



# INSTITUTIONAL CAPACITY ANALYSIS

UNIVERSITY OF WYOMING  
BOARD OF TRUSTEE UPDATE

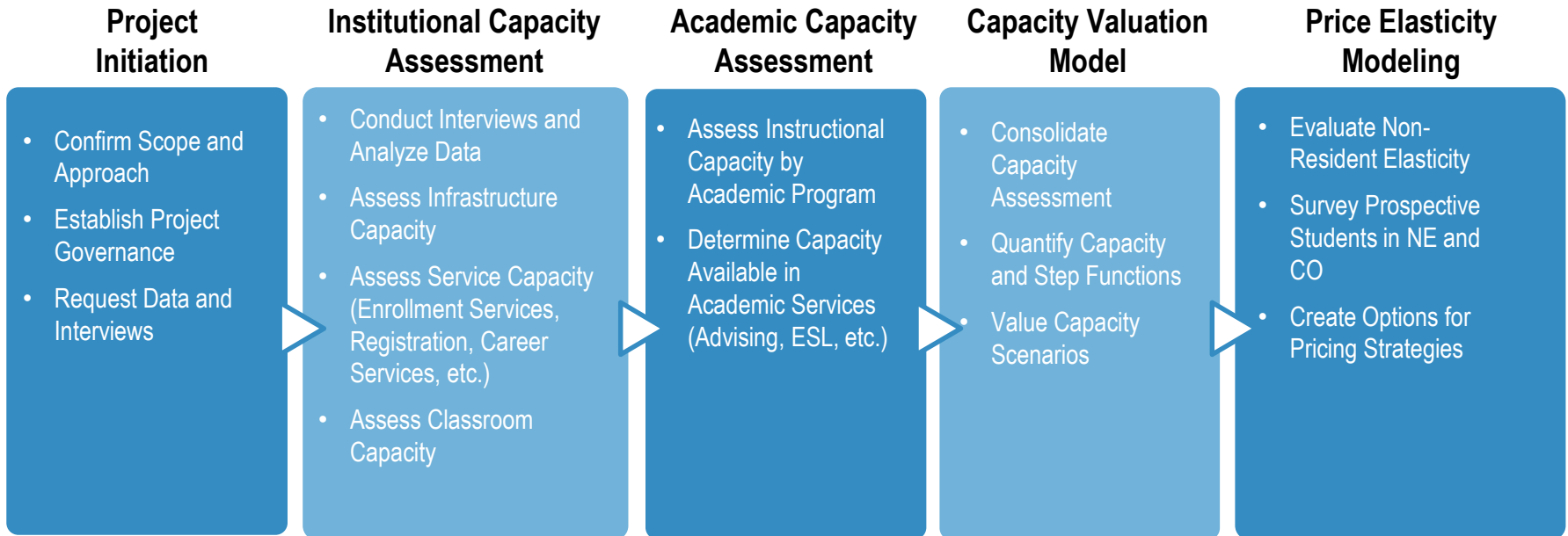
DECEMBER 13, 2017



UNIVERSITY  
OF WYOMING

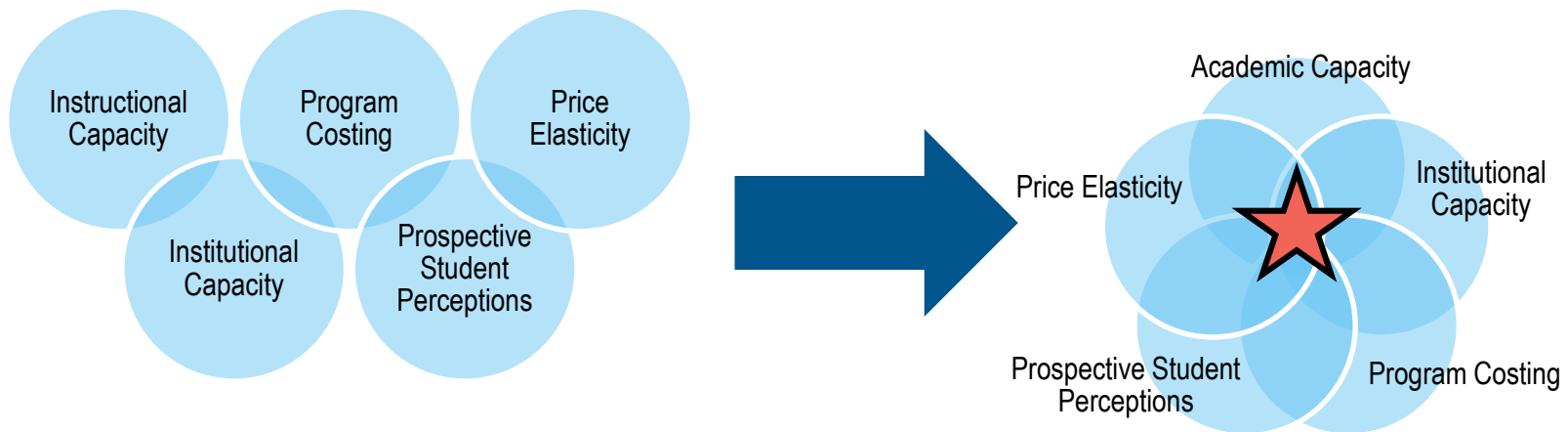
# APPROACH

Huron's Institutional Capacity Analysis at the University of Wyoming consisted of five key tasks over a 3-month period:



# PROJECT INTEGRATION

The project brought together various insights gleaned from capacity analyses, programmatic costing, student willingness to pay (elasticity), and the prospective student survey with a comprehensive scenario valuation model illustrating potential paths forward.

