# University of Wyoming Peer Institutions

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UW Board of Trustees September – 2016 Meeting

Developed by Brian Schueler
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September 2016

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### Summary

During the 2016-2017 academic year The University of Wyoming will embark upon an institution wide strategic planning process. The process will be guided by campus leaders and representatives of UW constituencies. Working across campus, the resulting plan will help guide the University of Wyoming's direction moving forward.

Peer institutions will serve as an important tool for the UW Strategic Planning Leadership Council as they assess the university. Rigorously selected peer institutions provide accurate institutional benchmarks by which to evaluate the university and develop ambitious, yet attainable targets.

This document provides a list of peer institutions selected using a quantitative scoring system. This system assessed 44 separate variables across 192 public research universities in the United States. This system was used to rank all institutions in their similarity to the University of Wyoming.

Feedback from multiple campus leadership groups and councils was used to further develop the list of peer institutions. Feedback was gathered between June 2016 and August 2016

The included peers are separated into two groups: close peers and stretch peers. close peers represent institutions which are very similar to the University of Wyoming and share the same research classification from the Carnegie Classifications of Institutions of Higher Education (CCIHE). Stretch peers are institutions which also have similarities to the University of Wyoming, but have received a higher classification from the CCIHE for research in 2015. These institutions also have larger faculty and student populations.

Please consult the attached peer institution 'snapshot' for more information on each peer institution.

#### Close Peers

University of Idaho
University of Nevada-Reno
New Mexico State University-Main Campus
University of Rhode Island
Utah State University
University of Maine
Oklahoma State University-Main Campus
Montana State University
South Dakota State University
The University of Montana
North Dakota State University-Main Campus

#### Stretch Peers

Kansas State University
University of Nebraska-Lincoln
West Virginia University
Colorado State University-Fort Collins
Clemson University
Texas Tech University
University of New Mexico-Main Campus
Washington State University
University of Utah

