
- Workforce Development
- Economic Development
- Community Engagement



Business and Human Resources

- Accounting
- Finance
- Procurement
- Benefits
- Inclusions and Diversity
- Talent Acquisition



Environment, Safety, Health & Quality

- Occupational Health and Safety
- Medical
- Employee Assistance Program
- Cultural Resources
- Radiation Control
- Emergency Management



Facilities and Site Services

- Maintenance
- Transportation
- Fire Department
- Electrical Grid
- Labor Support
- Design/Drafting



Safeguards and Security

- Human Performance Improvement
- Protective Force (Guards)
- Emergency Communications
- Training
- Performance tests
- Security Systems

Understanding Demand Helps Us:

Talent Pipeline Plan

Collaborate with community and education leadership (K-career) to build capability through grants, programs, capacity.

Succession Plan

Designate a plan for retirees and new positions.

Strategically Recruit Talent

Focuses efforts through information on positions, head count, timing.

Forecast and Assess

Internal/external supply and demand; labor costs; company growth rates; and company revenue.

Build Subcontractor and Labor Partnerships

Insight to determine make vs buy and strategy to build regional pipelines to support internal and external staff needs.

Capture Internal Workforce Development Opportunities

Develop current workforce to fill key areas. Up-training priorities to navigate retention strategies and internal transferring.

Keep Updated Metrics

Ongoing updates determine the effectiveness of workforce planning.



How Statistical Analysis and Qualitative Knowledge Work Together

1. Combine historical hiring and attrition data from FY16-FY20 and department financial data, provide to hiring managers for baseline.
2. Hiring managers provide estimated openings, by WDC, for both anticipated growth and attrition (voluntary leaves and retirement).
3. Data is collected, aggregated and sent out for a final adjustment phase.
4. Regression model analysis, capturing growth potential by work family, is run alongside staff plans and adjusted as needed.
5. Regression model analysis, capturing potential voluntary leaves attrition is run alongside staff plan data and adjusted if needed.
6. Age demographics analysis is run alongside data and indicators of retirement waves are specified on data presentation.

Data Parameters

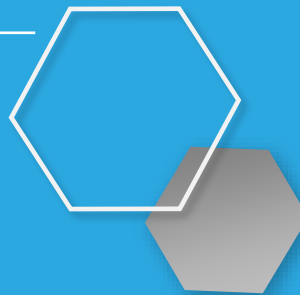
Timeline:

- FY2022 – FY2026

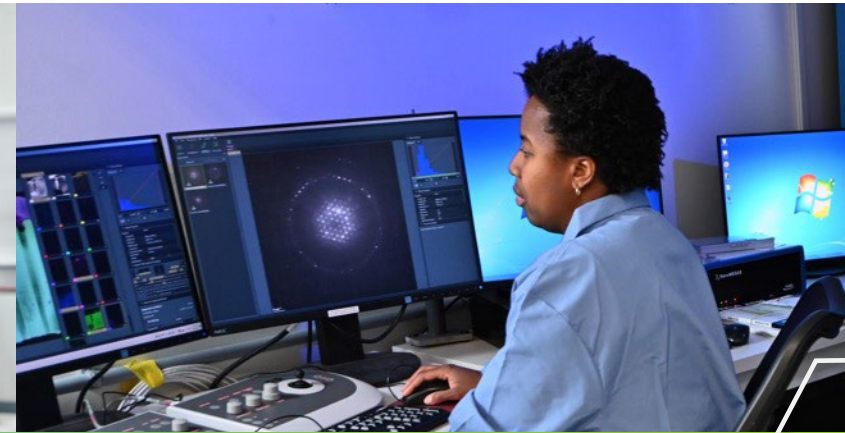
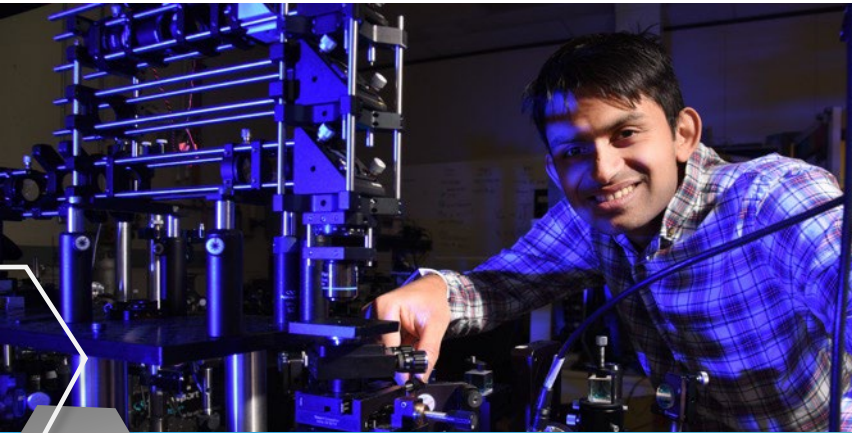
Annual Data Collection, Aggregation and Analysis:

- **FY** – *anticipated Fiscal Year for the position opening*
- **New Position/Replacement** – *indicate if this position is a new position or a replacement of a vacant position*
- **Funding Type and Source**
- **Job Code, Title, Organization, & Appointment Type**
- **Job Level** (*Required and Preferred*)
- **Education Requirement** (*Required and Preferred*)
- **Priority Type** –
 1. This position has secure funding and a determined position description critical to mission deployment
 2. This position has secure funding and is of benefit to mission but not critical
 3. This position has questionable or uncertain funding and the mission need is unclear in current conditions but indicated as a future need

These are full-time INL employment opportunities. Future construction positions associated with these organizations, other part-time and contracted positions are not counted here.



Work Families



For these purposes, occupations and projected hires will be categorized generally by work discipline, ***including:***

- Facility Services/Operations
- Specialty Occupations
- Managerial
- Engineering
- Science
- Computer Engineering/Information Systems
- Business Services
- Technician
- Union Trade

Annual Projected Openings

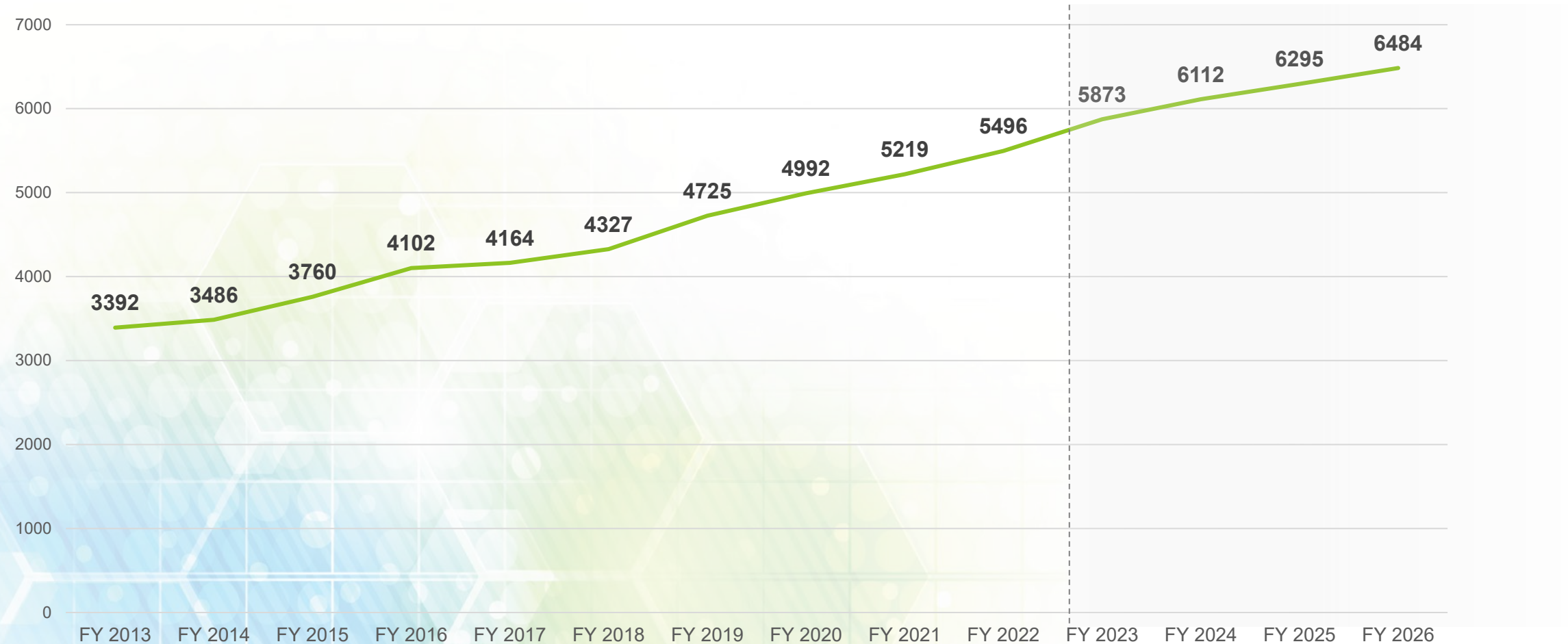
2,853 *Total Anticipated Openings*

Openings	FY22	FY23	FY24	FY25	FY26	Grand Total
New Position	456	381	237	177	187	1444
Replacement	441	265	272	262	175	1409
Grand Total	897	646	509	439	362	2853

These openings include research and enablement positions depicting workforce needs that range vastly in *educational levels, experience* and *background*.