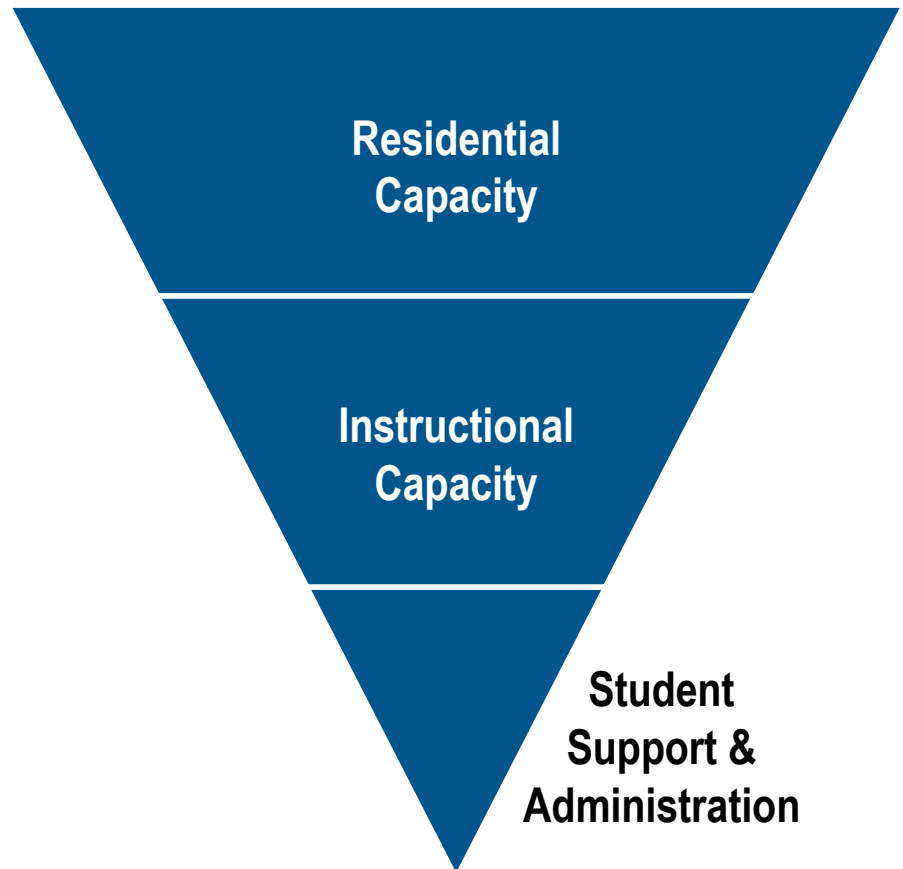


**Huron's recommendations to the Steering Committee and Board of Trustees focus on opportunities for alignment in price, capacity, cost, and management of the academic enterprise.**

# INSTITUTIONAL CAPACITY

When measuring institutional capacity, Huron reviews the primary three areas across campus that may create barriers to additional student headcount.

- + **Residential Capacity:** Residential capacity is measured by the number of freshmen student billable beds (1850-1900) on campus and in the absence of new buildings to facilitate additional growth, an understanding of the extent to which policies can be adjusted to accommodate larger cohorts
- + **Instructional Capacity:** Instructional capacity is measured by the number of seats offered in courses as scheduled by the university. While hiring faculty members can be a lengthy and expensive process, enhanced management and alignment of the academic enterprise through section management and scheduling can greatly increase the number of available seats on campus
- + **Student Support & Administration:** Student support and administration is measured by the number of non-academic professionals needed to support the student population on campus and is generally supported by additional investments in personnel and at times investments in infrastructure



**As you move down the institutional capacity pyramid, costs and barriers to growth are easier to overcome as barriers are increasingly driven by personnel rather than infrastructure needs.**

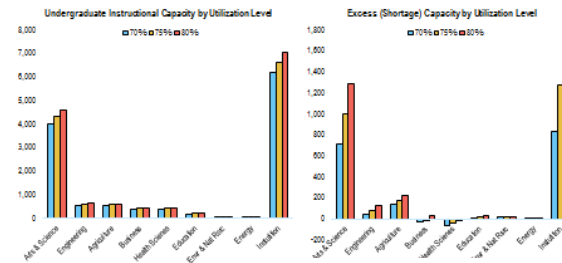
