Implementing Transformational Analytics Strategies

February 26, 2019

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Agenda

- Harford Community College Overview
- Overview of Analytics Initiatives & Strategy Development
- Partners
- Where is Harford Community College Today?
- What's Next?
- Questions?

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Harford Community College Overview

Serving Harford County since 1957

Pictured: HCC's Library, which serves as the "heartbeat space" of campus for students, staff, and administrators, housing both a state-of-the-art digital media lab and the Office of the President.

- HCC offers more than 80 degree and certificate programs, along with a wide variety of non-credit continuing education courses.

- Certifications are offered in such growing industries as cybersecurity, drone technology, and heavy equipment operations.

- We also offer apprenticeship programs and contract training services for local employers.

- The College enjoys strategic partnerships with area businesses and institutions—most notably the U.S. Army's Aberdeen Proving Ground, the largest employer in Harford County.

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The Quintessential Community College

- Harford County, MD is conveniently located near Baltimore, Philadelphia, Wilmington, and Washington, DC.

- The County has a population of approximately 250,000 and contains a mix of small urban and rural communities.

- We enroll more than 18,000 students annually across our credit and non-credit programs.

- We employ 961 people, including 100 full-time faculty.

- We are working to become a true College of the Future—an adaptable institution that can evolve to meet the ever-changing needs of the community we serve.

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Challenges

| Student Enrollment | Student Success

(Retention and Completion) | Adaptable and Sustainable Business Model |

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Overview of Analytics Initiatives & Strategy Development

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Strategic Planning at HCC

Performance-Driven Strategic Plan

Comprehensive Plan

Strategic Planning Kickoff
Envisioning Future Trends in Education

BOARD LEADERSHIP & ENGAGEMENT

COMMUNITY ENGAGEMENT

Implementation Readiness & Measurement

Form SP Committee
SWOT Survey
Future Summit
Develop Impact Statements

Mission/Vision
Value & Strategies Review
Spring Community Event

Share Impact Statements
Scan Teams Formed
Conduct Research

COMMUNITY ENGAGEMENT

Strategic Directions:
Scan to Plan
Values Survey

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COMPLETED

UPCOMING

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Partners

Engaging a Partner

Helio CAMPUS + ASSESSMENT + Achieving the Dream™ Community Colleges Count = TRANSFORMATIONAL ANALYTICS

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Maturity and ROI Framework:
From Foundational to Transformative

LEVEL OF MATURITY →

RETURN ON INVESTMENT ↑

4 TRANSFORMATIVE

Leadership, business process and cultural evolution will enable the use of data to make effective decisions

Analysis Agenda
Data Science
Predictive Modeling
Cultural Evolution
Monitoring & Measuring Impact

Admission Yeild
Retention & Graduation
Operational Efficiency

3 COST AVOIDANCE

Introduce efficiencies across staffing and technology

2 FOUNDATION FOR ANALYTICS

Reduce technical barriers and provide easy access to data

1 RISK MITIGATION

Institutional knowledge transfer

TIME: | YEAR 1 | YEAR 2 | YEAR 3

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Executive Summary

OPPORTUNITIES	RECOMMENDATIONS
• Build Off Strengths in IR • Plan for Increasing Technical Fluency • Introduce Efficiencies in Reporting and Analysis Across IR and IT • Plan for Data Governance • Leverage Synergies Across Strategic Initiatives	• *Elevate the Role of IR* • *Increase Technical Fluency Across IR and IT* • *Data Governance* • *Advance Sequentially from Legacy Reporting to Advanced Analytics*