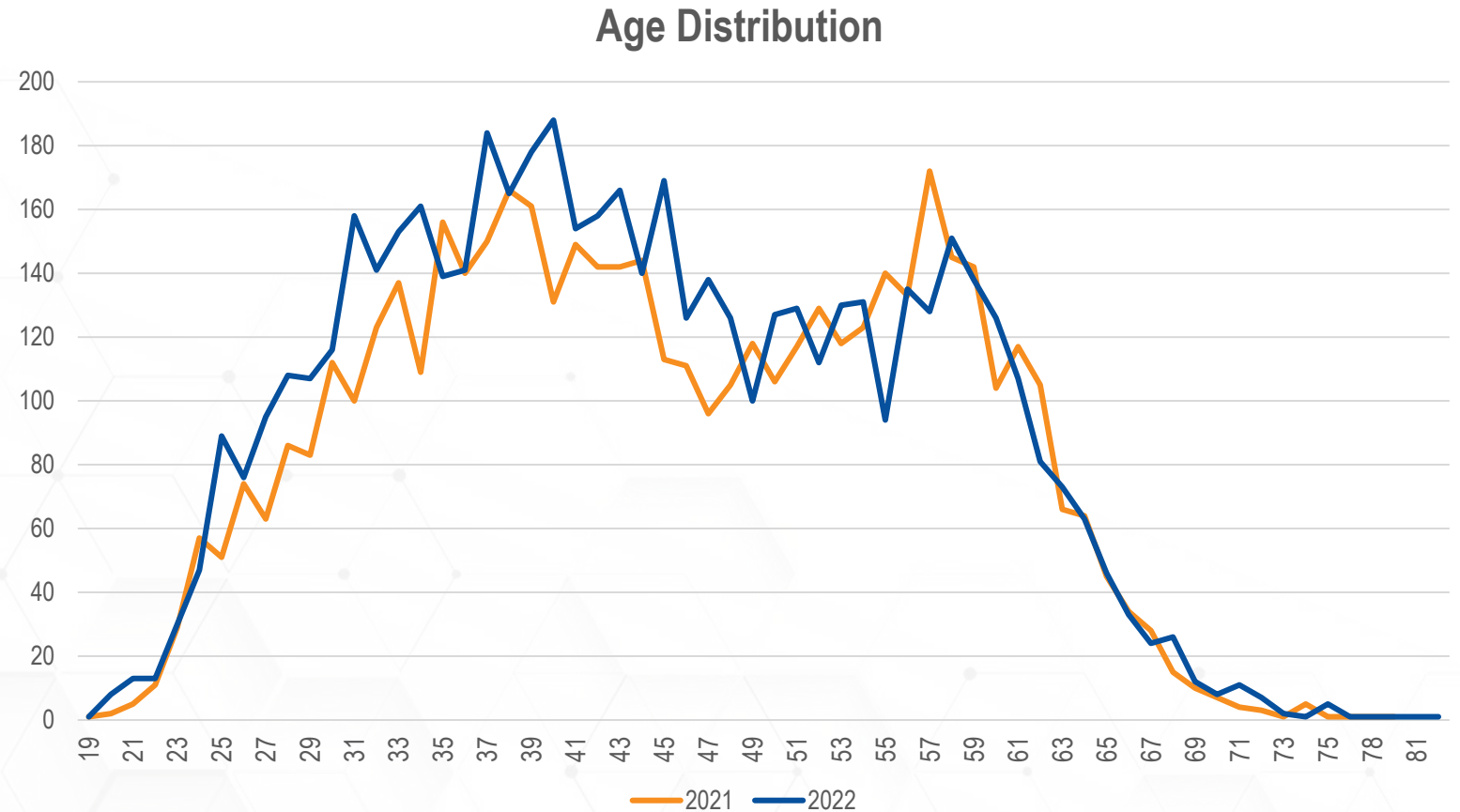
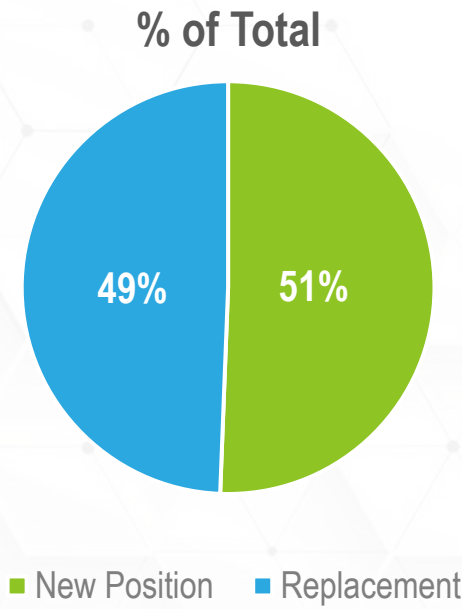
Headcount Growth Reflects Growth of the Laboratory



Headcount growth continues to sustain mission growth and outpace turnover.

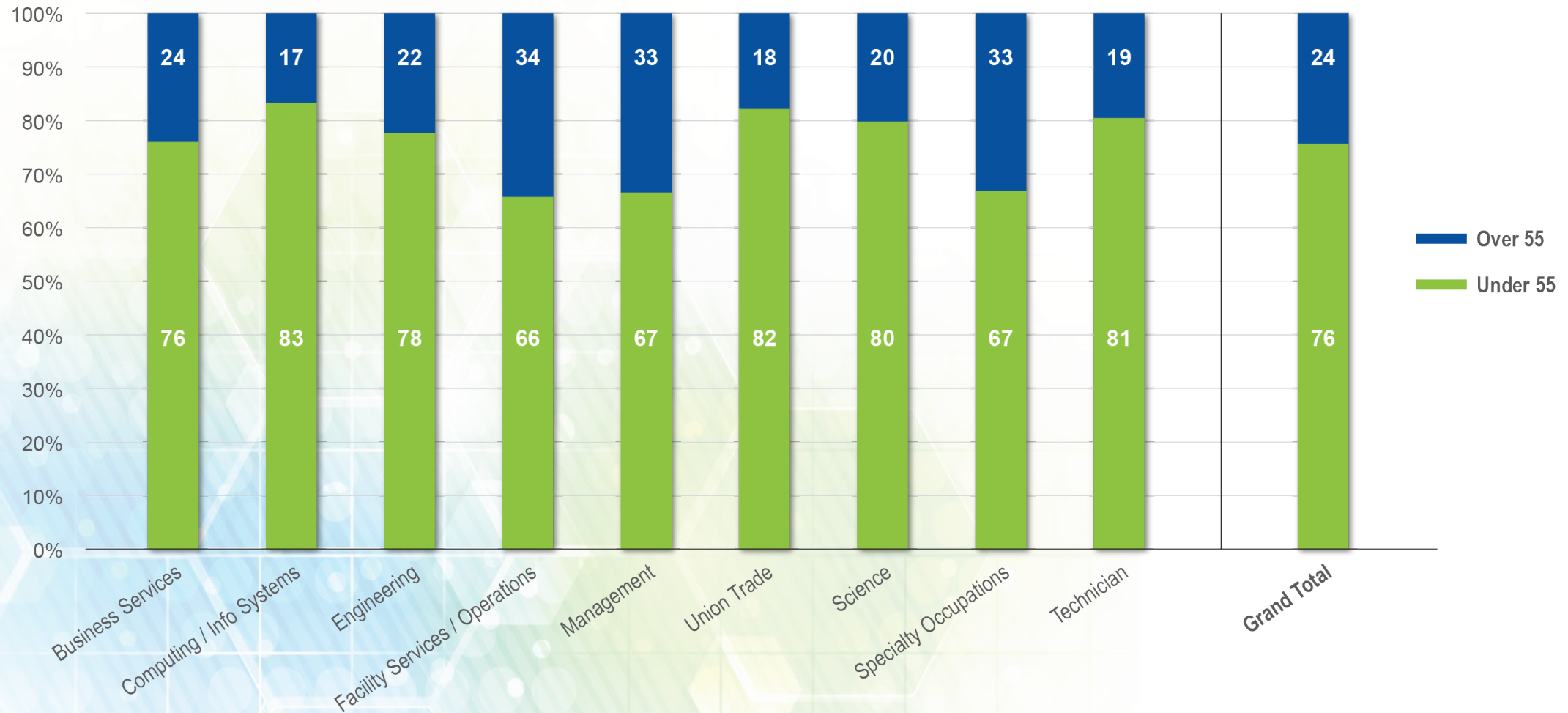
Distribution of Openings & INL's Demographics