# ACADEMIC CAPACITY

Assessing academic capacity helps the University understand the potential size of the student body through identifying areas to increase seat utilization both within the currently scheduled courses but also through enhanced policy management.

- + Based on target capacities ranging between 70-80% for undergraduate sections, with currently scheduled courses, the university appears to have capacity for an additional 800-1,700 students to take 10 courses during the academic year.
- + This analysis, combined with enhanced management of the academic enterprise adding seats, suggest the near-capacity seat constraints in many of the smaller academic units can be met with limited, if any, additional instructional effort.
- + Aside from seat utilization, Huron recommends investing time and resources into better documenting faculty load data to increase institutional comfort in utilizing data surrounding instructional and non-instructional time.
- + Much of the opportunity to grow, regardless of the type of student (freshmen, transfer, retention, etc.) will require a stronger registrar function and alignment of non-academic student facing functions to support the academic units.

## INSTRUCTIONAL CAPACITY INSTITUTIONAL CAPACITY & GROWTH POTENTIAL

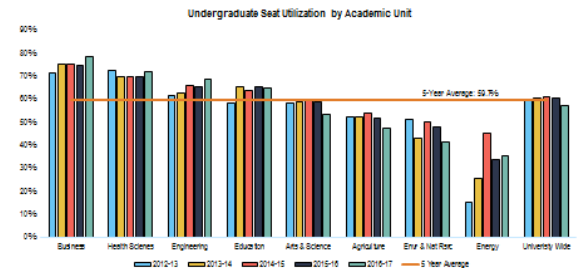
Based on target capacities ranging between 70-80% for undergraduate sections, with currently scheduled courses, the university appears to have capacity for 6,100 to 7,100 students to take 10 courses during the academic year.



