The Data Helix at the University at Buffalo

Lee H. Melvin  
Vice Provost for Enrollment Management

Brian J. O’Connor  
Assistant Vice President for Data Analytics
Agenda - Our Story
(which will hopefully have AH-HA parallels to YOUR story)

► About the University at Buffalo (UB)
► Expanding Data Services in Higher Education
► Challenges and Solutions – Constant Evolution
► The Data Helix at UB – A Story of Collaboration
► Actionable Intelligence Culture Shift via Tableau
► Information Integration in a Key Campus Process
► Takeaways / Bottom Line(s)
About the University at Buffalo (UB)
About the University at Buffalo (UB)

Premier Research-intensive Public University – SUNY Flagship
Member of the American Association of Universities (AAU)

Highlights:
- 12 Schools/Colleges
- 30,000 Students
- 8,700 Degrees
- 6,000 Employees
- 2,500 Faculty
- $1.6B Annual Budget
Expanding Data Services in Higher Education
Expanding Data Services in Higher Education

All Campuses have Institutional Research (IR) Offices

- Key Functions = Data, Official Reporting, Assessment, Surveys
- Historically served a ranked set of users in organization hierarchy
- Often small staff → 80% have less than 5 FTE staff (2012 AIR survey)
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Key Challenge
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“**Statement of Aspirational Practice for Institutional Research**”
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**UB Institutional Research Office (OIA)**
- Internal Reporting, Effectiveness, Surveys
- Official Reporting, Data Architecture, Infrastructure
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Challenges and Solutions – Constant Evolution
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Three Primary Challenges:

• Drowning in Data … Starving for Information
• Switching Silo Thinking into More Shared Thinking
• Creating Trust/Partnerships throughout UB’s Hierarchy
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Solutions

Enrollment and Resource Planning Committee (ERPC)
Challenges and Solutions – Constant Evolution

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• Commitment to Tableau as our visualization platform
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- New central Institutional Analytics group
- Commitment to Tableau as our visualization platform
- Communicating vision and building community trust
The Data Helix at UB – a Story of Collaboration
The Data Helix at UB

Compelling Features:

- Dynamic progression from enrollment to graduation
- Seamless communication
- Organizational transparency

Connecting Data Sources: A Model for Collaboration

UB Educational Mission → Admissions & Financial Aid → Courses → Space Utilization → Faculty & Research → Degrees → Student Success → Cost & Revenue → Students → Registration → Demographics
Actionable Intelligence
Culture Shift via Tableau
Actionable Intelligence Culture Shift via Tableau

Disparate Sources

- Admissions
- Students
- Courses
- Degrees
- Registration
- Demographics
- Financial
- Personnel
- Space Utilization
- Research
- External Sources
Actionable Intelligence Culture Shift via Tableau

Disparate Sources

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Transformation

- Raw Data Cleansing
- Merging and Purging
- Reduction to Key Fields
- Combined View Builds
- Analytics / Summaries
- Creation of Models
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Actionable Intelligence Culture Shift via Tableau

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Visualizations

Decision Making Evolution
ALL LEVELS of Campus
(Central, School, Department)
- Story-driven to DATA-INFORMED
- Taking ACTION on impact metrics
- Operational / Strategic
  “What If” Models
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Moving from knowing WHAT to understanding WHY to effective planning for WHAT NEXT
Actionable Intelligence Culture Shift via Tableau

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THIS is where Tableau had a key impact for us

Moving from knowing **WHAT** to understanding **WHY** to effective planning for **WHAT NEXT**
A Simplified View of Our Tableau “Distribution” History:

**Trial Version(s)**

- Screenshots
- Emailed PDFs

**< 5 Users**

*VERY localized*
A Simplified View of Our Tableau “Distribution” History:

- **Desktop License(s)**
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    - VERY localized
- **Packaged workbooks and PDF outputs**
- **Stored on secure share space with shortcuts**
- **~40 Users**
  - Single large school
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**Tableau Server**
- Scheduled Extracts
- Ease of Distribution
- Web accessibility
- User Tracking/Usage
  - 45 Sites / 1500+ Users
  - Not just Institutional Analytics
Information Integration in a Key Campus Process
UB’s Annual Resource Planning Process (ARPP)

Resource Planning YEAR

Phase #1
← Information Collection
Discussion/Decisions → Phase #2
Confirmation/Implementation → Phase #3

Implementation YEAR

Fall
Winter → *
Spring
Summer

Week -52  Week 0  Week 52
Planning for new academic year starts at least ONE YEAR prior. This planning really includes the next three+ academic years.
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Outcomes from this planning play out over four periods during each year (fall, winter, spring, and summer), with the ability to adjust based on observed impact metric changes.
Who is Involved in the Campus ARPP?