ADVANCE SEQUENTIALLY

Advanced Analytics

Business Intelligence

PREDICTIVE

Legacy Reporting

DIAGNOSTIC

DESCRIPTIVE
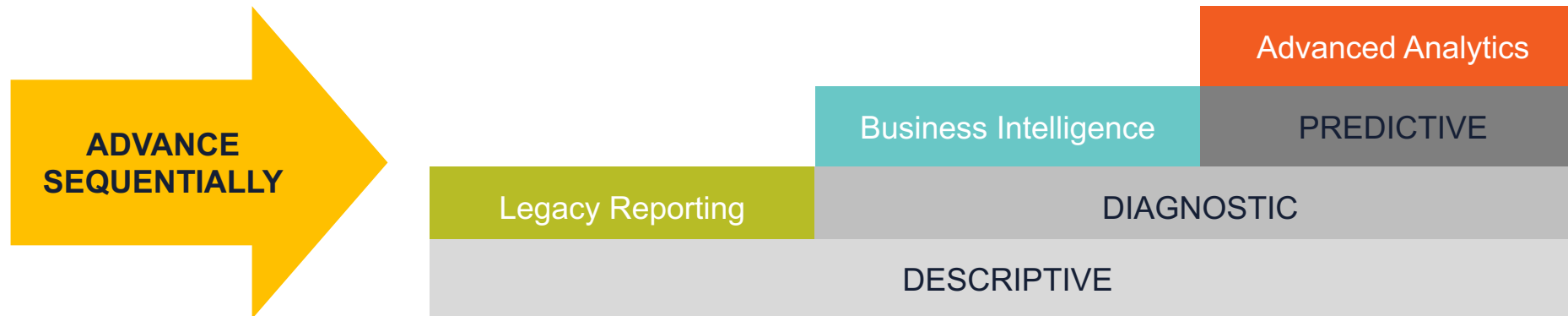
Achieving the Dream – Data Review

EMERGING THEME #1:
Transitional and Gateway Course Completion

EMERGING THEME #2:
Course Delivery Modes

EMERGING THEME #3:
Onboarding
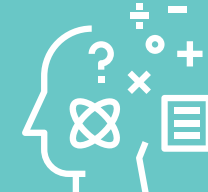
EMERGING THEME #4:
Attainment Gaps

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# Insights & Accomplishments

STUDENT SUCCESS
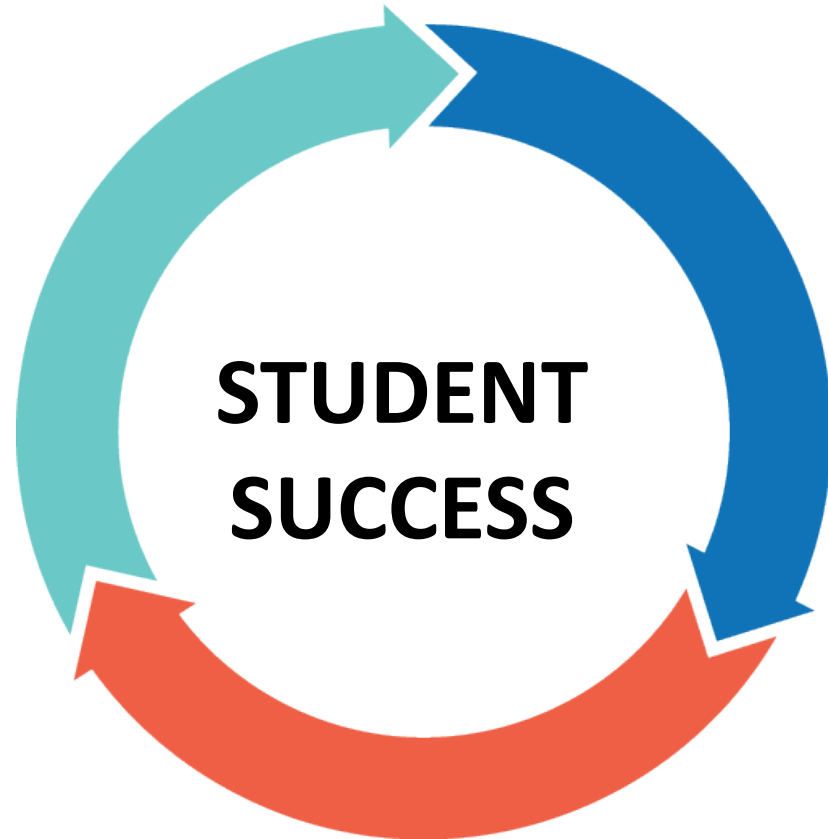
June 2018 – December 2018
Major Accomplishments:
- Migrated our IR Office to be an office of Analytics and Planning
- Built data platform
- Validated data models
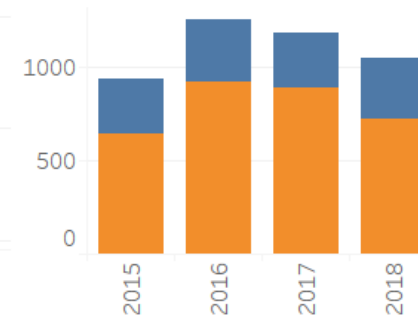- Visualized data to identify trends and patterns

