



Introductions



Meet Our Team



Paul Leef
Project Manager



Steve Schonberger
Space Needs
Coordinator

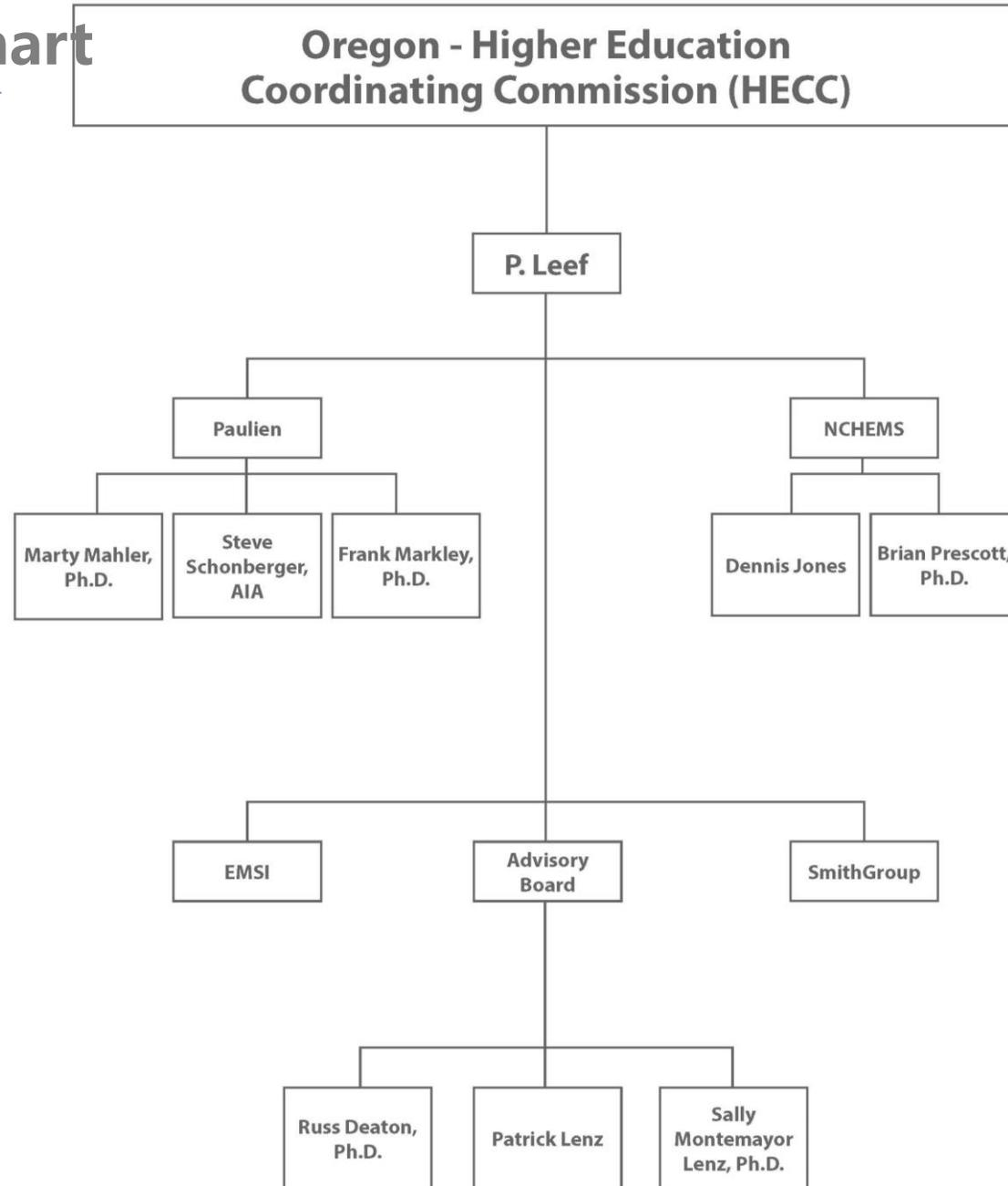


Brian Prescott
NCHEMS



Dennis Jones
NCHEMS

Organization Chart



About Paulien & Associates

- Understanding of the academy from the inside
- Breadth & depth of higher education experience
- Expertise in data management and visualization
- Space Needs Assessments and Analytics
- Benchmarking
- Capital Planning
- Process and Policy Recommendations

PAULIEN & ASSOCIATES

700 Campuses

49 States

10+ State Systems

38 Years in Higher
Education Planning



- Data collection and analysis
 - Space and utilization analysis
 - Space Benchmarking
 - Alignment of academic plans with facility plans
 - Gap analysis
- Space models
 - Space needs as related to enrollment, workforce needs
 - Translating programmatic and student success needs into space
- Aligning capital planning with statewide strategic goals
 - Best practices in capital planning
 - Assessment of regional needs
- Design for a strategic capital planning process