# University of Wyoming Peer Institution Snapshot

	Insti	utiona	l Charact	eristics						Carnegie C	lassificat	ions (2015)							Faculty 8	& Research	า			Stude	nt Body		<b>Private Giving</b>
Institution Name	City	State	Derived Peer Ranking	Is Land Grant <sup>[IPE]</sup>	Institution is both Land Grant and Flagship [IPE]&[CB]	Distance from UW (miles) [IPE]	Institution Grants a Professional Degree in Medicine [IPE]	Basic Classifica iton <sup>[CAR]</sup>		Graduate Program [CAR]	Enrollment Profile <sup>[CAR]</sup>	UG Profile - Time and Term <sup>[CAR]</sup>	UG Profile - Selectivity [CAR]	UG Profile Transfers [CAR]	- Size & Setting [CAR]	Num. Faculty on Tenure Track or with Tenure <sup>[IPE]</sup>	Contr		Num. Earned doctorates (422 ranked) Percentile score <sup>[NSF]</sup>	Num. Full- time graduate students <sup>[2]</sup> (684 ranked) Percentile score <sup>[NSF]</sup>	Total R&D expenditures (632 ranked) Percentile [NSF]	5 Year Ave. Federal Grants from NSF, NIH, NIFA & DOE (2011 2015)	2013 Enroll. <sup>[IPE]</sup>	2008 Enroll. <sup>[IPE]</sup>		2014 Num. Students Exclusively Enrolled in Distance Ed. [IPE]	FY15 Endowment ( [NAC] or [IPE] if NAC unavailable
University of Wyoming	Laramie	WY	1	Х	Х	0	No	RU/H	Bal - HGC	D H/S	H-UG	4 YR - FT	MS	HTI	L4/NR	601	\$	48,416,944	34	24	30	\$28,640,638	12,778	12,067	22	1,573	\$481,469,024
		,	1				1		1				osed Close F		1						1				1	,	1
offiversity of faulto	Moscow	ID	2	Х	Х	680	Yes [1]	RU/H	Bal - HGC	D STEM	H-UG	4 YR - FT	S	HTI	M4/NR	444		68,813,321	38	33	24	\$32,674,940	12,024	11,791	20	916	\$239,602,961
,	Reno	NV	3	Х	Х	758	Yes - M	RU/H	Bal - HGC	D Comp - MedVet	H-UG	4 YR - FT	S	HTI	L4/NR	551		98,644,011	33	24	25	\$33,546,985	18,776	16,867	21	476	\$306,587,240
New Mexico State University-N		NM	4	Х		627	No	RU/H	Prof + A&S - HGC	D Comp	H-UG	4 YR - FT	I	HTI	L4/NR	577		97,025,281	33	24	21	\$26,497,136	16,765	17,239	18	1,890	\$221,005,235
<u> </u>	Kingston	RI	5	Х	Х	1753	No	RU/H	Bal - SGC	D Comp	H-UG	4 YR - FT	S	LTI	L4/R	538		76,805,263	34	31	24	\$31,933,507	16,387	15,904	22	225	\$131,655,326
·	Logan	UT	6	Х		324	Yes -V	RU/H	Bal - HGC	D H/S	VH - UG	4 YR - MFT	S	HTI	L4/NR	702		136,124,080	32	31	18	\$33,340,875	27,812	15,099	20	4,883	\$314,687,843
	Orono	ME	7	Х	Х	1861	No	RU/H	Prof + A&S - HGC	D Comp	H-UG	4 YR - FT	S	LTI	M4/R	405		35,802,000	41	28	23	\$21,247,331	11,247	11,818	21	592	\$185,612,561
Oklahoma State University-Mai		OK	9	X		581	Yes-M&V	RU/H	Prof + A&S - HGC	D Comp - MedVet	H-UG	4 YR - FT	MS	HTI	L4/R	862		67,392,729	18	12	22	\$32,896,071	26,073	22,995	22	1,409	\$877,548,906
		MT	10	X		407	No	RU/H	Prof + A&S - HGC	D STEM	VH - UG	4 YR - FT	MS	HTI	L4/R	466		68,572,340		29	22	\$43,744,937	14,852	11,976	21	347	\$142,660,761
South Dakota State University			12	Х		491	No	RU/H	Prof + A&S - SGC	D STEM	VH - UG	4 YR - FT	S	LTI	L4/R	362	-	37,316,949	50	27	29	\$19,976,839	12,525	11,995	20	1,016	\$104,903,422
The University of Montana  North Dakota State University-I		MT ND	13 14	V		566 581	No No	RU/H RU/H	Bal - HGC Prof + A&S - HGC	D STEM D Comp	H-UG H-UG	4 YR - FT 4 YR - FT	S	HTI	L4/R L4/R	495 410		42,910,740 46.538.383	49	42 27	29 19	\$17,335,743 \$23,057,922	14,525 14,629	14,207 13,230	20	504 1,038	\$172,756,142 \$133,978,262
North Dakota State Offiversity-I	rargo	ND	14	Λ		201	INO	KU/ FI	PIOI + A&S - NGC	D Comp	n-uu		sed Stretch		L4/ K	410	٦	40,556,565	33	21	19	\$23,057,922	14,029	13,230	21	1,036	\$155,976,202
Kansas State University	Manhattan	νc	16	Х		496	Voc V	RU/VH	Prof + A&S - HGC	D Comp - MedVet	H-UG	4 YR - FT		HTI	L4/NR	790	¢ 1	100,230,292	26	17	17	\$52,253,396	24,581	23,520	22	2 115	\$488,935,540
University of Nebraska-Lincoln		NE	17	Λ V	V	496	Yes-V No	RU/VH	Prof + A&S - HGC	D Comp - Med Vet	H-UG H-UG	4 YR - FT	MS MS	LTI	L4/NR L4/R	1036		136,067,977	16	14	13	\$52,253,396	24,581	23,520	22	2,115 992	\$1,538,070,689
,	Morgantow		18	A X	X	1347	Yes -M	RU/VH	Bal - HGC	D H/S	H-UG	4 YR - FT	S	LTI	L4/R L4/NR	1036		83,166,293	24	15	19	\$44,819,668	29,466	28,840	21	2,976	\$533,598,851
Colorado State University-Fort	. 0		28	X		57	Yes-V	RU/VH	Bal - HGC	D Comp - MedVet	H-UG	4 YR - FT	MS	HTI	L4/NK	996		191,481,103	20	14	12	\$80,857,365	31,186	28,882	22	2,578	\$281,355,223
,		SC	31	X		1315	No	RU/VH	Prof + A&S - HGC	D Comp	H-UG	4 YR - FT	MS	HTI	L4/R	848		64,157,687	21	11	19	\$41,973,908	21,303	18,317	26	809	\$648,610,563
		TX	60			571	No	RU/VH	Bal - HGC	D Prof	H-UG	4 YR - FT	MS	HTI	L4/R	998		33,015,799	13	10	19	\$11,960,256	33,111	28,422	22	2,262	\$546,229,422
University of New Mexico-Mair			85			434	Yes- M&D	RU/VH	Bal - HGC	D Comp - MedVet	H-UG	4 YR - MFT	S	HTI	L4/NR	1005		186,875,800	20	14	15	\$40,221,211	28,592	25,754	20	1,565	\$1,023,004,219
,		WA	96	Х		686	Yes-V	RU/VH	Bal - HGC	D Comp - MedVet	H-UG	4 YR - FT	S	HTI	L4/R	874	-	132,105,811	17	13	11	\$77,943,390	27.642	25,352	19	2,863	\$885,776,795
	Salt Lake Ci		125			329	Yes- M&D	RU/VH	Bal - HGC	D H/S	H-UG	4 YR - MFT	S	HTI	L4/NR	1473	-	256,671,000	13	8	7	\$191,237,079	32,077	28,211	21	1,010	\$1,023,004,219