This analysis, combined with enhanced management of seat constraints in many of the smaller academic units

## UNDERGRADUATE SEAT UTILIZATION APPENDIX: ACADEMIC CAPACITY ANALYSIS

Seat utilization increases in business, and engineering follow national trends for student interests, however, credit hour production declines in education combined with high utilization illustrate unit adaptations to changing student demand.



University wide utilization of two-thirds of available seats suggests opportunities to increase section utilization and potentially increase available sections offered without changing total faculty effort.

**While there are some academic units and departments that exceed desired utilization targets, there is generally sufficient space for additional undergraduate students across a variety of departments at the institution.**



# SPACE UTILIZATION

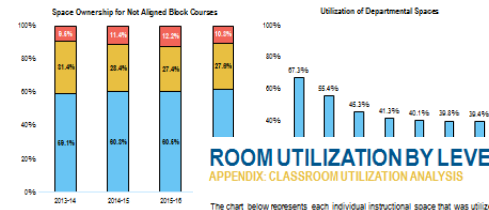
There is a significant opportunity to increase space utilization across campus, particularly in academic and instructional areas, through a review of historical policies and space allocation assignments to more effectively use key resources across campus.

- + A review of classroom scheduling activity illustrates nearly 650 unique start and end times within AY 2016-17 and almost 1,200 across the last five academic years.
- + Scheduling alignment with the block schedule has remained relatively consistent over the past four academic years, however, increases above historic averages around 75% to closer to 85% to 90% would open up significant space on campus for more classrooms and potentially reduce student time to degree.
- + As the institution considers space allocation, the opportunity to increase centrally owned space will likely result in an increase in space utilization and alignment with the block schedule.
- + Of the sections not aligned with block schedule, general pool classrooms account for less than 10% of non-compliant sections. Additionally, there is a 16% relative loss in utilization amongst non-central spaces on campus.

## CONTROL OF SPACE

### APPENDIX: CLASSROOM UTILIZATION ANALYSIS

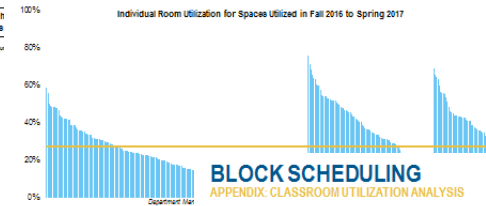
Space is split into one of three classifications across campus, and those that are not "controlled" exclusively by central scheduling are increasingly less utilized, but varied by academic unit.



## ROOM UTILIZATION BY LEVEL OF CONTROL

### APPENDIX: CLASSROOM UTILIZATION ANALYSIS

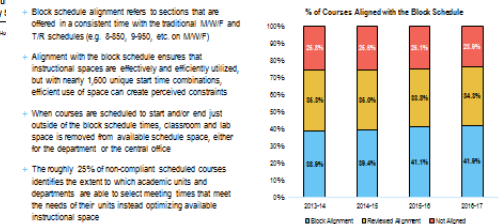
The chart below represents each individual instructional space that was utilized during the academic year and the percent of available time the rooms were utilized from 8 am to 5 pm throughout the week.



## BLOCK SCHEDULING

### APPENDIX: CLASSROOM UTILIZATION ANALYSIS

Scheduling alignment with the block schedule has remained relatively consistent over the past four academic years with approximately 75% alignment and 25% non-alignment with the university block schedule.



Opportunities may exist to increase alignment with block scheduling to improve space utilization across campus.