About the National Center for Higher Education Management Systems (NCHEMS)



- Private non-profit
- Mission is to improve strategic decision-making in higher education for states and institutions
- Rely heavily on data, but also stakeholder engagement
- Assume the perspective of students and the public
- Current & recent projects:
 - State- or system-wide strategic planning (Utah, Pennsylvania, Connecticut, Wyoming)
 - Strategic finance (affordability, performance funding, etc.)
 - Workforce outcomes & alignment to education
- Notable previous technical assistance provided to Oregon
 - Governance: creation of HECC
 - Models for Oregon promise program
 - Oregon Opportunity Grant redesign (WICHE-provided)

- Data collection and analysis – statewide and for regions
 - Environmental scan – current conditions, trends and projections, workforce needs, etc.
 - Data visualizations
 - Stakeholder engagement
 - Projection of enrollment and workforce demands
- Heuristic models
 - Student Flow (examples follow)
 - Industry – occupation
- Aligning capital planning with statewide strategic goals
 - Alternative delivery modes
 - Multi-campus collaboration
- Design for a strategic capital planning process

Today's Agenda

OUR APPROACH

- Kick-off, Process Preparation, Data Collection & Review
- Data Analysis
- Facilitation of Meetings and Discussions
- Development of Space Needs & Capital Plan Framework (including alternative delivery modes)
- Project Schedule

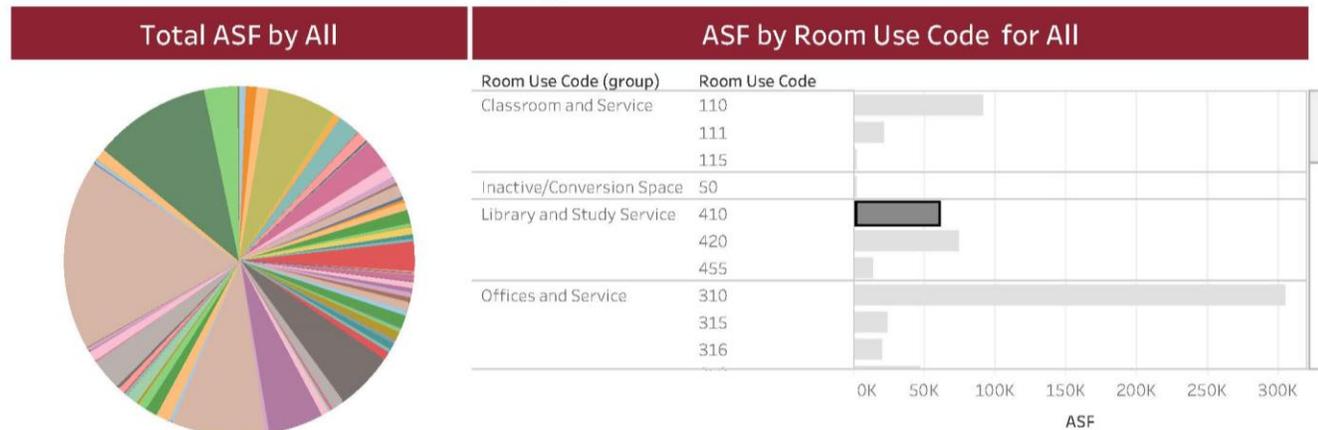
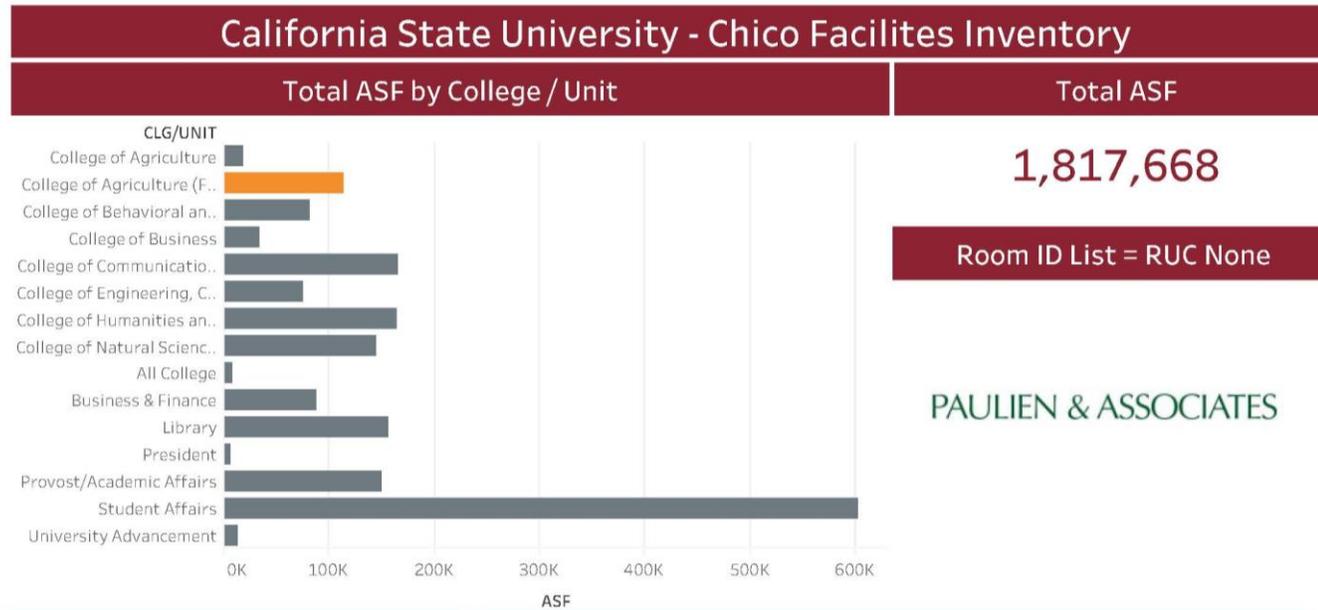
DISCUSSION