Data Sources: Carnegie Foundation [CAR], IPEDS Data center [IPE], NSF(NSF), The College Board [CB] and NACUBO [NAC]

Key
Pink colored universities are close peers
Gold shaded institutions are stretch peers
Blue accented boxes indicate the same characteristic/value as UW
Green accented boxes indicate near match with UW ( +/- 1/4 a standard deviation - roughly +/- 10% of
distribution)

<sup>[1]</sup> University of Idaho participates in WWAMI and the Washington-Idaho Regional Veterinary Medical Education Program but does not currently (2016) have a standalone medical or veterinary school

	Definitions - Institutional Characteristics
Derived Peer Ranking	The rank of similarity to UW out of 192 included institutions based on 44
Denved Leer Ranking	scored metrics. This rank is the primary factor for selecting peers.
Is Land Grant	Institutions designated to receive benefits under 1862 or 1890 Morrill Acts
Flagship Institution	The best known (public) institution in a state according to common list used
riagsinp institution	by The College Board, Princeton Review, and others
Distance from UW	Straight-line distance between instituion and UW. Used to consider regionalit
In	stitution Grants a Professional Degree in Medicine
Yes	The institution grants a degree in Medicine, Dentistry, Osteopathic Medicine
163	or Veterinary Medicine
Yes + (M,D and/or V)	(specifies what type(s) of medical education provided)
No	Institution does not grant degree in those areas
	Definitions - Carnegie Classifications
	Basic Classification
RU/VH	Research Universities (very high research activity)
RU/H	Research Universities (high research activity)
	Undergraduate Program
Bal - HGC	Balanced arts & sciences/professions, high graduate coexistence
Bal - SGC	Balanced arts & sciences/professions, some graduate coexistence
Prof + A&S - HGC	Professions plus arts & sciences, high graduate coexistence
Prof + A&S - SGC	Professions plus arts & sciences, some graduate coexistence
	Enrollment Profile
H-UG	High undergraduate
VH - UG	Very high undergraduate