**Huron's review suggested that instructional space is not a limiting factor to growth at UW, utilization declines drastically with departmentally managed spaces, and the number of non-block start times create further optimization challenges.**

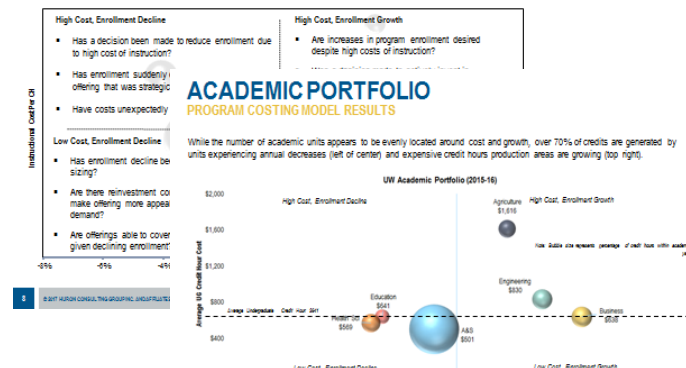
# PROGRAM COSTING

Huron's program costing model of undergraduate programs suggests that current tuition prices do not sufficiently cover the cost of the average undergraduate program, which range in price from \$54K to \$127K (unweighted average is \$71,638).

- + The programmatic costing model identified an average university undergraduate credit hour cost of approximately \$641 and varies by academic unit ranging from \$501 (Arts & Sciences) to \$1,616 (Agriculture).
- + Nearly 54% of the departments have average undergraduate credit hour costs that exceed the institutional average of \$641, with over 2/3 of the high costs departments within Agriculture, Arts & Sciences, and Engineering.
- + There were nearly 2,000 unique undergraduate courses taught with costs per credit hour seeing a significant amount of variability as driven by key allocation factors—including course compensation, departmental expense, and credit hours consumed.
- + While the lowest cost credit hours are within the College of Arts & Sciences, the school is experiencing a slight annual decline in credit hour production and its ability to offset higher cost areas may be declining.

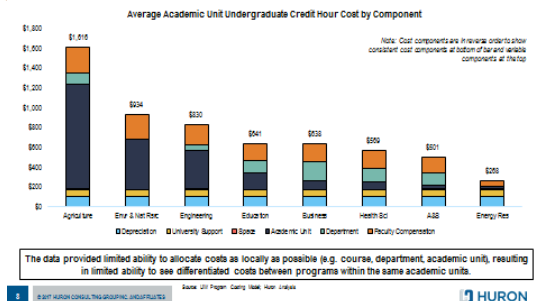
## PORTFOLIO MANAGEMENT PROGRAM COSTING MODEL RESULTS

Utilizing program costing information, the steering committee is able to rationalize why programs are placed in the quadrants they currently reside in and whether or not this is desirable for the long-term success at Wyoming.



## UNDERGRADUATE ACADEMIC PORTFOLIO PROGRAM COSTING MODEL RESULTS

The programmatic costing model identified an average university undergraduate credit hour cost of approximately \$641 and varies by academic unit ranging from \$501 (Arts & Sciences) to \$1,616 (Agriculture).



**With a proposed tuition price that does not cover the average cost of attendance for any undergraduate student, institutional leadership will need to ensure appropriate state-level support continues as enrollment grows.**

# PRICING: ELASTICITY & SURVEY

Huron's pricing efforts aimed to identify how prospective students perceived the value of a Wyoming education and aligned the findings with historical reviews of out-of-state aid strategies to identify a new out-of-state price for CO and NE residents.

- + Survey data suggests that a price of roughly \$12-\$13,000 creates a price that is not only affordable but offers a great value at that price
- + Students from Colorado and Nebraska, given incentives to stay in-state, often end up paying approximately \$10,000 per year in tuition; Wyoming's tuition price will likely need to compete with this number
- + The survey illustrated that students do not understand general discounting strategies employed by universities and over ½ have removed a school from their application list because of a sticker price exceeding their budget
- + Elasticity analysis revealed that the prior 150% of tuition offered to top-tier Colorado and Nebraska students resulted in over-aiding students; optimization of net-tuition revenue and headcount can be increased with a lower-price and corresponding lower aid strategy while not compromising the academic quality of the class

## VOICE OF THE MARKET INSIGHT COST IS THE TOP DECISION FACTOR FOR PROSPECTIVE STUDENTS

Prospective students place cost and location as their top two most important factors in choosing a university. Given the importance of cost, it is not surprising that prospects would like to have as much clarity as possible on cost.