Kick-off, Data Collection

- Kick-off Meeting at HECC
- Data Collection - Institutions
 - Academic Plans
 - Facility and Capital Plans
 - Deferred Maintenance Facility Condition Assessments
 - Space Inventory Data
 - Research Expenditure
 - Enrollment and Enrollment Projections
 - Student Data
 - Student Success Data
- Other:
 - EMSI
 - Public sources
 - HECC



Data Analysis: Space

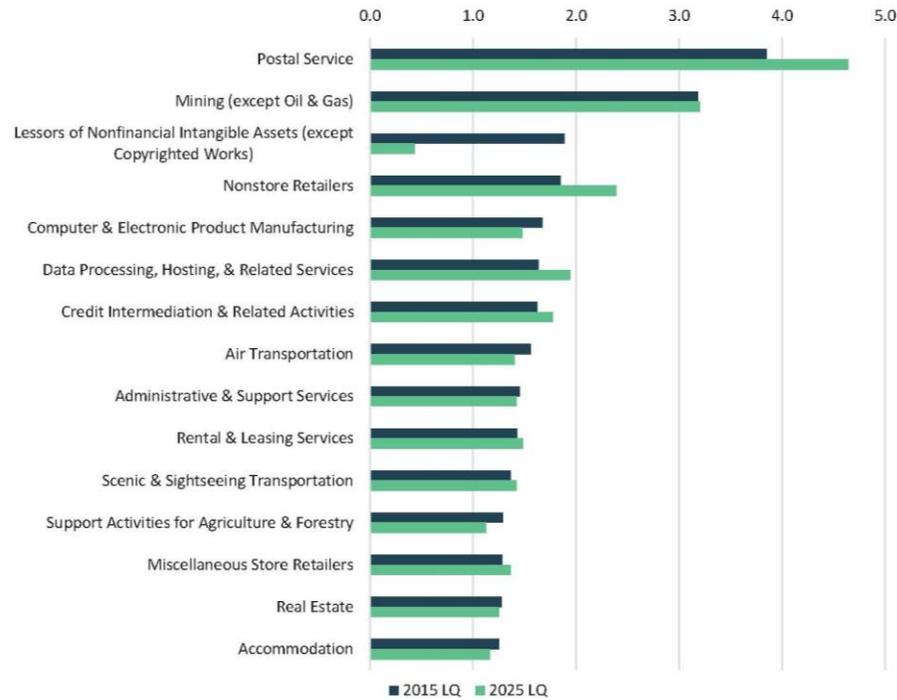


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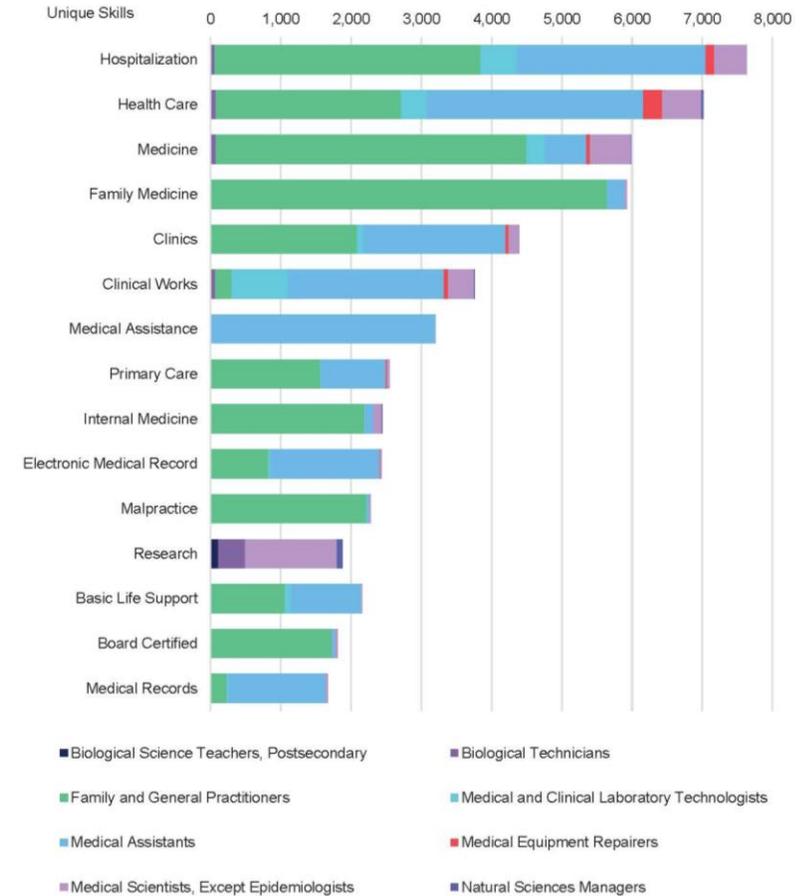
Data Analysis: Occupational Gaps

Figure 5.6 - Employment Concentration (LQ) by Industry Sector in Arizona, 2015 to 2025

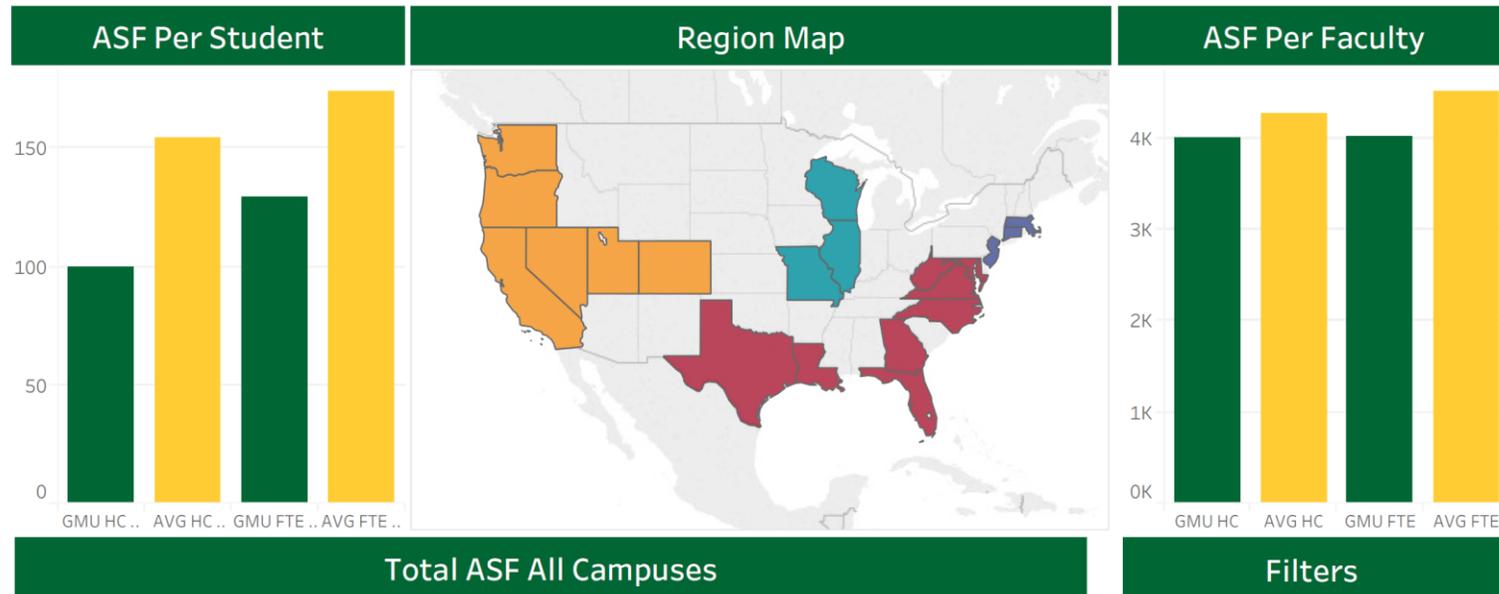


Source: QCEW Employees, Non-QCEW Employees, and Self-Employed Data 2016.4.