Definitions -	- Carnegie Classifications (Continued)					
Graduate Program						
D Comp	Comprehensive doctoral (no medical/veterinary)					
D Comp + MedVet	Comprehensive doctoral with medical/veterinary					
D -H/S	Doctoral, humanities/social sciences dominant					
D-Prof	Doctoral, professional dominant					
D-STEM	STEM dominant					
	UG Profile - Time and Term					
4 YR - FT	Four Years - Full Time					
4 YR - MFT	Four Years - Medium Full Time					
UG Profile - S	electivity (Derived from ACT/SAT Scores)					
S	Selective (most selective)					
MS	More Selective (but less selective than 'Selective')					
1	Inclusive					
	UG Profile - Transfers					
НТІ	High Transfer-in					
LTI	Low Transfer-in					
	Size and Setting					
L4/NR	Large, 4 Year, Primarily Nonresidential (0-24% live on campus					
L4/R	Large, 4 Year, Residential (25-49% live on campus)					
L4/HR	Large, 4 Year, Highly Residential (>50% live on campus)					
Def	finitions - Faculty & Research					
Num. Faculty on Tenure Track or with	Total number of faculty with tenure status or in positions					
Tenure	that lead to consideration for tenure					

Definitions - Faculty & Research (Continued)						
ederal Grants & Contracts Revenues from Federal agencies for specific research projects & similar programs						
Num. Earned docs Percentile	Percent rank of institution by number of Ph.D.s issued (excludes professional degrees). Institutions issuing					
	more degrees have a LOWER percentile rank.					
Num. Full Time Grads	$Number of full-time\ graduate\ students\ in\ science,\ engineering,\ health\ and\ soc.\ sciences.\ Institutions\ with\ more$					
Num. Fun Time Grads	students have a LOWER percentile rank.					
Total Research and	Total expenditures in research and development activities across all academic fields. Institutions with more					
<b>Development Expeditures</b>	expenditures have a LOWER percentile rank.					
5 Year Ave. Federal Grants from	National Institute of Food and Agriculture, and Department of Energy between 2011 and 2015. This metric is					
NSF, NIH, NIFA & DOE	provided for information purposes, and is not included in scoring due to the time consuming nature of collecting					
NOT, NITH & DOL	this data.					
	Definitions - Student Body					
Enrollment	Total fall graduate and undergraduate student headcount					
25th Percentile ACT Score	The highest ACT score in the lowest quartile of incoming class 2014.					
Num. Students Exclusively	Number of students only enrolled in educational offerings that use technology to deliver instruction to					
Enrolled in Distance Ed.	students seperated from instructor on a regular basis					
	Definitions - Private Giving					
FY15 Endowment	Data on University Endowments from the National Association of Collge and University Business Officers					
F 1 13 Endowment	Commonfund Study of Endowments for 2015					

 $<sup>^{\</sup>left[2\right]}$  Please note - some academic fields may be underrepresented in this metric

## Peer Institution Purpose and Intent

Peer institutions were selected with the intent of providing comparison information for strategic planning at the University of Wyoming. In the selection process, it was understood that these peer institutions would also be used to evaluate UW's progress towards targets established by the forthcoming strategic plan, evaluate institutional structures and practices, and provide a framework for assessment of university entities.

#### Close and Stretch Peers

For planning purposes, it can be useful to include in the peer group institutions which remain very similar to the target institution, but also have notable areas of excellence distinct from UW. Including these universities in the peer group can help illustrate areas where growth and improvement may be possible for the institution.

These different peers are divided into two primary groups. The first group, close peers, represents schools which are very similar to the University of Wyoming across measured areas. These institutions provide the closest approximation to the University of Wyoming on an institutional level.

The second group, stretch peers, also hold many similarities to the University of Wyoming across measured areas, but unlike UW's close peers have significantly larger student

populations and larger research enterprises as determined by the Carnegie Classifications of Institutions of Higher Education.

It is important to note that the classification of an institution as a stretch peer does not itself indicate a desire by UW's leaders to emulate those institutions (but doesn't preclude such a decision being made). The distinction between stretch peers and close peers is intended to highlight institutions similar to the University of Wyoming with larger or more productive research enterprises and commonly larger organizations as a whole.