Which of the following factors are very important to you in thinking about the college/university you would like to attend? Please select no more than four.

## VOICE OF THE MARKET: UW PERCEPTIONS THE UNIVERSITY OF WYOMING PERFORMS WELL ON AFFORDABILITY

A: A majority of prospects agree that the University of Wyoming is affordable; average ratings of affordability are higher for UW than for the top choice competitor.

Size (in)

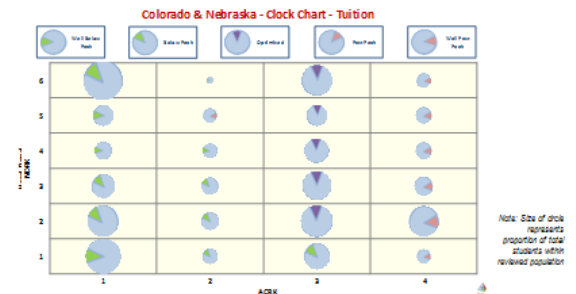
Pledge orientation

Another component of the survey asked prospects to rate the University of Wyoming on a scale of 1 to 5, with 1 being "not at all" and 5 being "very good".

## ANALYZING BY ACADEMICS & NEED OUT-OF-STATE (CO & NE) ELASTICITY

## FINANCIAL AID OPTIMIZATION BY SEGMENT OUT-OF-STATE (CO & NE) ELASTICITY

Based on the prior three years of aid strategies for undergraduate freshmen from Colorado and Nebraska, elasticity results suggest that the institution is well past peak in regards to financial aid optimization for its highest achieving students<sup>1</sup>.



There is an opportunity to increase financial aid amongst Academic Bands 1 and 2 to grow headcount and net revenue. However, the University should ensure academic quality remains stable by focusing enrollment growth on Bands 2 and 3.

Source: University of Wyoming, Huron Consulting Group  
Optimization: Based on the cost-revenue analysis, net revenue per student segment

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**Setting tuition for Colorado and Nebraska between \$9,500-\$10,000 with a discount for top academic students would likely increase clarity and appeal for these prospective students for Wyoming.**



# ONLINE EDUCATION PRICING

Based on our analysis, the University of Wyoming should implement the following changes to its online program pricing structure for out-of-state students to increase demand for program enrollments:

- + Maintain current pricing structure for in-state tuition for online programs, however, explore capping the number of credit hours campus-based undergraduate students can take online to accommodate space for fully-online degree seekers.
  - Undergraduate online course enrollment is increasing and pricing is extremely low compared to regional peers
  - Consider raising the online course fee to \$50 per credit hour for in-state students to recover additional costs for online education delivery.
- + Reduce undergraduate, graduate, and graduate certificate out-of-state tuition to be competitive with the Regional Peer Average (at or near peer average)
  - UW may experience a short-term reduction in revenue due to lower tuition rates for out-of-state enrollments
  - Current proportion of resident to non-resident undergraduate enrollment is 87% / 13%; graduate is 91% / 9%; and certificate 95% / 4%
  - Reduction of tuition rates for out-of-state students could stimulate more demand resulting in more out-of-state enrollments that generate revenue gains in the long-term
- + Retain current pricing for niche programs (e.g. Executive MBA, Undergraduate Nursing Degree) as these programs are currently priced more closely to peer averages and appear to have sufficient enrollments for available capacity.

## WYOMING CURRENT PRICE SUMMARY ONLINE EDUCATION PRICING

Considering the regional peer average tuition, it is suggested that Wyoming decrease its out-of-state, online tuition pricing to remain competitive with peers.