Central University Administration
President, Provost, VP Finance ... etc.

Schools and Colleges
Deans
Assistant/Associate Deans
Chief Operating Officers
Chief Financial Officers
Enrollment Managers

Academic Departments
Chairs
Assistant to Chair
Directors of UG/GR Studies

UG/GR Academic Programs
Program Directors, Faculty
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Resource Planning

Headcount Targets

Revenue Targets
Who is Involved in the Campus ARPP?

Wide Range of Roles

- Central/Unit Leadership
- Operations/Business Officers
- Enrollment Teams
- Departmental Faculty
- Central Enrollment Management
- Central Resource Planning

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Resource Planning
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Different roles will each require different levels of information
- Summary Level
- 1st Layer Drill-down
- Detail Level
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What Information is Needed for ARPP Projections?

**Selected Metrics:**

- New Student Headcount
- Continuing Student Headcount
- Retention and Graduation
- Credit Hour Enrollment
- Tuition Revenue Generated
- Tenure-Track (TT) Faculty Size
- Non-TT Faculty Size
- Staff Size
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Shifts in Information Flow for the ARPP

Earlier Process
- Annual workbook sent to each of the twelve schools to complete & return
- Schools returned completed workbooks with their projections to central offices
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- Strong trust/collaboration was built between central offices involved in the ARPP process
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- Projections (headcounts and tuition revenue, undergrad and graduate) were distributed to campus via Tableau dashboards
- Allowed for a common view of the expected numbers for discussion between central offices and various school staff involved
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- Allowed for a common view of the expected numbers for discussion between central offices and various school staff involved
- Back & forth with units helped refine original one size fits all model → began incorporating unit-specific differences into the predictions
Working toward seamless access to select campus dashboards via the **Dashboard of Dashboards** based on an idea our team learned about at TC17 in Las Vegas:

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**ARPP - What's Available and Where do I Find it?**

Let's start with ... **Where do I find it?**

<table>
<thead>
<tr>
<th>Institutional Analytics Toolkit - University at Buffalo Actionable Intelligence Dashboards via Tableau Server</th>
</tr>
</thead>
<tbody>
<tr>
<td>Click on any thumbnail image to open the selected tool in a new browser window. Once the dashboard is open, users can set various selections to get a wide ranging view of the data.</td>
</tr>
<tr>
<td>The tools are meant to help users across all levels of the campus, gain insight into their current operations or predicted future outcomes. The goal is to identify some potential actions for change.</td>
</tr>
<tr>
<td>Most of what is found in the tools comes from combining disparate data and seeing relationships and patterns between data groups that lead to better understanding of where action is needed.</td>
</tr>
<tr>
<td>These tools are forged from combining the following information groups:</td>
</tr>
<tr>
<td>- UGRD Admissions</td>
</tr>
<tr>
<td>- GRAD Admissions</td>
</tr>
<tr>
<td>- Course Registration</td>
</tr>
<tr>
<td>- Student Records</td>
</tr>
<tr>
<td>- Tuition Revenue</td>
</tr>
<tr>
<td>- HS / Personal</td>
</tr>
<tr>
<td>- Resource Planning</td>
</tr>
<tr>
<td>- Space / Rooms</td>
</tr>
<tr>
<td>-Degrees Awarded</td>
</tr>
<tr>
<td>-Projections (enrollment)</td>
</tr>
</tbody>
</table>

Produced by Institutional Analytics - for questions, contact Brian O'Connor (645-0754, box@buffalo.edu)

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Joe Haden
Systems Advisor
ExxonMobil – Data & Analysis Group

So you've built a great dashboard, now what...
ARPP - What’s Available and Where do I Find it?