New Growth vs. Attrition



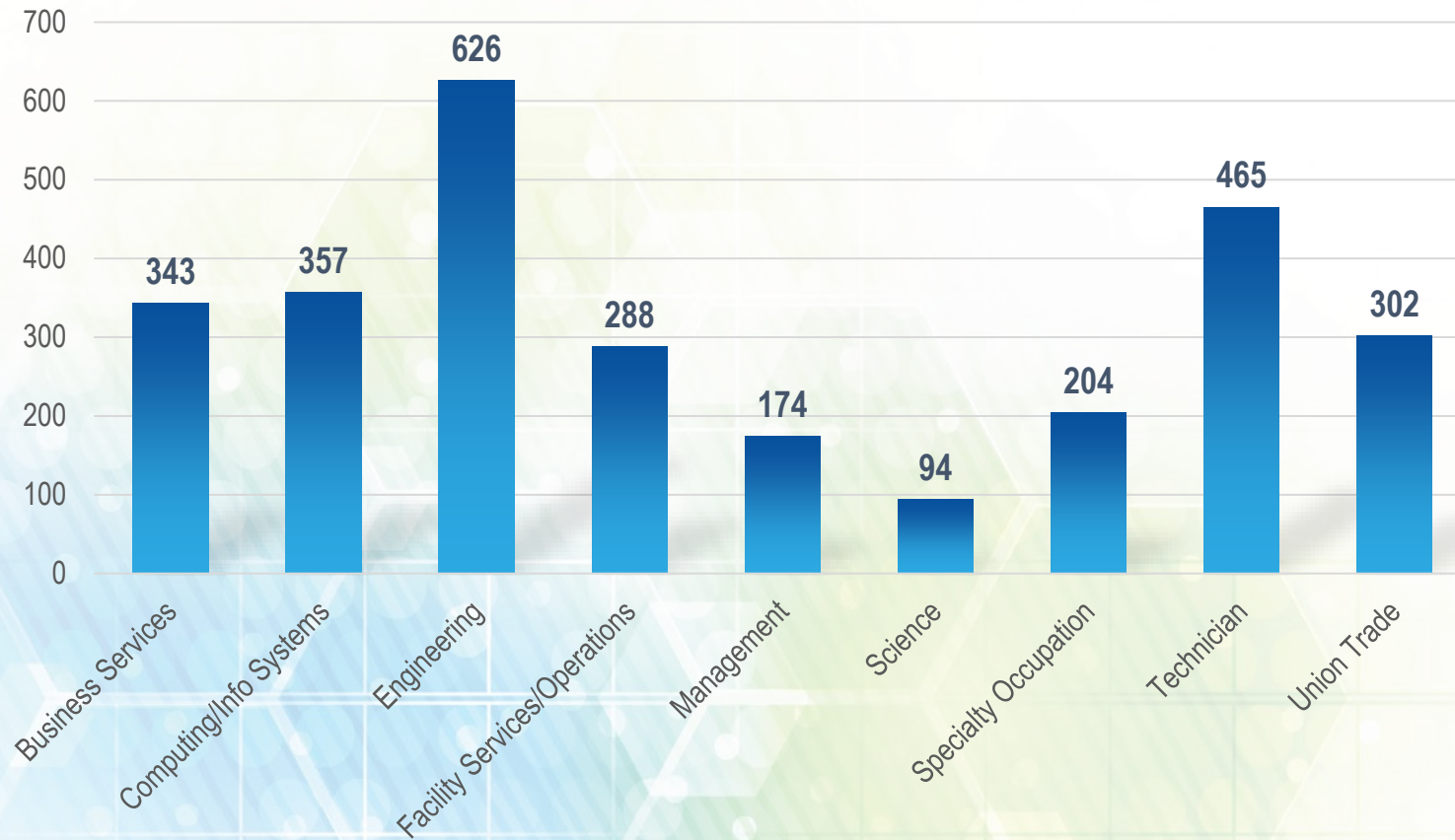
Analyzing Our Current Workforce

Age Breakdown and Potential Retirement Risks



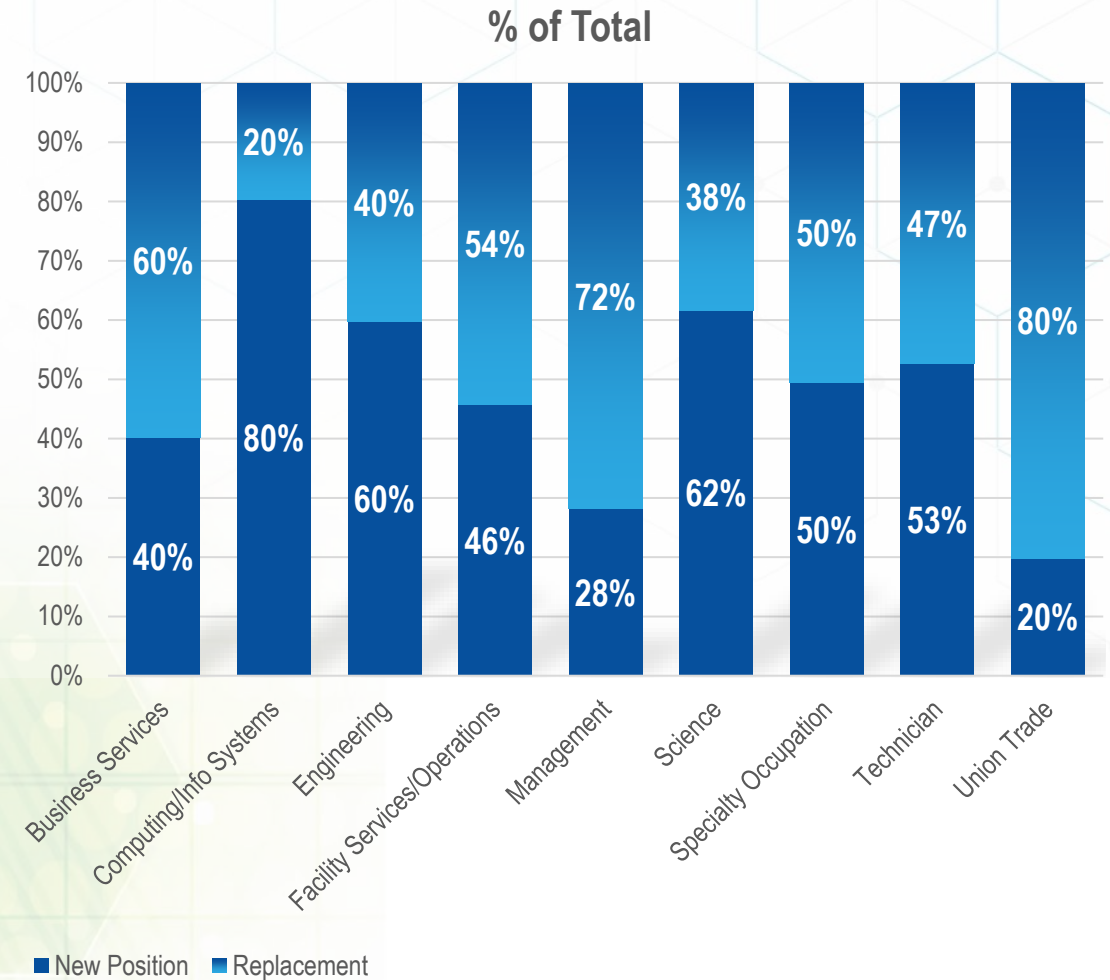
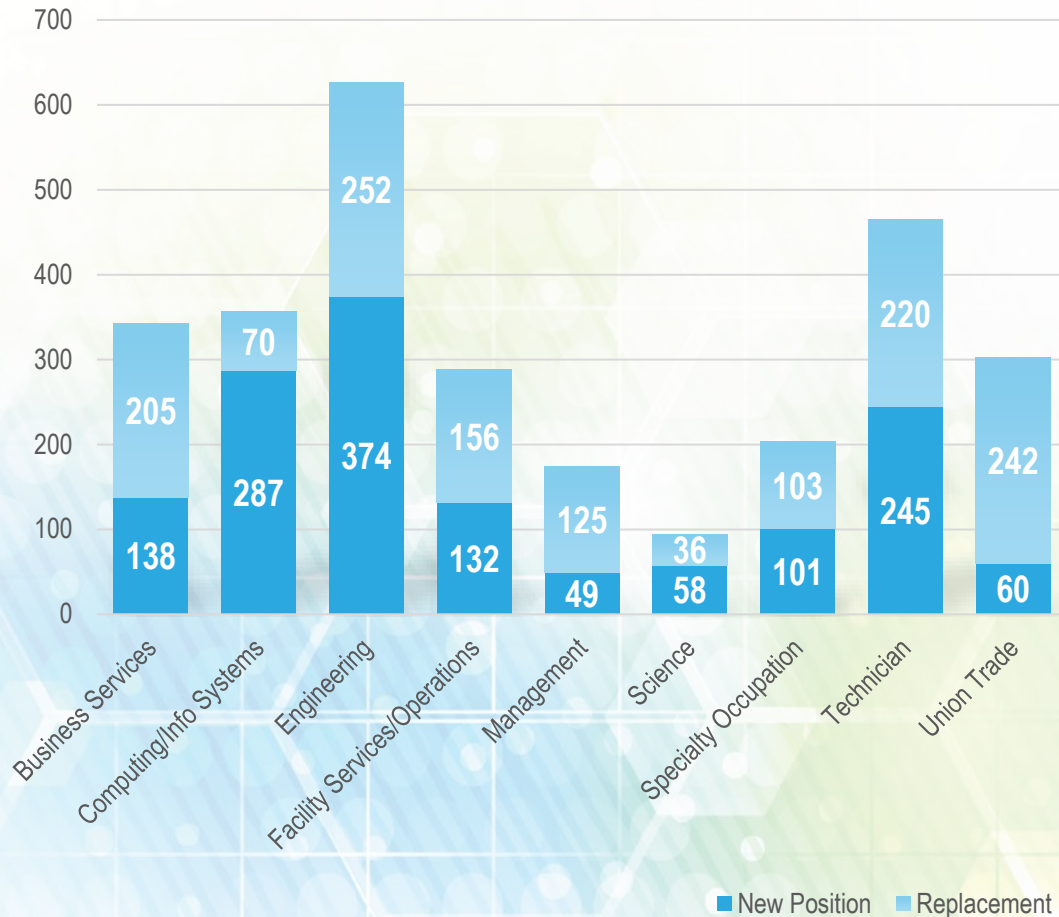
Projected Openings by Work Family