Inclusion of these stretch peers provides examples of institutions with similarities that have excelled in certain fields. The combination of close peers and stretch peers also serves to illustrate how institutions similar to the University of Wyoming have grown in the past.

#### Comparison Peers vs. Competitor Peers

Previous peer lists for the University of Wyoming have consisted of comparable institutions, competitor institutions (competing in various areas), and sometimes both. These lists have often been used for institutional comparisons across a few areas.

The peer list detailed in this document has been selected to show institutions which are comparable to the University of Wyoming. For the purposes of evaluating an institution, comparative institutions are best suited.

Assessing competing institutions can help in some kinds of strategic decision-making. Competitor peers can be useful for some kinds of analysis, but can hold drawbacks for institutional planning. As an exaggerated example, the University of Wyoming competes with Sheridan College for some students, and with Yale University for some faculty members, but using these institutions to set benchmarks and assess UW as a whole would obviously be problematic.

## Selection Methodology

Peer institutions for the University of Wyoming were selected in a two-step process which first involved ranking institutions with regard to their similarity to UW using publically available metrics, and then utilized feedback and suggestions from campus leaders and leadership boards to finalize the peer lists.

The initial process utilized was based loosely on the methods used by South Dakota State University in their strategic planning process.<sup>1</sup> Peer institutions were selected out of a list which included every institution included in previous peer lists. These included 8 previously used institution-wide lists, as well as 11 college and sub-college level peer lists developed in the Spring of 2015. All other institutions that were classified as public research universities in 2010 were also included. This resulted in a total list of 192 institutions.

#### **Scored Metrics**

44 separate metrics were selected to help in quantitative assessment of the similarity of each public research university to UW. 33 of these metrics were included as a result of feedback from meeting with campus leaders and advisory bodies. These metrics are detailed in the following five tables.

# Metrics from The Carnegie Classifications of Higher Education <a href="http://carnegieclassifications.iu.edu/downloads.php">http://carnegieclassifications.iu.edu/downloads.php</a>

Basic - 2015, 2010 & 2000	Measures comparative research productivity and volume
UG Program – 2015, 2010	Describes the distribution of degrees across fields (A&S & Professions), and the amount of undergraduate degree areas also offering graduate degrees
Grad. Program - 2015,2010	Describes the distribution of doctoral degrees awarded across academic and professional fields
Enroll. Profile – 2015,2010	Describes the breakdown of enrolled students by graduate and undergraduate level
UG Profile – 2015,2010	Describes the level of institution, the proportion of undergraduates enrolled full time, if test scores are used in admissions and the level of selectivity, and the number of undergraduate students who are transfer students.
Size and Setting – 2015, 2010	Indicates the size of the institution (large indicates at least 10,000 students), and the proportion of undergraduates who live on campus

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<sup>&</sup>lt;sup>1</sup> https://www.sdstate.edu/impact-2018-strategicvision-south-dakota-state-university/peerinstitutions

# Metrics from The National Center for Education Statistics (NCES) Integrated Postsecondary Education Data System (IPEDS)