New Primary Projection Dashboard

Future headcounts assume freshman cohorts of 4,000, with fall ’17 retention rates applied to Fr, So, Jr, Sr levels.
 Per cents shown under the headcount values indicate the school portion of the total undergraduate population.
 Major revenue comes from courses taken in the school by approved and intended majors (see headcounts above).
 Service revenue comes from courses taken in the school by ALL non-major undergraduates on campus.
 Note that all historical and future tuition revenue values have been normalized to fall ’17 rates for fair comparison.

Individual values are shown for masters, doctoral and professional. Certificate and non-matric are combined as “Other.”

Future headcounts use current GxddMIF data to predict final offers for fall ’18, then apply fall ’17 yield rates.
 Future tuition applies fall ’17 tuition per student rates, by year in graduate career, with out-of-state 4% held constant.
 Gross tuition is shown for graduate/prof students, thus tuition costs for supported students are also included here.
ARPP - What’s Available and Where do I Find it?

New Primary Projection Dashboard

Undergraduate

Graduate and Professional Tuition Revenue
Includes school revenue generated by students in each legend sub-group

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Graduate and Professional Headcount

Graduate and Professional Tuition Revenue

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New Primary Projection Dashboard

Headcounts

Undergraduate Headcount

- Includes approved and intended majors from fall census snapshot

<table>
<thead>
<tr>
<th>Year</th>
<th>Undergraduate</th>
<th>Future</th>
</tr>
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<tbody>
<tr>
<td>2012</td>
<td>1,005 5.6%</td>
<td></td>
</tr>
<tr>
<td>2013</td>
<td>1,053 5.7%</td>
<td></td>
</tr>
<tr>
<td>2014</td>
<td>1,083 5.9%</td>
<td></td>
</tr>
<tr>
<td>2015</td>
<td>984 5.3%</td>
<td></td>
</tr>
<tr>
<td>2016</td>
<td>863 4.9%</td>
<td></td>
</tr>
<tr>
<td>2017</td>
<td>903 4.1%</td>
<td></td>
</tr>
<tr>
<td>2018</td>
<td>757 3.8%</td>
<td></td>
</tr>
<tr>
<td>2019</td>
<td>737 3.6%</td>
<td></td>
</tr>
<tr>
<td>2020</td>
<td>729 3.5%</td>
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</table>

Graduate and Professional Headcount

- Includes student counts from fall census snapshot

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<th>Graduate and Professional</th>
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<tr>
<td>2012</td>
<td>1,334 5.5%</td>
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<td>2020</td>
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Undergraduate Tuition Revenue

- Includes school revenue generated by students in each legend sub-group

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<th>Major</th>
<th>Service</th>
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<tbody>
<tr>
<td>2012</td>
<td>$1.7M</td>
<td>$3.2M</td>
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<td>$1.8M</td>
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<tr>
<td>2019</td>
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Graduate and Professional Tuition Revenue

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Future headcounts assume freshman cohorts of 4,000, with fall ’17 retention rates applied to Fr, So, Jr, Sr levels
Percentages shown under the headcount values indicate the school portion of the total undergraduate population
Major revenue comes from courses taken in the school by approved or intended majors (see headcounts above)
Service revenue comes from courses taken in the school by all non-major undergraduates on campus
Note that all historical and future tuition revenue values have been normalized to fall ’17 rates for fair comparison

Future headcounts use current GradMIT data to predict final offers for fall ’18, then apply fall ’17 yield rates
Future tuition applies fall ’17 tuition $ per student rates, by year in graduate career, with out-of-state % held constant
Note that all historical and future tuition revenue values have been normalized to fall ’17 rates for fair comparison
Gross tuition is shown for graduate/prof students, thus tuition costs for supported students are also included here
ARPP - What’s Available and Where do I Find it?

New Primary Projection Dashboard

Tuition Revenue
ARPP - What's Available and Where do I Find it?