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Data: The Fabric Of The Institution

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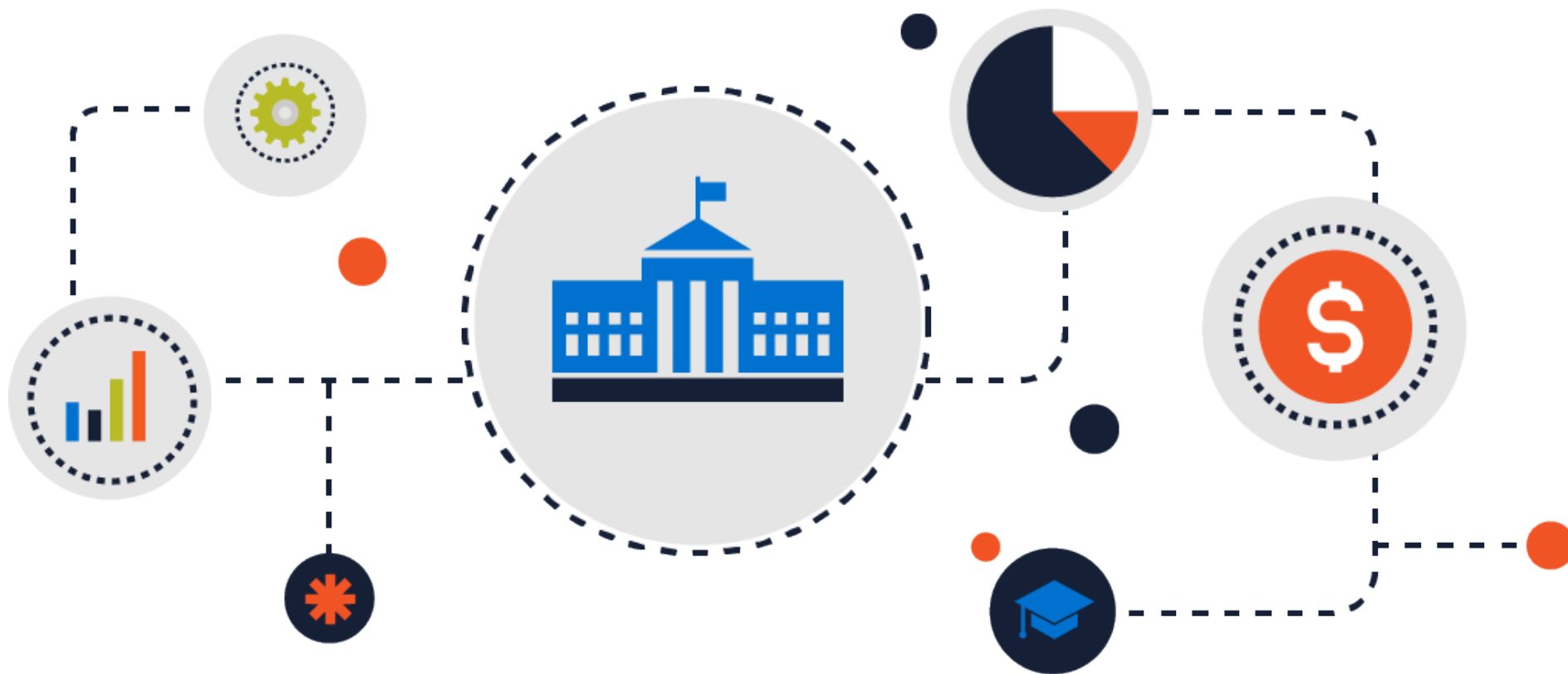
Obstacle Course Analysis