Total Anticipated Openings Through FY25



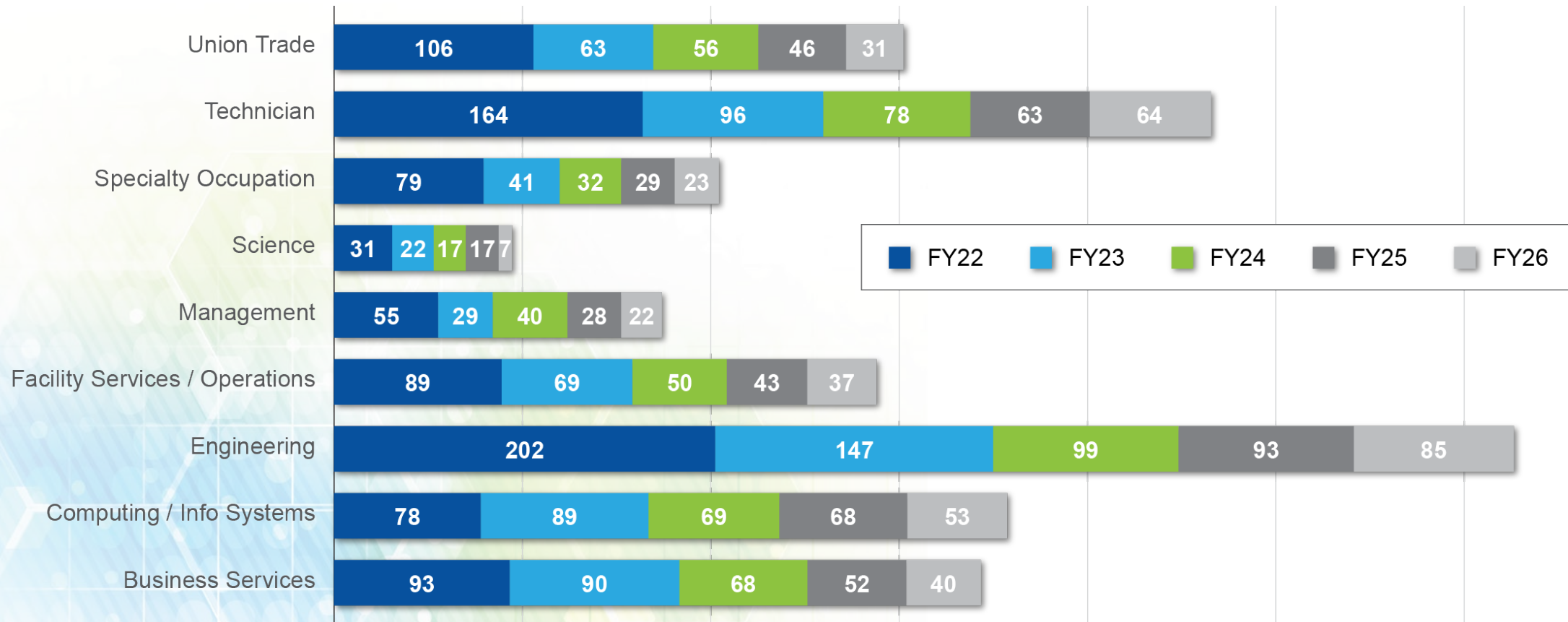
Projected Openings by Work Family

New Growth vs. Replacement Counts



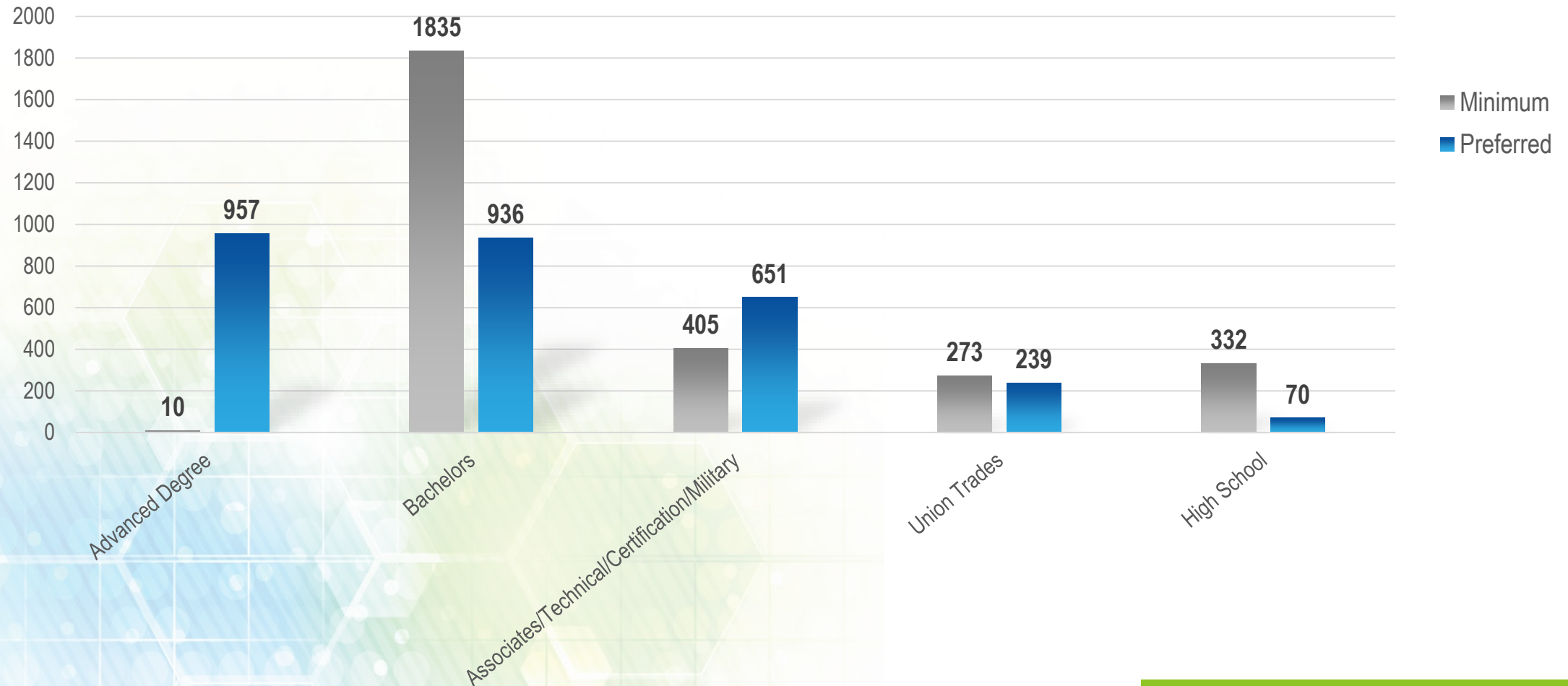
Projected Openings by Work Discipline

Projection Total Broken Down by Fiscal Year



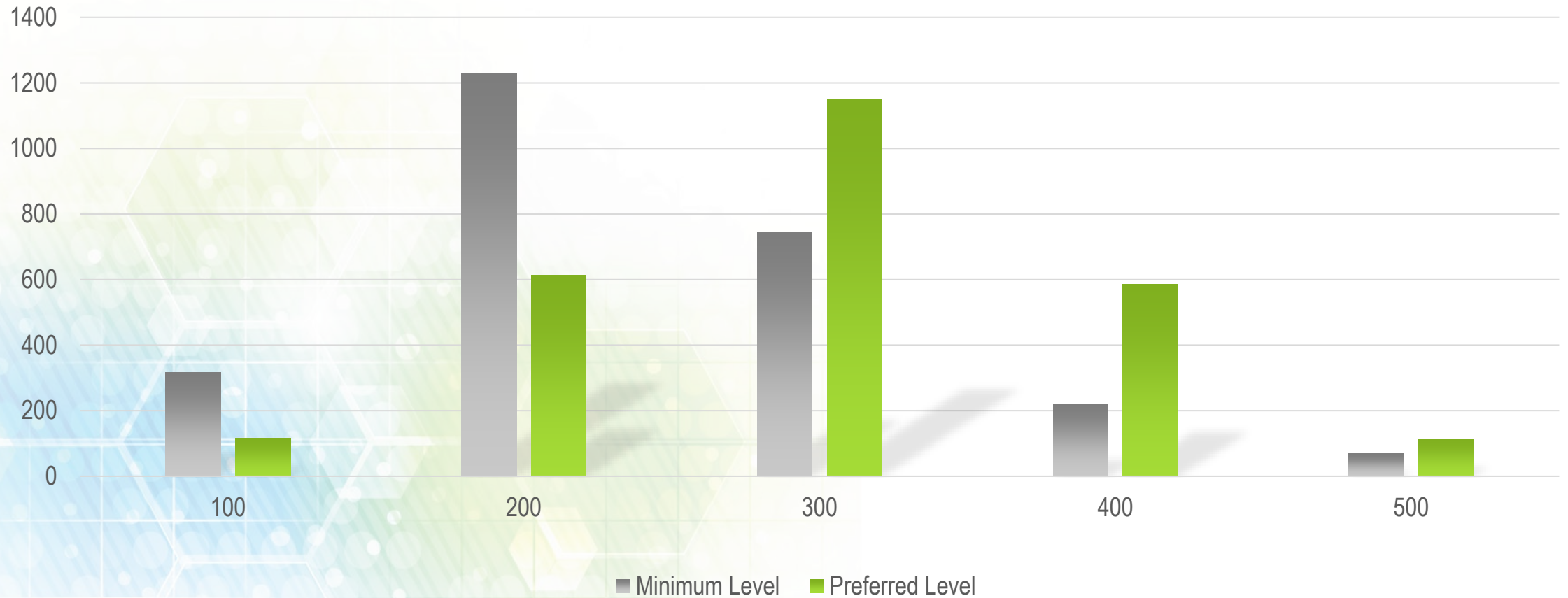
Projected Openings by Education Requirements

Minimum Education Requirement vs Preferred Education Level Upon Entry



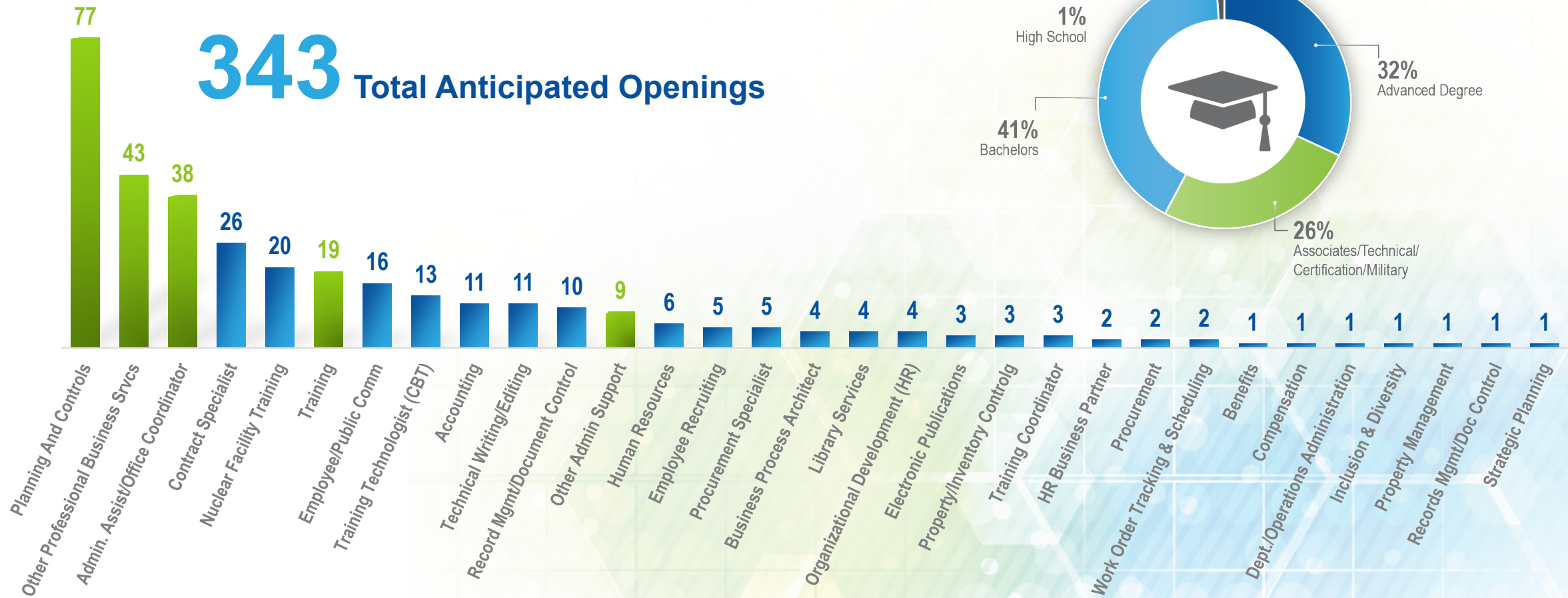
Projected Openings by Job Level Requirements