New Primary Projection Dashboard

6-Year Historical

Undergraduate Headcount
Includes approved and intended majors from fall census snapshot

Future headcounts assume freshman cohorts of 4,000, with fall '17 retention rates applied to Fr, So, Jr, Sr levels
Percentages shown under the headcount values indicate the school portion of the total undergraduate population
Major revenue comes from courses taken in the school by all non-major undergraduates on campus
Note that all historical and future tuition revenue values have been normalized to fall '17 rates for fair comparison

Graduate and Professional Headcount
Includes student counts from fall census snapshot

Graduate and Professional Tuition Revenue
Includes school revenue generated by students in each legend sub-group

Future headcounts use current GradMIT data to predict final offers for fall '18, then apply fall '17 yield rates
Future tuition applies fall '17 tuition/student rates, by year in graduate career, with out-of-state 4% held constant
Gross tuition is shown for graduate/prof students, thus tuition costs for supported students are also included here
ARPP - What’s Available and Where do I Find it?

New Primary Projection Dashboard

3-Year Projection

<table>
<thead>
<tr>
<th>Undergraduate Headcount</th>
<th>Graduate and Professional Headcount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Includes approved and intended majors from fall census snapshot</td>
<td>Includes student counts from fall census snapshot</td>
</tr>
<tr>
<td>1,005 5.6% 2012</td>
<td>1,334 3.8% 2012</td>
</tr>
<tr>
<td>1,053 5.7% 2013</td>
<td>1,007 3.8% 2013</td>
</tr>
<tr>
<td>1,033 5.9% 2014</td>
<td>1,936 4.0% 2014</td>
</tr>
<tr>
<td>984 5.3% 2015</td>
<td>506 3.0% 2015</td>
</tr>
<tr>
<td>894 4.9% 2016</td>
<td>541 3.0% 2016</td>
</tr>
<tr>
<td>803 4.1% 2017</td>
<td>1,214 3.0% 2017</td>
</tr>
<tr>
<td>757 3.8% 2018</td>
<td>1,268 3.0% 2018</td>
</tr>
<tr>
<td>737 3.6% 2019</td>
<td>1,294 3.0% 2019</td>
</tr>
<tr>
<td>729 3.5% 2020</td>
<td>1,903 3.0% 2020</td>
</tr>
</tbody>
</table>

3-Year Projection

<table>
<thead>
<tr>
<th>Undergraduate Tuition Revenue</th>
<th>Graduate and Professional Tuition Revenue</th>
</tr>
</thead>
<tbody>
<tr>
<td>Includes school revenue generated by students in each legend sub-group</td>
<td>Includes school revenue generated by students in each legend sub-group</td>
</tr>
<tr>
<td>$3.2M</td>
<td>$12.7M</td>
</tr>
<tr>
<td>$1.7M</td>
<td>$2.5M</td>
</tr>
<tr>
<td>$3.5M</td>
<td>$2.9M</td>
</tr>
<tr>
<td>$3.6M</td>
<td>$2.2M</td>
</tr>
<tr>
<td>$3.0M</td>
<td>$2.7M</td>
</tr>
<tr>
<td>$3.6M</td>
<td>$2.4M</td>
</tr>
</tbody>
</table>

Future headcounts assume freshmen cohorts of 4,000, with fall ’17 retention rates applied to Fr, So, Jr, Sr levels. Percentages shown under the headcount values indicate the school portion of the total undergraduate population. Major revenue comes from courses taken in the school by approved or intended majors (see headcounts above). Service revenue comes from courses taken in the school by all non-major undergraduates on campus. Note that all historical and future tuition revenue values have been normalized to fall ’17 rates for fair comparison.
ARPP - What’s Available and Where do I Find it?

New Primary Projection Dashboard

Great ... what do I do now with this information?
ARPP - What’s Available and Where do I Find it?

Primary Projections
Summary Totals

Deeper Dive
Understanding how UG students flow through career
ARPP - What’s Available and Where do I Find it?

The WEDGE – Student Flow Tracking Tool

Primary Projections
Summary Totals

Deeper Dive
Understanding how UG students flow through career
ARPP - What’s Available and Where do I Find it?

The WEDGE – Student Flow Tracking Tool

Primary Projections
Summary Totals

Deeper Dive
Understanding how UG students flow through career
ARPP - What’s Available and Where do I Find it?

The WEDGE – Student Flow Tracking Tool

Wedge IN – Where did our current students come from?

Primary Projections
Summary Totals

Deeper Dive
Understanding how UG students flow through career
ARPP - What’s Available and Where do I Find it?