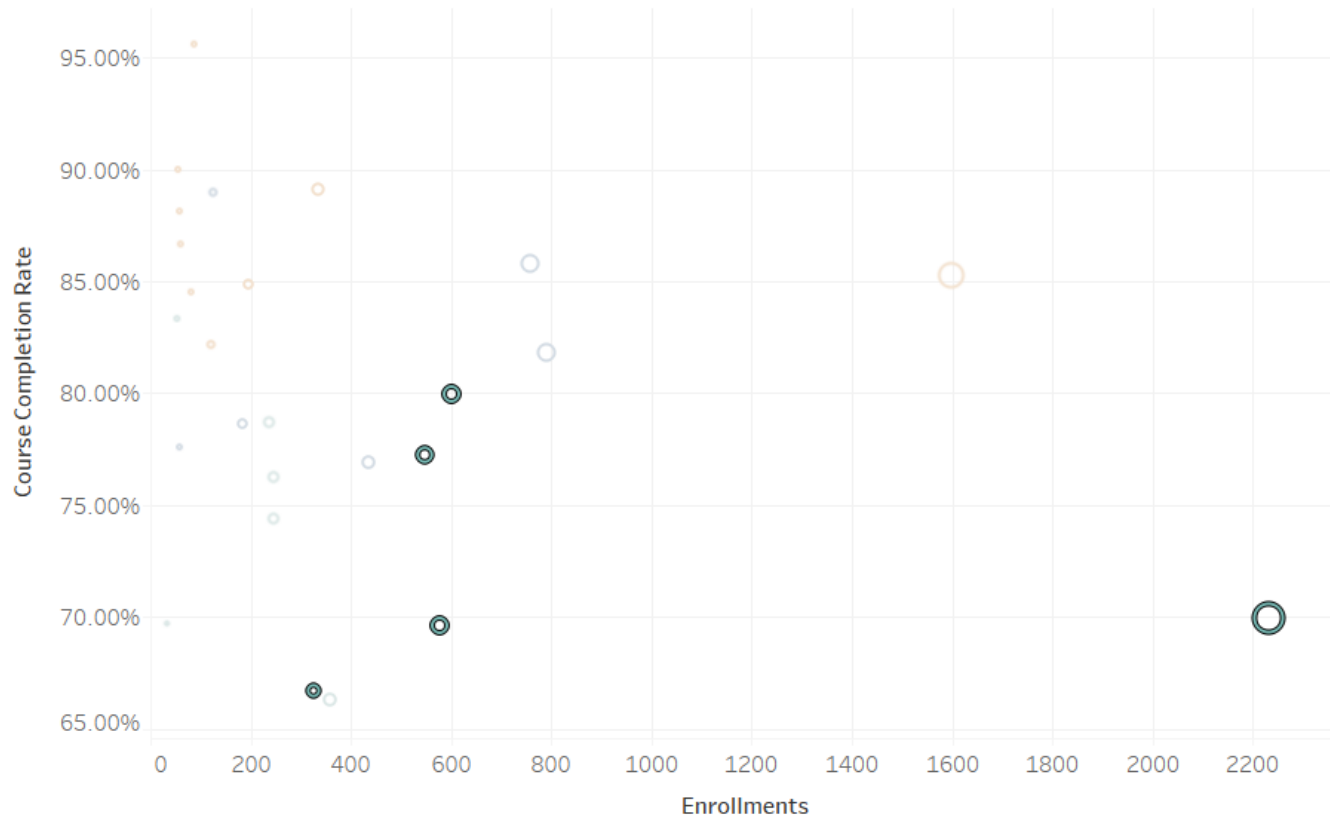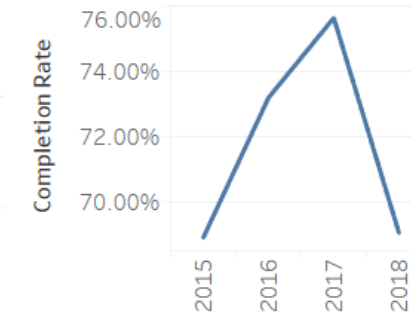
- Student Success dashboards present multiple views of student success: success in courses, student persistence and cohort retention.