Minimum Job Level Requirement vs Preferred Level Upon Entry



Business Services Openings

343 Total Anticipated Openings

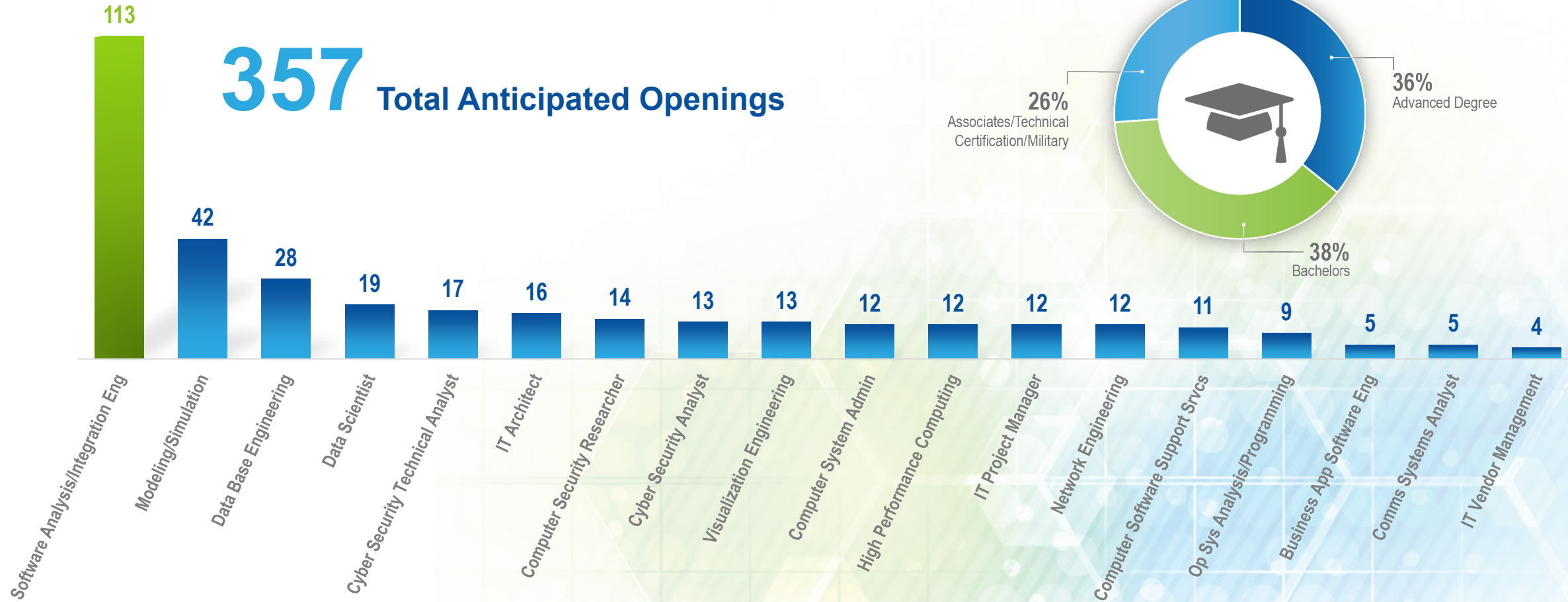
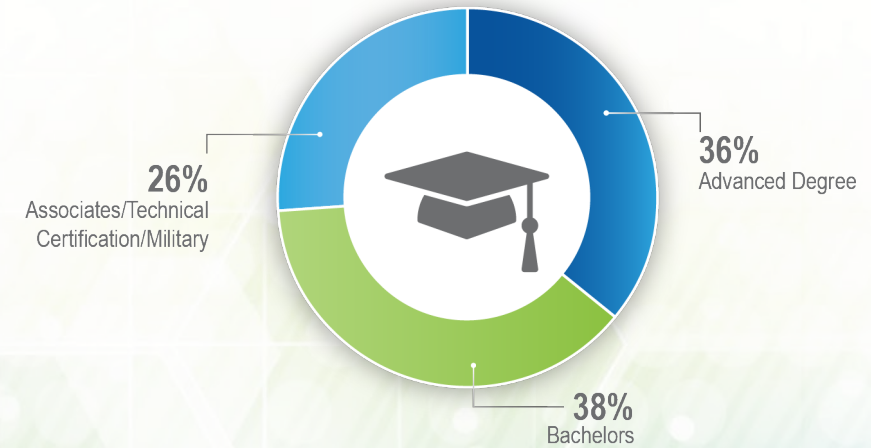