Primary Projections
Summary Totals

Deeper Dive
Prediction of NEW registered graduate and/or professional student headcount
ARPP - What’s Available and Where do I Find it?

Graduate Admissions (GrAdMIT) - Weekly Update Tool

Primary Projections
Summary Totals

Deeper Dive
Prediction of NEW registered graduate and/or professional student headcount

GradAdMIT Single Metric Flow with Specific Week Comparison
School: Department / Level / Plan:

Weekly Flow
Applications

Current Week Comparison
Applications

Current Week % of Final Value

Final Historical Rates
%Offer (Offer/Complete)

%Yield (Registered/Offer)

%Convert (Registered/Apply)

Generated by UH Institutional Analytics. Plot values are derived from GradAdMIT.
For questions, contact Brian O’Connor, 646-0784, boc@houston.edu
Graduate Admissions (GrAdMIT) - Weekly Update Tool

Primary Projections
Summary Totals

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Prediction of NEW registered graduate and/or professional student headcount
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ARPP - What’s Available and Where do I Find it?

Primary Projections
Summary Totals

Deeper Dive
Determining portion of revenue generated by different student groups during career
# ARPP - What’s Available and Where do I Find it?

## Heads to Credits to Revenue (HCR) – by Career Phase

### Graduate - Fall NVEQ Metrics

<table>
<thead>
<tr>
<th>Year</th>
<th>Students</th>
<th>Percent Of</th>
<th>Credits per Student</th>
<th>Credits Paid / Student</th>
<th>Tuition Revenue / Credit</th>
<th>Total Tuition Revenue</th>
</tr>
</thead>
<tbody>
<tr>
<td>Early 2013</td>
<td>300</td>
<td>39%</td>
<td>31.4</td>
<td>10.2</td>
<td>$50,000</td>
<td>$80,000</td>
</tr>
<tr>
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<td>300</td>
<td>39%</td>
<td>31.4</td>
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<td>31.4</td>
<td>10.2</td>
<td>$50,000</td>
<td>$80,000</td>
</tr>
</tbody>
</table>

### Summary Totals

- Early: $1,000,000
- Mid: $1,000,000
- Late: $1,000,000
- Total: $3,000,000

### Primary Projections

- Determining portion of revenue generated by different student groups during career.

### Deeper Dive

- Heads to Credits to Revenue (HCR) – by Career Phase

*Generated by Institutional Analytics; For questions, contact Brian O'Connor, 646-0784, boa@buffalo.edu*
## ARPP - What’s Available and Where do I Find it?