Figure 5.11 - Top Fifteen Unique Skills for Job Postings Related to Biological Sciences in Arizona

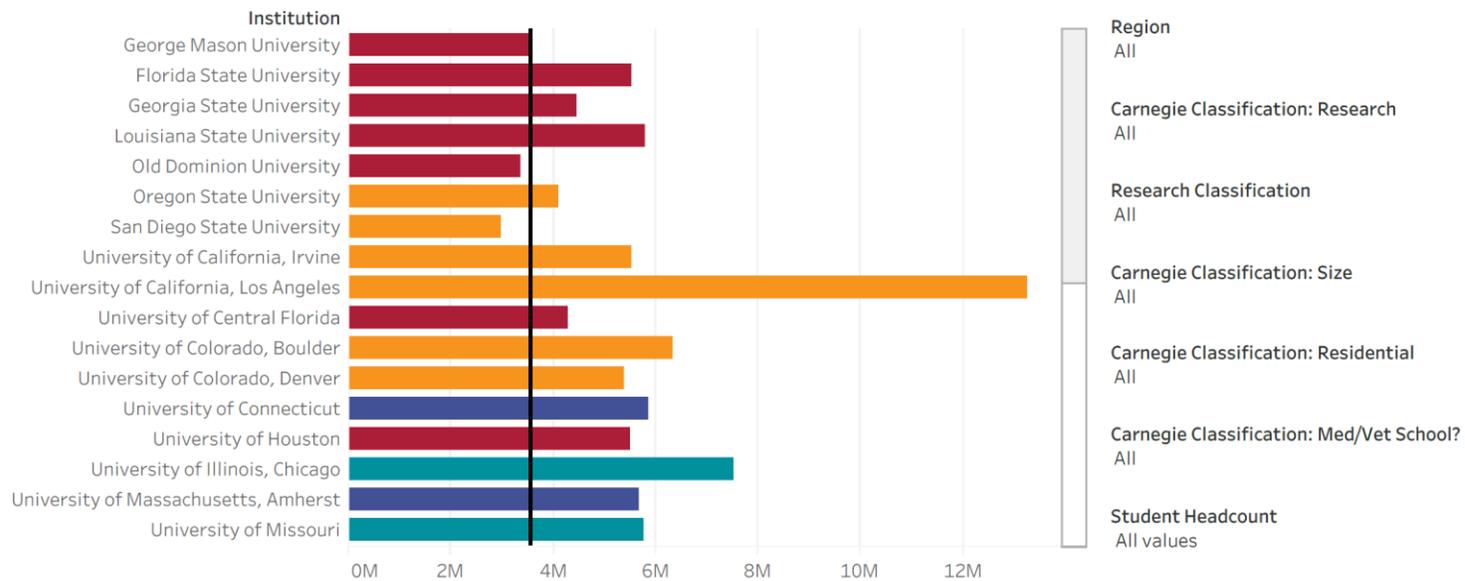