- . We can now identify which courses are impediments to successful progression in students academic programs, and make updates and interventions to course programs as necessary.

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Term to Term Comparison

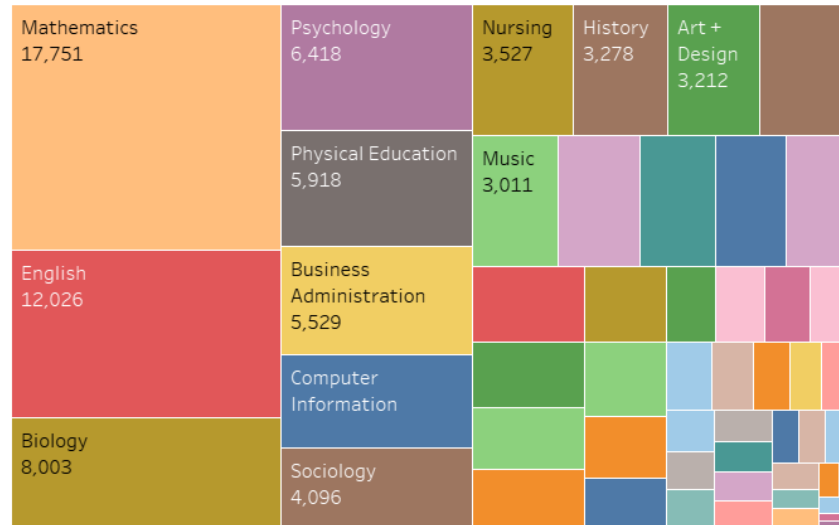Headcount Change by Course from 201620 to 201720

- The Term to Term comparison dashboard allows our institution to identify changes in headcounts or credit hours over time.

- This allows us to identify trends and patterns in the data that require action.

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Class Size Metrics

Total Enrollments

Subject	Enrollments
Mathematics	17,751
Psychology	6,418
Nursing	3,527
History	3,278
Art + Design	3,212
Physical Education	5,918
Music	3,011
English	12,026
Business Administration	5,529
Computer Information	
Biology	8,003
Sociology	4,096

Level of Detail Selector — Course Subject

CourseFill

Selected Level of Detail Cour..	Avg. Average Section Cap ..	Avg. Fixed Section E..	Avg. Section Fill Rate
Visual and Per..	55.00	53.83	97.9%
Orientation	64.51	43.54	74.5%
Sociology	29.68	23.97	80.7%
Philosophy	29.98	23.70	79.1%
Psychology	29.79	23.70	78.7%
Earth Science	32.73	23.40	69.5%
Economics	30.76	23.14	75.7%
Nursing	23.23	22.90	97.1%
Astronomy	27.36	21.68	79.4%
Communicatio..	25.67	21.47	84.5%
Criminal Justice	29.75	21.09	69.7%
History	28.90	20.24	69.2%
Forensic Scien..	26.00	20.08	76.9%
Religion	30.00	19.83	66.1%
Health	23.82	19.13	82.3%
Biology	24.54	19.11	77.6%
Geography	28.81	18.77	63.6%
Chemistry	24.63	18.08	73.8%
Mathematics	23.16	16.92	61.2%
Drama	25.86	16.43	68.6%
Political Science	28.94	16.24	56.7%
Computer Scie..	24.43	16.04	65.9%
Business Admi..	25.92	15.83	58.8%
Accounting	27.75	15.50	54.8%
Physics	23.52	15.48	65.8%
Anthropology	24.63	15.25	71.9%
Allied Health S..	18.51	15.09	84.3%

Course Type

Lecture 87,019
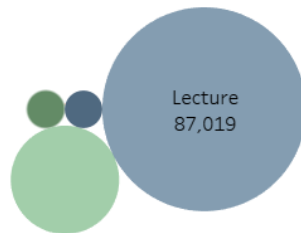
Enrollments / Maximum Class Size