	Current Price	Suggested Price	Price Change	Credit Hour Production (AY 15-16) <sup>1</sup>	CH Production to Maintain Current Revenue	% of Total Online CH Production	% of Online CH Production by Level
Undergraduate In-State	\$154	-	-	11,182	-	65%	86%
Undergraduate Out-of-State	\$541	\$319	(\$222)	1,882	3,192 (70%)	11%	14%
Graduate In-State	\$276	-	-	3,289	-	19%	91%
Graduate Out-of-State	\$775	\$326	(\$450)	327	780 (138%)	2%	9%
Certificate In-State	\$276	-	-	616	-	4%	96%
Certificate Out-of-State	\$775	\$420	(\$355)	25	46 (85%)	<1%	4%

Note: Changes in gross tuition revenue due to increase/decrease in credit hour pricing by segment and credit hour production are shown on subsequent slides.

<sup>1</sup> Data used the available 11/2016 data and is for the current year.  
Undergraduate includes online nursing degree, graduate includes online nursing and business degree, certificate programs are graduate only.

**HURON**

# GROWTH POTENTIAL: WY, CO, & NE

While there may be space at the institution for additional students, changes in the college-going population from Colorado, Nebraska, and Wyoming, in number, ethnicity, and college preparedness may create challenges for additional headcount growth.

Projected Percentage Change in Public High School Graduates (2017-18-2027-28) <sup>1</sup>						
	White	Hisp.	Black	Asian/Pacific Islander	American Indian/Alaska Native	Projected Change
WY	10.1%	34.5%	31.2%	16.9%	22.6%	787
CO	2.5%	2.8%	1.1%	3.7%	-24.0%	1,303
NE	-1.9%	26.5%	-0.2%	48.4%	-18.9%	879
<b>Total</b>	<b>998</b>	<b>1,658</b>	<b>50</b>	<b>364</b>	<b>-102</b>	<b>2,969</b>

College Readiness of ACT Test Takers <sup>2</sup>				
	Nebraska	Colorado	Wyoming	National
English	68%	61%	58%	<b>61%</b>
Reading	48%	42%	38%	<b>44%</b>
Mathematics	43%	39%	33%	<b>41%</b>
Sciences	40%	36%	31%	<b>36%</b>
All Four	28%	25%	20%	<b>26%</b>

- + The institution should continue to refine and market its value proposition to students and, combined with a newly communicated out-of-state price, may be able to attain and attract additional non-resident students

**Declining growth in college going students in the region will only exacerbate enrollment competitive pressures for Wyoming as it competes for desirable students within neighboring states and at home.**

# NEXT STEPS

As University Leaders and Trustees plan a path forward for the University of Wyoming, it is important to find a way to balance the competing priorities of enrollment management with higher education pressures and internal opportunities for improvement.

- + **Balancing Tradeoffs with Enrollment:** Leadership will need to decide what will drive future enrollment growth—net tuition revenue, academic quality, or diversity
- + **Enrollment Growth Levers:** The institutional capacity analysis has focused on undergraduate capacity, and while the scenarios were all driven by out-of-state students, many other options exist for increased headcount, pending identifiable student demand
- + **National Trends in Enrollment:** UW is not alone in its desire to optimize its undergraduate efforts, many institutions are facing the pressures of a decreasing population of traditional college students and rising costs to maintain the status quo
- + **Enhanced Academic Management:** Prior presentations illustrated the opportunity to increase efficacy and efficiency within the block schedule alignment and space utilization to help improve student throughout
- + **Improved Data Stewardship:** While current efforts are underway to improve data accuracy and reporting within the institution, limited historical infrastructure resulted in data limitations in analyzing the academic enterprise
- + **Optimization of the Registrar Function:** Enhanced academic management combined with desired increased headcount will require a change in how the registrar function engages with the academic units to further support and engage with the schools and colleges

Huron looks forward to sharing final recommendations and project insights during the upcoming January Board of Trustee Meeting on Thursday, January 18<sup>th</sup> 2018.



**THANK YOU**