Data Analysis: Benchmarking

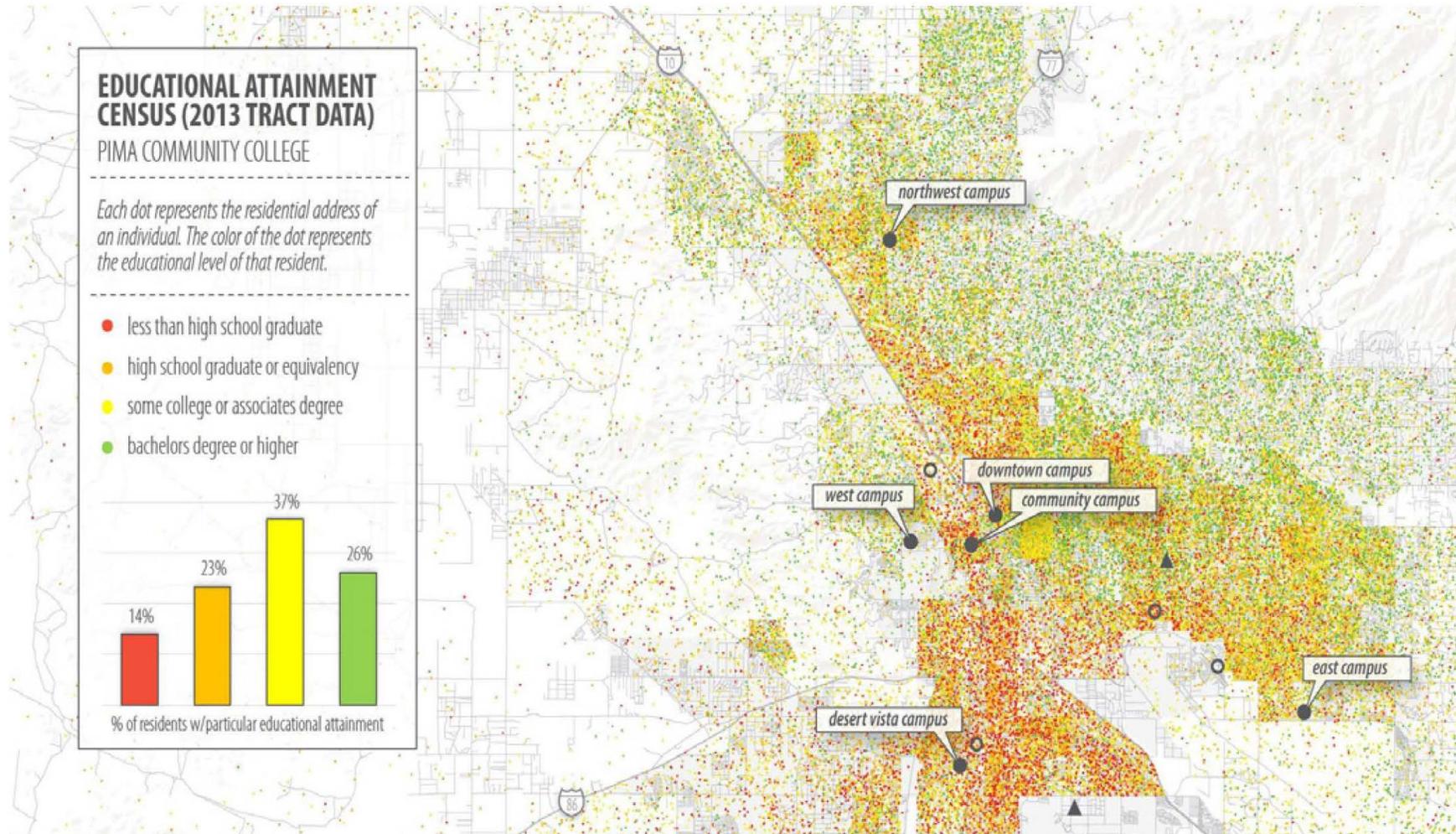


Total ASF All Campuses

Filters



Data Analysis: Geographic Informational System (GIS)