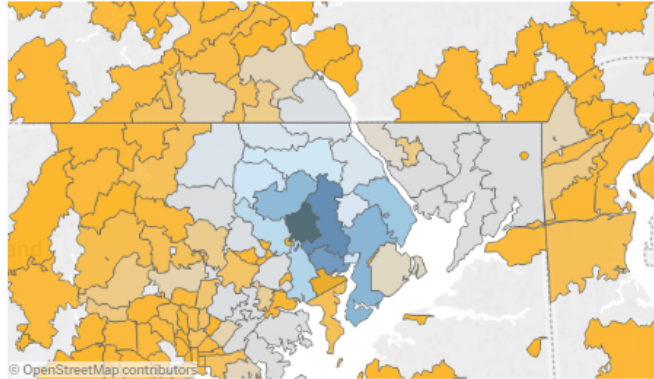Avg. Section Fill R.. — 69%, 61%, 67%, 65%, 59%, 60%, 68%, 58%, 66%, 68%
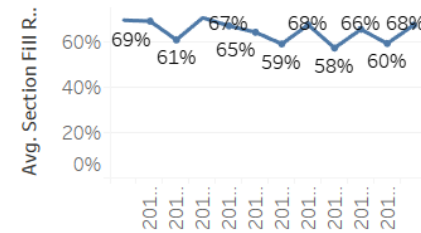
- The Class Size Metrics dashboard is intended to be used to track metrics that help with capacity planning and space utilization.

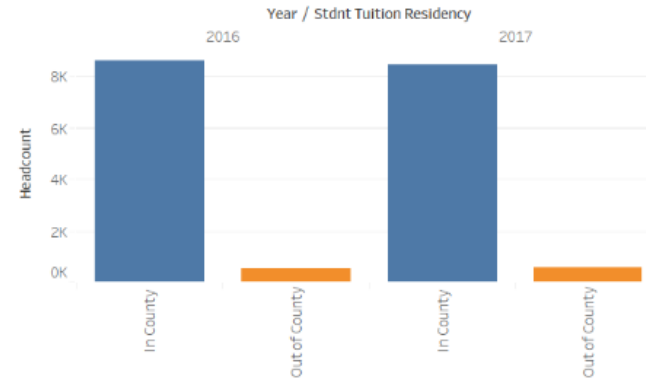- This allows us to identify trends and patterns in the data that require action.

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Student Geographics

Enrollments By Zipcode

Enrollments by Residency

Enrollments By City

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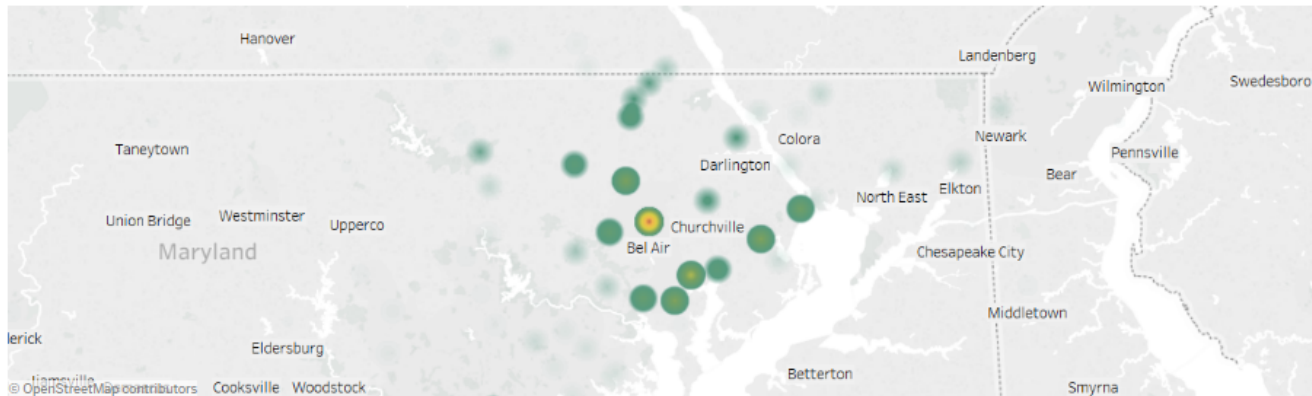
What's Next?

Going Forward

Data Dictionary
STATUS: NOT STARTED

Training:
Senior Leadership
& Across Campus
STATUS: NOT STARTED

Financials
Implementation
Kick-Off
STATUS: NOT STARTED

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Questions?