### Heads to Credits to Revenue (HCR) – by Career Phase

#### Graduate - Fall NYEQ Metrics

<table>
<thead>
<tr>
<th>Year</th>
<th>Students</th>
<th>Percent OS</th>
<th>Credits per Student</th>
<th>Credits Paid / Student</th>
<th>Tuition Revenue / Credit</th>
<th>Tuition Revenue / Student</th>
<th>Total Tuition Revenue</th>
</tr>
</thead>
<tbody>
<tr>
<td>Early 2013</td>
<td>321</td>
<td>47%</td>
<td>12.4</td>
<td>11.3</td>
<td>$818</td>
<td>$8,222</td>
<td>$2.45M</td>
</tr>
<tr>
<td>2014</td>
<td>268</td>
<td>48%</td>
<td>11.6</td>
<td>11.3</td>
<td>$815</td>
<td>$8,180</td>
<td>$2.34M</td>
</tr>
<tr>
<td>2015</td>
<td>290</td>
<td>42%</td>
<td>12.8</td>
<td>11.4</td>
<td>$883</td>
<td>$8,821</td>
<td>$2.64M</td>
</tr>
<tr>
<td>2016</td>
<td>247</td>
<td>38%</td>
<td>11.9</td>
<td>11.2</td>
<td>$847</td>
<td>$8,425</td>
<td>$2.52M</td>
</tr>
<tr>
<td>2017</td>
<td>274</td>
<td>34%</td>
<td>12.5</td>
<td>11.1</td>
<td>$845</td>
<td>$8,385</td>
<td>$2.47M</td>
</tr>
<tr>
<td>Mid 2013</td>
<td>169</td>
<td>40%</td>
<td>10.1</td>
<td>9.1</td>
<td>$690</td>
<td>$6,291</td>
<td>$1.76M</td>
</tr>
<tr>
<td>2014</td>
<td>193</td>
<td>43%</td>
<td>9.2</td>
<td>9.2</td>
<td>$697</td>
<td>$6,421</td>
<td>$1.80M</td>
</tr>
<tr>
<td>2015</td>
<td>208</td>
<td>42%</td>
<td>9.2</td>
<td>9.2</td>
<td>$654</td>
<td>$6,144</td>
<td>$1.69M</td>
</tr>
<tr>
<td>2016</td>
<td>243</td>
<td>37%</td>
<td>9.7</td>
<td>9.4</td>
<td>$557</td>
<td>$5,405</td>
<td>$1.28M</td>
</tr>
<tr>
<td>2017</td>
<td>159</td>
<td>32%</td>
<td>10.7</td>
<td>9.4</td>
<td>$528</td>
<td>$5,020</td>
<td>$1.07M</td>
</tr>
<tr>
<td>Late 2013</td>
<td>97</td>
<td>22%</td>
<td>4.6</td>
<td>4.4</td>
<td>$533</td>
<td>$2,348</td>
<td>$0.27M</td>
</tr>
<tr>
<td>2014</td>
<td>82</td>
<td>24%</td>
<td>3.5</td>
<td>3.4</td>
<td>$510</td>
<td>$2,180</td>
<td>$0.29M</td>
</tr>
<tr>
<td>2015</td>
<td>70</td>
<td>20%</td>
<td>3.5</td>
<td>3.7</td>
<td>$560</td>
<td>$2,050</td>
<td>$0.20M</td>
</tr>
<tr>
<td>2016</td>
<td>70</td>
<td>25%</td>
<td>4.0</td>
<td>4.7</td>
<td>$561</td>
<td>$2,136</td>
<td>$0.20M</td>
</tr>
<tr>
<td>2017</td>
<td>76</td>
<td>33%</td>
<td>5.0</td>
<td>4.7</td>
<td>$591</td>
<td>$2,761</td>
<td>$0.20M</td>
</tr>
</tbody>
</table>
ARPP - What’s Available and Where do I Find it?

Heads to Credits to Revenue (HCR) – by Career Phase

Primary Projections
Summary Totals

Note: All heads are NOT Equal

---

### Graduate - Fall NYEQ Metrics

<table>
<thead>
<tr>
<th>Career Phase</th>
<th>Students</th>
<th>Percent (% of Total)</th>
<th>Credits per Student</th>
<th>Credits Paid / Student</th>
<th>Tuition Revenue / Credit</th>
<th>Tuition Revenue / Student</th>
<th>Total Tuition Revenue</th>
</tr>
</thead>
<tbody>
<tr>
<td>Early 2012</td>
<td>1,911</td>
<td>47%</td>
<td>13.4</td>
<td>13.3</td>
<td>$520</td>
<td>$1,717</td>
<td>$2,439</td>
</tr>
<tr>
<td>Early 2013</td>
<td>1,924</td>
<td>48%</td>
<td>13.4</td>
<td>13.3</td>
<td>$520</td>
<td>$1,717</td>
<td>$2,439</td>
</tr>
<tr>
<td>Early 2014</td>
<td>1,937</td>
<td>49%</td>
<td>13.4</td>
<td>13.3</td>
<td>$520</td>
<td>$1,717</td>
<td>$2,439</td>
</tr>
<tr>
<td>Early 2015</td>
<td>1,950</td>
<td>50%</td>
<td>13.4</td>
<td>13.3</td>
<td>$520</td>
<td>$1,717</td>
<td>$2,439</td>
</tr>
<tr>
<td>Early 2016</td>
<td>1,963</td>
<td>51%</td>
<td>13.4</td>
<td>13.3</td>
<td>$520</td>
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<td>47%</td>
<td>13.4</td>
<td>13.3</td>
<td>$520</td>
<td>$1,717</td>
<td>$2,439</td>
</tr>
<tr>
<td>Mid 2016</td>
<td>1,029</td>
<td>47%</td>
<td>13.4</td>
<td>13.3</td>
<td>$520</td>
<td>$1,717</td>
<td>$2,439</td>
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<tr>
<td>Mid 2017</td>
<td>1,032</td>
<td>47%</td>
<td>13.4</td>
<td>13.3</td>
<td>$520</td>
<td>$1,717</td>
<td>$2,439</td>
</tr>
<tr>
<td>Late 2013</td>
<td>1,035</td>
<td>47%</td>
<td>13.4</td>
<td>13.3</td>
<td>$520</td>
<td>$1,717</td>
<td>$2,439</td>
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<tr>
<td>Late 2014</td>
<td>1,038</td>
<td>47%</td>
<td>13.4</td>
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<td>$520</td>
<td>$1,717</td>
<td>$2,439</td>
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<tr>
<td>Late 2015</td>
<td>1,041</td>
<td>47%</td>
<td>13.4</td>
<td>13.3</td>
<td>$520</td>
<td>$1,717</td>
<td>$2,439</td>
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<tr>
<td>Late 2016</td>
<td>1,044</td>
<td>47%</td>
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<td>$520</td>
<td>$1,717</td>
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<td>Late 2017</td>
<td>1,047</td>
<td>47%</td>
<td>13.4</td>
<td>13.3</td>
<td>$520</td>
<td>$1,717</td>
<td>$2,439</td>
</tr>
<tr>
<td>Other 2013</td>
<td>1,491</td>
<td>47%</td>
<td>13.4</td>
<td>13.3</td>
<td>$520</td>
<td>$1,717</td>
<td>$2,439</td>
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<tr>
<td>Other 2014</td>
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<td>47%</td>
<td>13.4</td>
<td>13.3</td>
<td>$520</td>
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</tr>
<tr>
<td>Other 2015</td>
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<td>47%</td>
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</tr>
<tr>
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<td>13.4</td>
<td>13.3</td>
<td>$520</td>
<td>$1,717</td>
<td>$2,439</td>
</tr>
</tbody>
</table>