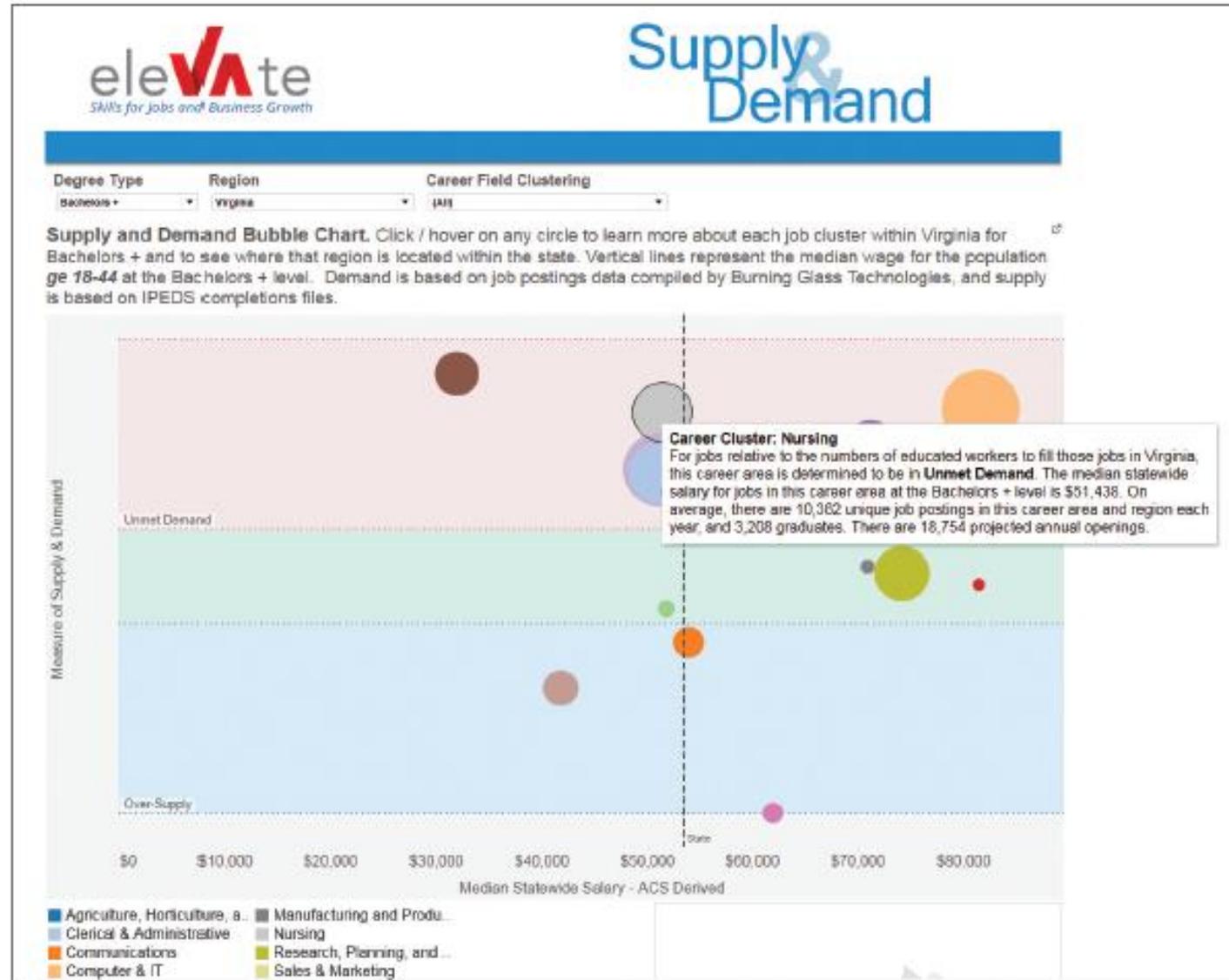


Engagement: Meetings

- Initial Campus Visits
 - Data verification
 - Understanding facility and academic program needs
- Follow-up Campus Visits
 - Facilities personnel
 - Engage local campus, economic and workforce development stakeholders
- Regular Touchpoints
 - CFO's
 - HECC Agency
 - Commission



Example: Supply & Demand Analysis



Example: Student Flow Model

Calculating the Economic Value of Increasing College Credentials by 2025

Utah

[Start Over](#)
[Save Scenario](#)
[Print Page](#)

[Increase College Attainm...](#)
[View Returns on Investm...](#)
[Instructions and Definiti...](#)

Set Postsecondary Performance Goals for Year 2025

Avg. of Top 3 States | Increase College Access

High School Graduation Rate 80.4%

College-Going Rate Directly from High School 45.1%

20 to 39 Year Olds Enrolled in College 0.85%

Increase Number of College Credentials

Public Research 23.7

Public Bachelor's and Master's 25.0

Public Two-Year 22.2

Private Colleges 21.6

Undergraduate Credentials Awarded per 100 Students

Change Enrollment Patterns of Additional First-Time Students

	Directly from High School	20 to 39 Year Olds
Public Research	28% <input type="range" value="28"/>	15% <input type="range" value="15"/>
Public Bachelor's and Master's	31% <input type="range" value="31"/>	30% <input type="range" value="30"/>
Public Two-Year	10% <input type="range" value="10"/>	29% <input type="range" value="29"/>
Private Sector	31% <input type="range" value="31"/>	26% <input type="range" value="26"/>
Must Equal 100%	100% <input type="range" value="100"/>	100% <input type="range" value="100"/>

2025 Enrollment patterns of additional first-time students as a result of the improvements made above.

Optional: Set 2025 College Attainment Goal (%)