#### https://nces.ed.gov/ipeds/datacenter/Default.aspx

Land Grant Status	Indicates institutions eligible for benefits under the Morrill Acts of 1862 and 1890.
Distance from UW	Calculated from latitude and longitude points <sup>2</sup>
Institution has Hospital	Indicates if the institution registers revenues or expenses associated with hospital services
Institution grants Medical Degree	Indicates if the institution had students complete a degree in Medicine (M.D. or D.O.), Dentistry (D.D.S. or D.M.D), or Veterinary Medicine (D.V.M)
Faculty – tenured, on tenure track, and not on tenure track (or no tenure system)	Instructional staff counts classified by tenure status
Grants and Contracts - Federal, State, Local and Local/private	Institutional revenues classified as operating grants or contracts by source of origin. Delineated by Federal, State, Local and Private sources. Calculated according to GASB standards. (Governmental Accounting Standards Board)
Percent of applicants admitted	Total admitted students divided by the number of total applications received
ACT Composite scores (25 <sup>th</sup> and 75 <sup>th</sup> percentiles)	Top ACT score of lowest quartile and lower 3 quartiles of incoming students. Where ACT Data inadequate, SAT conversions to ACT Scores are calculated using College Board approved concordance tables. <sup>3</sup>
Enrollment – 2013 and 2008	Fall total headcount enrollment – includes undergraduates and graduates
Students Exclusively enrolled in Distance Education	Fall 2014 count of undergraduate, graduate and non-degree seeking students enrolled exclusively in online/distance education courses
NCES Comparison Grouping	Comparison groups automatically generated by IPEDS for use in IPEDS Data Feedback Reports when institutions don't provide custom comparator groups.
Endowment Value – 2013,2010,2007	Value of total endowment assets at the end of the fiscal year. Includes invested funds, term limit endowments, and other funds function as endowments for the institution, any affiliated foundations or affiliate organizations.

Excel formula is =ACOS(COS(RADIANS(90-Lat1)) \*COS(RADIANS(90-Lat2)) +SIN(RADIANS(90-Lat1)) \*SIN(RADIANS(90-Lat2)) \*COS(RADIANS(Long1-Long2))) \*3958.76

<sup>(</sup>formula developed by blogger 'BlueMM' <a href="http://bluemm.blogspot.com/2007/01/excel-formula-to-calculate-distance.html">http://bluemm.blogspot.com/2007/01/excel-formula-to-calculate-distance.html</a>
3Conversion was calculated from SAT to ACT. <a href="https://www.act.org/content/dam/act/unsecured/documents/ACT-SAT-Concordance-Tables-Report.pdf">https://www.act.org/content/dam/act/unsecured/documents/ACT-SAT-Concordance-Tables-Report.pdf</a>

#### Metrics from The National Science Foundation Academic Institution Profiles https://ncsesdata.nsf.gov/profiles/site

Earned Doctorate Percentile Rank	Percentile rank of institution out of all institutions reporting to the Survey of Earned Doctorates. (Published by the NSF's National Center for Science and Engineering Statistics) Includes research doctorate counts from all fields, including Non-Science and Engineering Fields
Full-time Graduate Students Percentile Rank	Percentile rank of institution out of all institutions reported to the Survey of Graduate Students and Post-doctorates in Science and Engineering. (Published by the NSF's National Center for Science and Engineering Statistics) Includes social sciences, but does not include humanities and arts. <sup>4</sup>
Total Federal Obligations Percentile Rank	Percentile rank of institution out of all institutions reported to the Survey of Federal Science and Engineering Support to Universities, Colleges and Nonprofit Institutions. (Published by the NSF's National Center for Science and Engineering Statistics) Does not include grants to other fields — not included in final scoring metrics.
Total Research and Development expenditures Percentile Rank	Percentile rank of institution out of all institutions reported to the Higher Education Research and Development Survey. (Published by the NSF's National Center for Science and Engineering Statistics) Includes all academic fields.

#### Metrics from The College Board

 $\frac{https://trends.collegeboard.org/college-pricing/figures-tables/tuition-fees-flagship-universities-over-\underline{time}$ 

Flagship Universities Measures comparative research productivity and volume

#### Metrics Developed from Previous UW Peer Institutions

Lists made available through UW Office of Institutional Assessment and UW Division of Academic Affairs, as well as published lists of peer institutions at other universities.

Prevalence on 8 Institution-	Counted inclusion of an institution on 8 recently used peer lists.					
Wide Peer Lists	These lists include the previous 'Trustee List', '20 Western Land-					
	Grant', '50 Public Research', the selected comparators for the					
	National Survey of Student Engagement UW Report, selected					
	comparators for the UW Dashboard's tuition and fees comparison,					
	comparators for the UW LRDP Academic and Research Space Study,					
	and the comparators selected for the ASUW Tuition Survey in 2013.					
Prevalence on College-Level	Counted inclusion of an institution on 11 college specific peer lists					
Peer Lists	developed in April of 2015. (Arts and Sciences and Agriculture					
	subdivided their subject areas into multiple peer lists).					
Institution considers UW a	Determined via a manual survey and website search of the top 40					
Peer	schools ranked in similarity to UW.					