■ Indicates occupations with high risk for retirement

Computer Engineering and Information Systems

357 Total Anticipated Openings

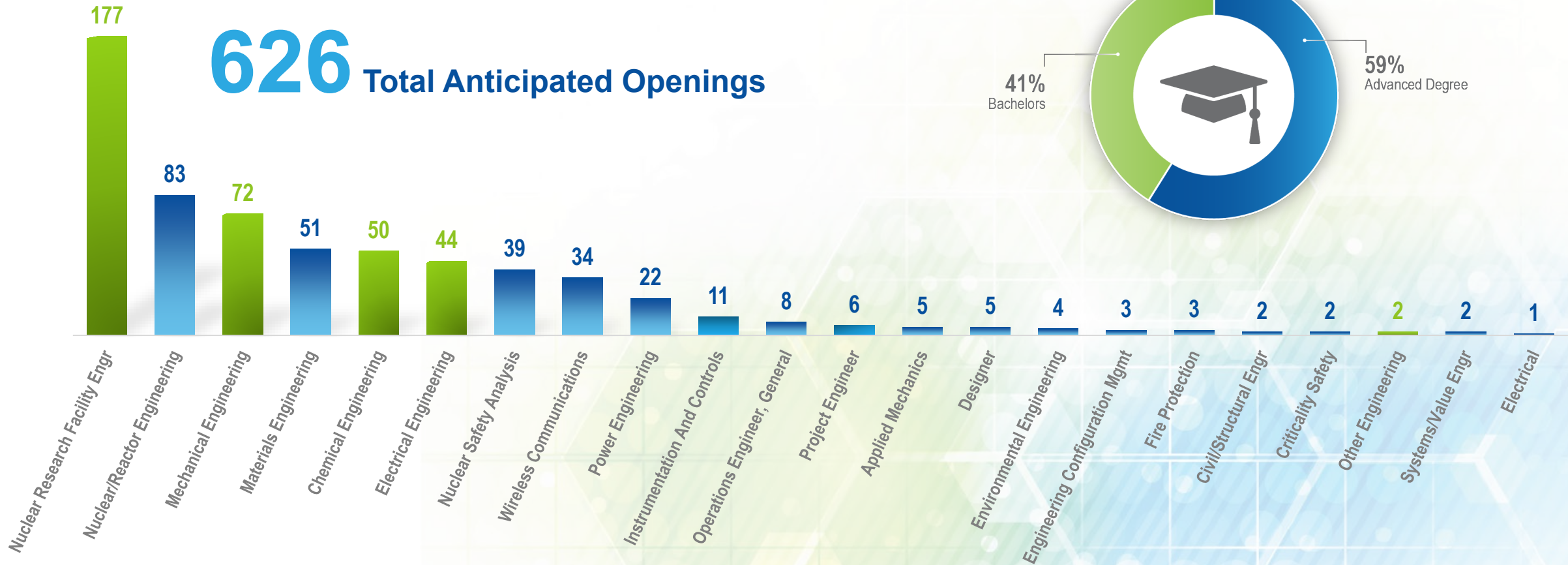
Preferred Education Upon Entry



■ Indicates occupations with high risk for retirement

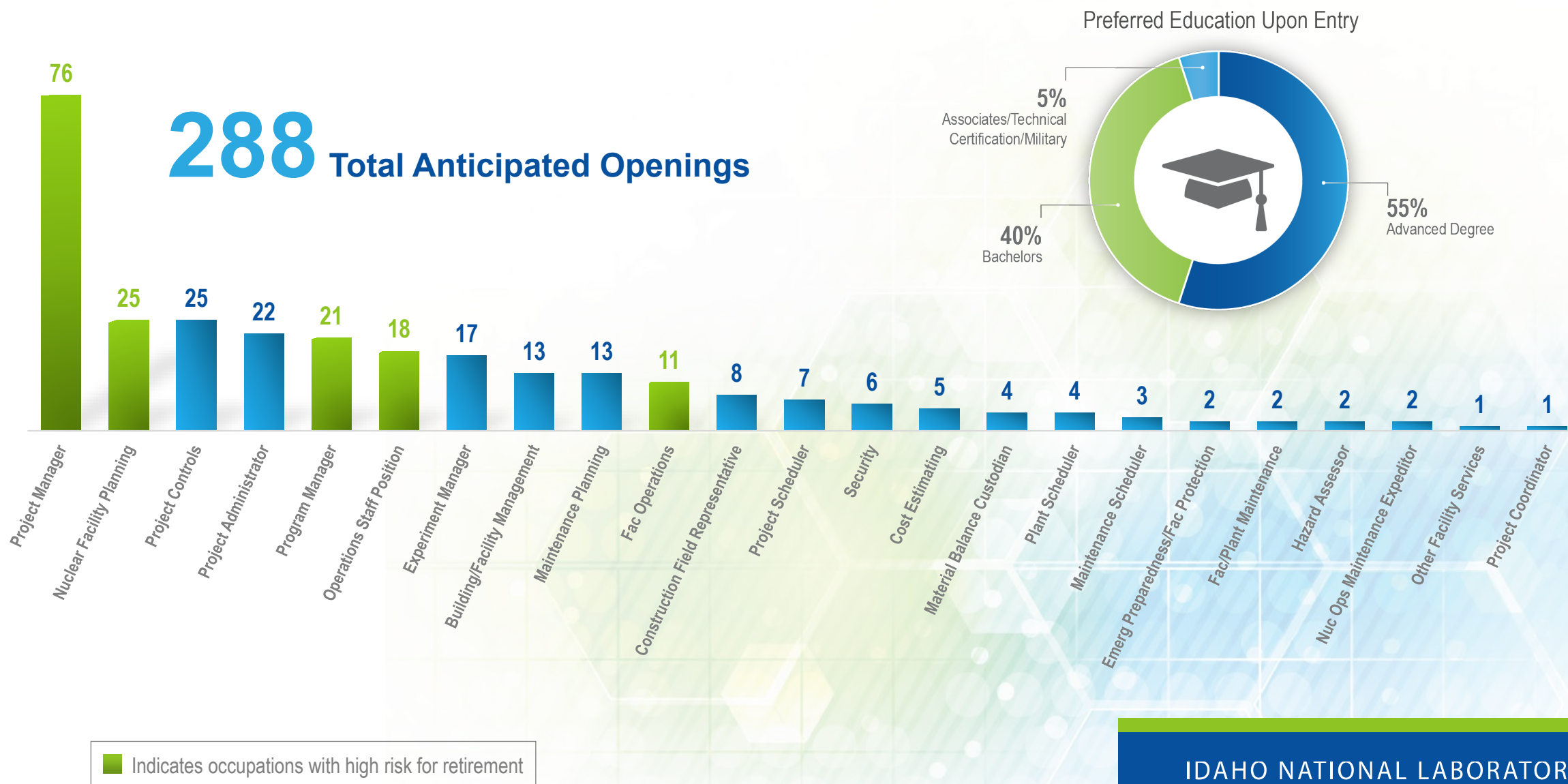
Engineering

626 Total Anticipated Openings



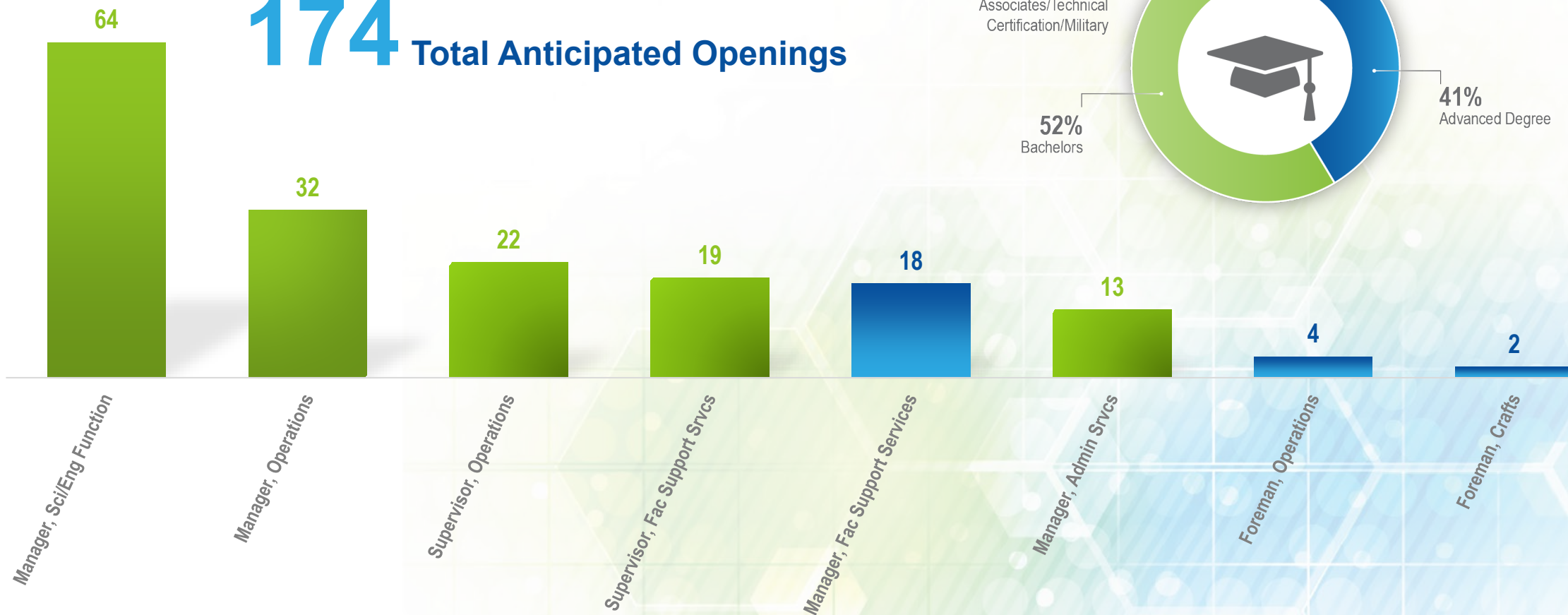
■ Indicates occupations with high risk for retirement