60.0

Gap: Additional Degrees Needed to Meet Goal

118,815

Results: Additional Undergraduate Credentials Awarded by 2025

Associate's + Bachelor's

= Additional Degrees 16,834

Undergraduate Certificates

Total Additional Undergraduate Credentials 16,418

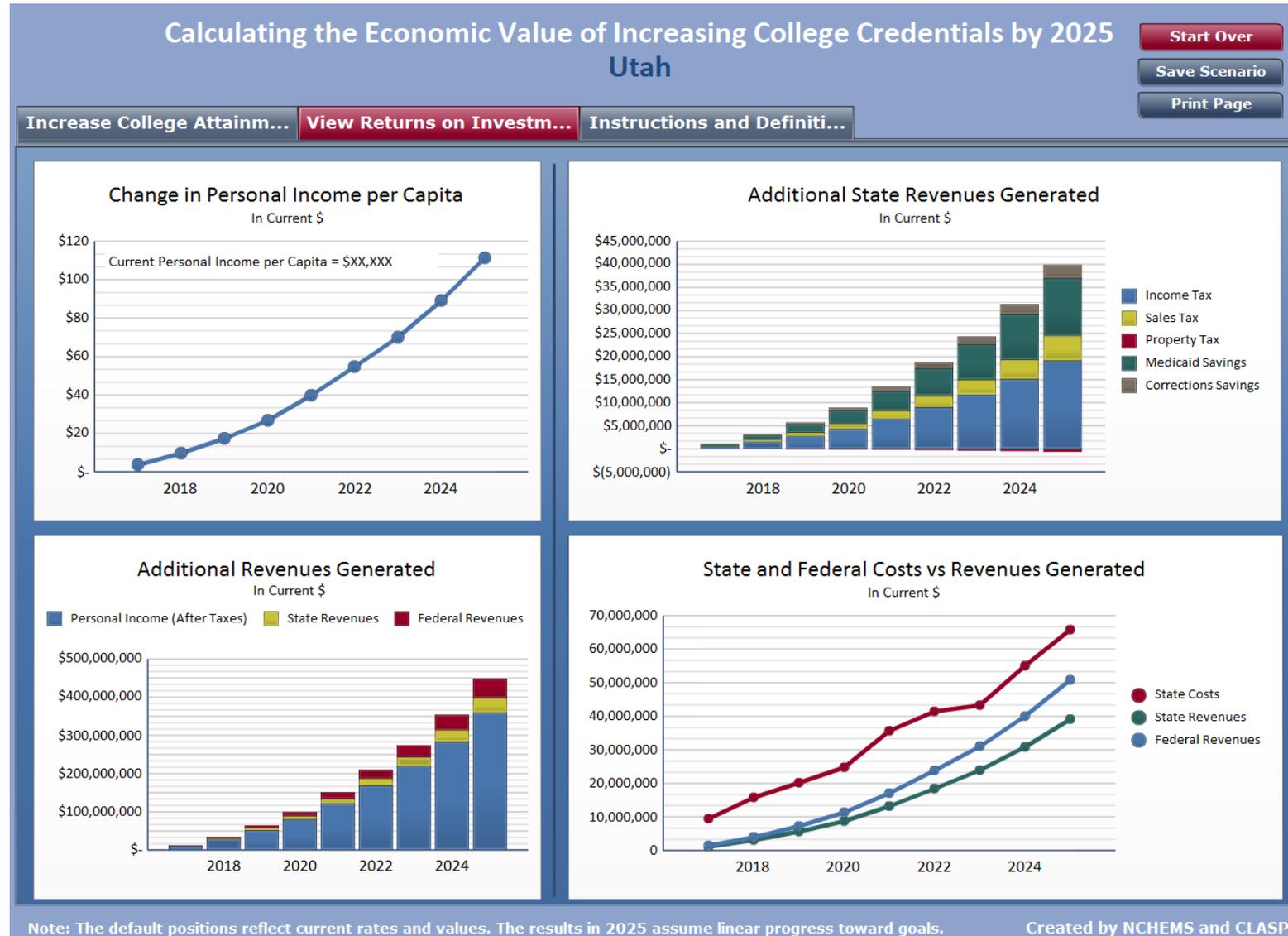
Additional Undergraduate Credentials Awarded Annually

■ Certificates
 ■ Associate's
 ■ Bachelor's

Year	Certificates	Associate's	Bachelor's	Total
2018	~100	~200	~400	~700
2019	~100	~200	~500	~800
2020	~100	~200	~600	~900
2021	~100	~200	~700	~1,000
2022	~100	~200	~800	~1,100
2023	~100	~200	~900	~1,200
2024	~100	~200	~1,000	~1,300
2025 (Total)	416	2,719	14,115	16,418

Note: The default positions reflect current rates and values. The results in 2025 assume linear progress toward goals. Created by NCHEMS and CLASP

Example: Student Flow Model - ROI



Designing for a Strategic Capital Planning Process

- Data driven analyses
- Informed by benchmarking best practices
- Regionally based
- Aligned with statewide strategic goals: 40-40-20
- Effective prioritization process
 - Academic and regional needs
 - Deferred Maintenance
 - Alternatives
- Implementable

Project Schedule

Project Milestone Summary

- HECC kick off meetings: February
- Data collection: Feb through May
- First campus visits: March/April
- Preliminary Analysis: June/July
- Second campus visits: June/July
- Development of plans: Aug/Sept
- Draft report: Sept/Oct

Discussion