---

Generated by Institutional Analytics. For questions, contact Brian O'Connor, 644-0754, boc@buffalo.edu
ARPP - What’s Available and Where do I Find it?

**Primary Projections** - Summary Totals

Even DEEPER Dive

Understand the IMPACT METRICS that bring about key outcomes, then identify some potential ACTIONS to change outcomes via those metrics.
Primary Projections - Summary Totals

Even DEEPER Dive
Understand the IMPACT METRICS that bring about key outcomes, then identify some potential ACTIONS to change outcomes via those metrics.

Imagine & Test → What If?
ARPP - What’s Available and Where do I Find it?

HEADCOUNT – What If?

Key Information:
- Freshmen Admissions
- Transfer Admissions
- WEDGE Effect (In/Out) for FR, SO, JR, SR

4-year progressive results

Primary Projections - Summary Totals

Even DEEPER Dive
Understand the IMPACT METRICS that bring about key outcomes, then identify some potential ACTIONS to change outcomes via those metrics.

Imagine & Test → What If?
ARPP - What’s Available and Where do I Find it?

**Primary Projections** - Summary Totals

Even DEEPER Dive
Understand the **IMPACT METRICS**
that bring about key outcomes, then
identify some potential **ACTIONS**
to change outcomes via those metrics.

Imagine & Test → What If?

**HEADCOUNT – What If?**

- Key Information:
  - Freshmen Admissions
  - Transfer Admissions
  - WEDGE Effect (In/Out)
    - for FR, SO, JR, SR
  - 4-year progressive results

**TUITION REVENUE – What If?**

- Key Information:
  - Freshmen Revenue Share
  - Transfer Revenue Share
  - Non-major Revenue Share
  - 4-year progressive results
  - combining head/$ changes
ARPP - What’s Available and Where do I Find it?

HEADCOUNT – What If?
Bottom Line(s)?

- Yes, there’s a lot of disparate data available, with high volume being generated every day in every area.
- Elimination of the need for campus leaders and front line staff to harvest and process raw data.
- These tools are meant to initiate ACTIONS that will lead to needed changes in key metrics (pro-actively).
- Common intelligence tools, readily available via the web, can immediately inform discussions on campus.
- This process can ideally break down silos (us vs. them), leading to more collaboration and partnerships.
Bottom Line(s)?

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- Elimination of the need for campus leaders and front line staff to harvest and process **raw data**.
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Thank you!