Facility Services and Operations



Management

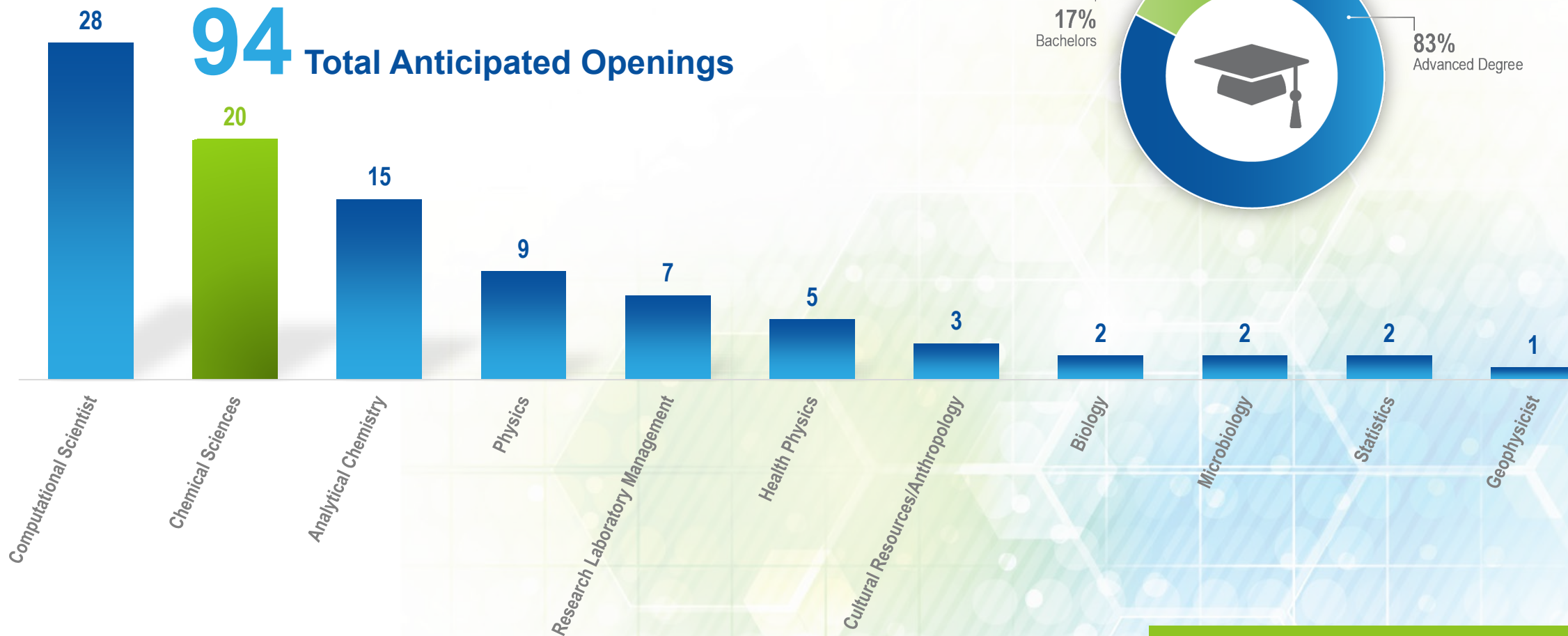
174 Total Anticipated Openings



■ Indicates occupations with high risk for retirement

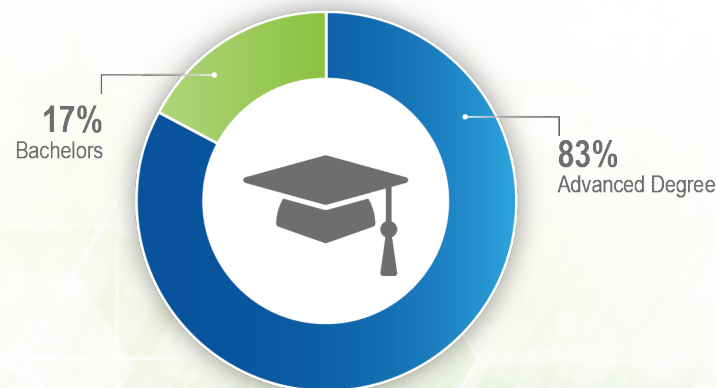
Sciences

94 Total Anticipated Openings

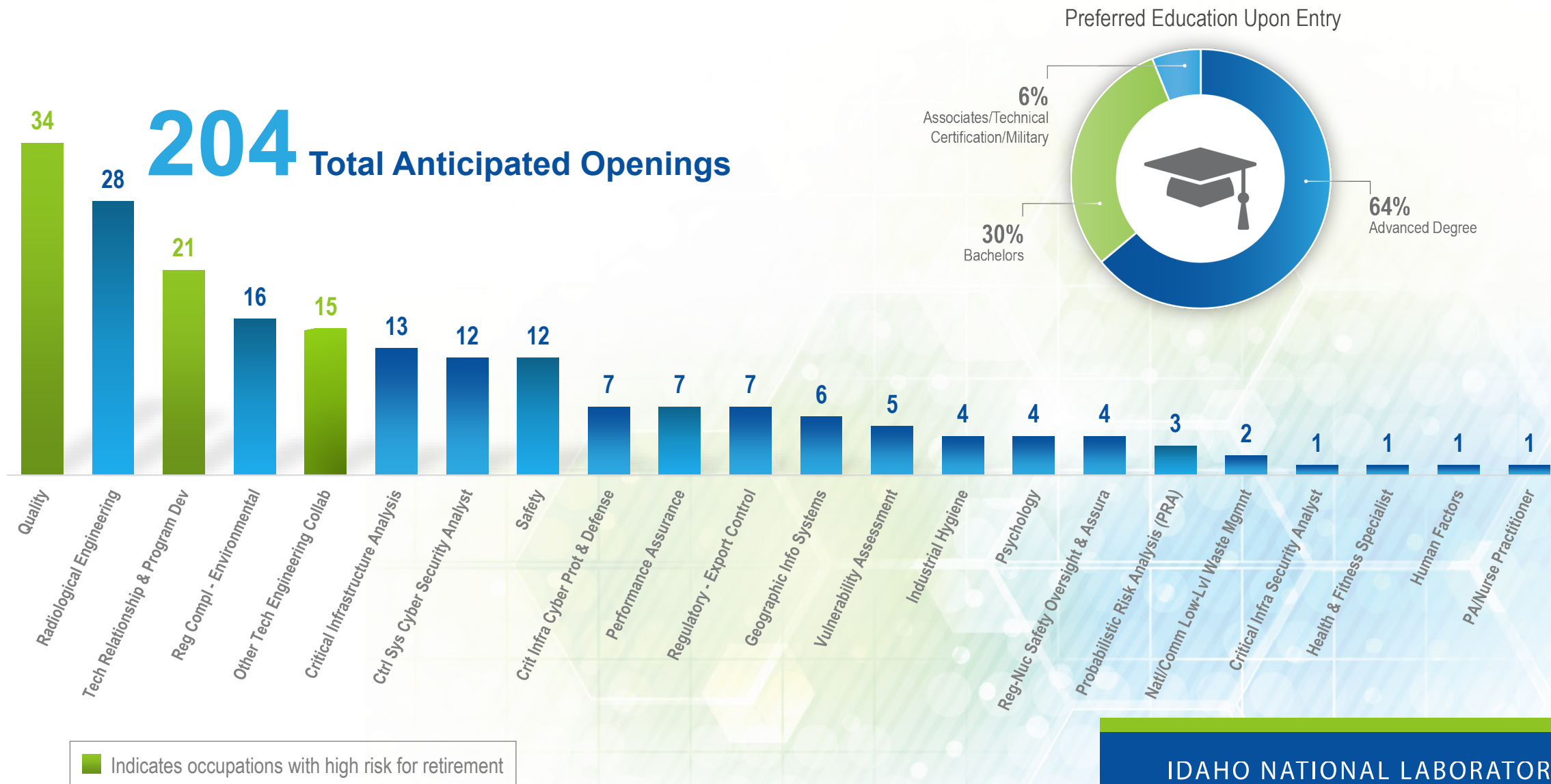


■ Indicates occupations with high risk for retirement

Preferred Education Upon Entry



Specialty Occupations



Technicians

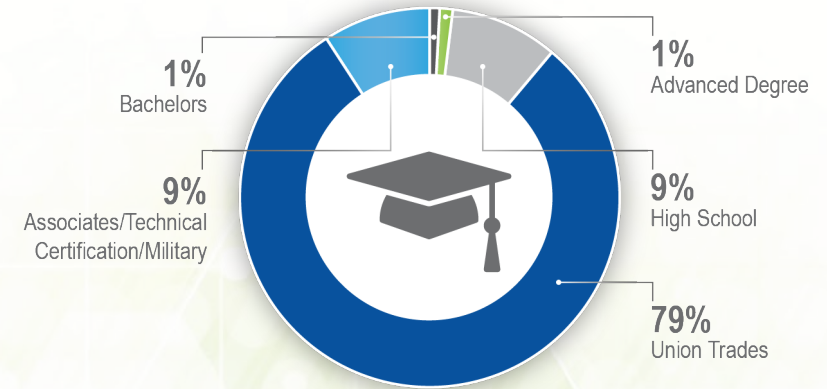


Union Trade Positions

302 Total Anticipated Openings



Preferred Education Upon Entry

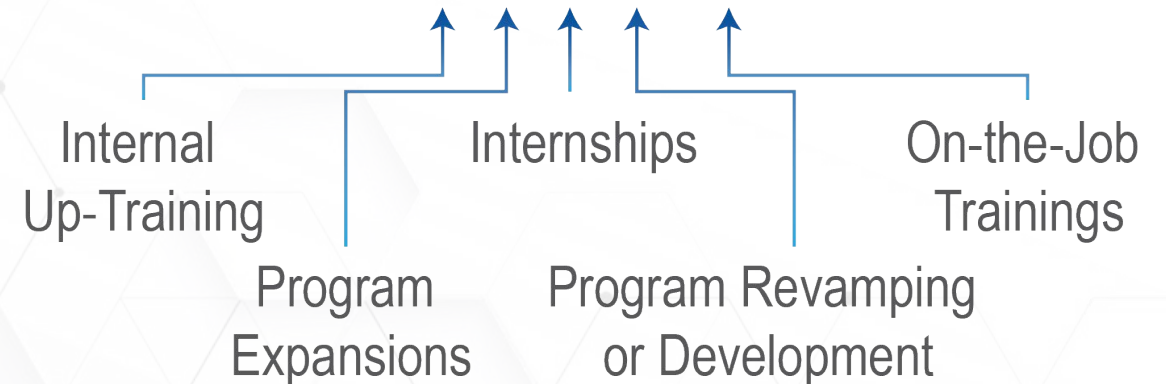


■ Indicates occupations with high risk for retirement

How are We Developing the Future Workforce?

To create a ***well-trained, diverse, and abundant workforce*** there must be multiple routes into any career.

1. Prioritize development where demand is the greatest
2. Improve the ways we already approach developing the workforce
3. When necessary, develop new pipeline on-ramps, expansions or contractions



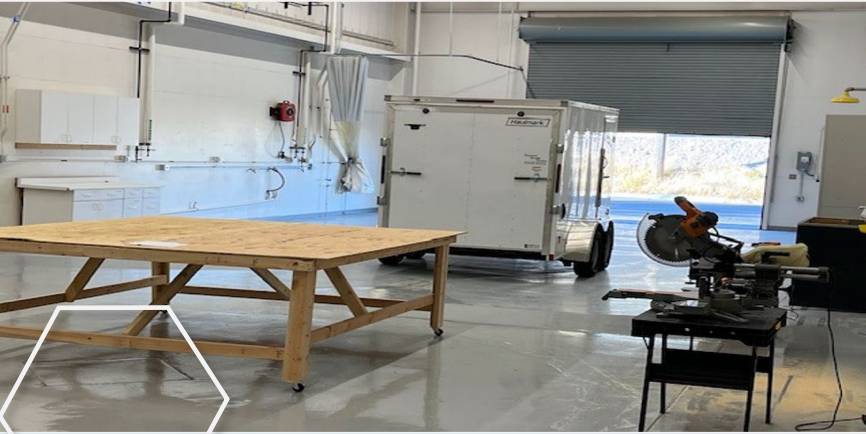
Community College Engagement

- Create relationships with state and regional colleges
- Build pathways- expand practicum and internship programs across the state
- Facilitate collaboration between higher education institutions
- Expand opportunities in areas of mutual interest
- Create professional development opportunities



*INL MOU signing with
College of Eastern Idaho*

Eastern Idaho Workforce Training Center (EIWC)



Industry led and community supported skilled trades training workforce development opportunities in Eastern Idaho:

- 32,000 sq.-feet & 8.47 acres
- 8 high-bays
- 6 classrooms
- Flexible use space
- Employer led trainings
- Instructor led trainings

Talent Pipeline Management Initiative



Building Idaho's Energy Future

- **Drive alignment** for the regional energy economy
- Execute sophisticated, operational, and **actionable priorities**
- Partner with stakeholders from **all industries** across advanced energy sector
- Proactively **shape Idaho's energy economy** and its regional impacts



IDAHO
ADVANCED ENERGY
CONSORTIUM

Workforce & Education • State & Local Impacts • Supply Chain • Economic Development





Idaho National Laboratory

Battelle Energy Alliance manages INL for the U.S. Department of Energy's Office of Nuclear Energy. INL is the nation's center for nuclear energy research and development, and also performs research in each of DOE's strategic goal areas: energy, national security, science and the environment.

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