<sup>&</sup>lt;sup>4</sup> This metric may create a 0.1-point skew towards institutions with comprehensive, or STEM predominant graduate programs. However, this difference is not statistically significant.

#### Scoring Methodology

To weigh an institution's similarity to the University of Wyoming scores were developed based on the similarity or difference of each value to UW's corresponding value. Across all metrics the maximum score possible was 1.00, and the minimum score possible was 0.00 for qualitative metrics and -0.50.

For qualitative metrics, like Carnegie classifications, scoring was assigned on exact, partial or no match with UW's value. For metrics measuring one statistic (for example Carnegie Basic) scores of 1.00 were given for exact matches (RU/H) and scores of 0.00 given for non-matches (RU/VH or RU/M). metrics that incorporated multiple statistics into one metric were judged as full match (1.00), partial match (0.5) or non-match (0.00). An example is the undergraduate profile metric, which simultaneously measures full time status, selectivity and transfer students. A match on all three statistics resulted in a score of 1.00. Matching with two of three statistical elements resulted in a partial score of 0.5, and a match of one or less resulted in a score of 0.00. 20 of the 44 total metrics were scored in this manner.

Quantitative metrics were scored using the following formula calculating score across all institutions for the set of values of metric 'X'<sup>5</sup>

Score I = 
$$1 - \left( \frac{|I_x - UW_x|}{\text{Std. Dev. of all institutions}_x} \right)$$

Where the resultant score of the formula was less than -0.5, the score was automatically adjusted to the minimum value of -0.5.

The two UW Peer list metrics were scored based on the percentage of lists with a certain school included with a maximum score of 1 and minimum score of 0. Schools included on all lists received a value of 1.00, schools only present on half of the lists received a score of 0.50, etc.

In some circumstances where the total distribution was skewed with regard to UW's value (distance for example), weights of the formula were adjusted to provide a less skewed distribution of scores.

#### Variable Scoring Weights

Overall, a goal of the quantitative scoring formula is to fairly consider many areas of the university in the process of peer selection. However, variations in some areas should be more heavily considered than others. In the utilized quantitative model, each metric can be

assigned individual weights, and each overall area can also be assigned individual weights. These weights are detailed in Appendix B.

#### Secondary Selection and Campus Feedback Sessions

Development of the peer institutions incorporated multiple feedback sessions with leadership groups at the University of Wyoming. Feedback was received from members of the Board of Trustees, Vice Presidents of Academic Affairs, Research, and Institutional Advancement, the University

Executive Council, as well as the Academic Deans Council, the Student Affairs Directors Council, the Financial Crisis Advisory Council, and the Director of the Office of Institutional Assessment. These meetings and feedback sessions resulted in the addition of nearly 30

<sup>&</sup>lt;sup>5</sup> Excel formula =IF ((1-((ABS(Institution i – UW value))/(Std. Deviation of all institutions)))>-0.5, ((1-((ABS(Institution i – UW value))/(Std. Deviation of all institutions))),-0.5)

metrics (detailed above) and multiple adjustments of selected peer institutions.

Utilizing this feedback and advice, a list of 'close peers' and 'stretch peers' was developed.
Carnegie Basic classification was primarily used to create this distinction alongside geographic considerations and feedback from university stakeholders.

The list of peer institutions has been presented alongside a selection of contributing factors to the scoring formula in the "Peer Snapshot". Although this table does not include every scored metric, it provides insight on the qualities of the selected peers and an overview of their similarities to the University of Wyoming.

## Updates and Continued Use of Peer Institutions

To ensure that peer evaluations and comparative assessments remain valid, peer institutions lists should be kept consistent. However, over a period of years as peer institutions and the University of Wyoming change and develop, it may be necessary to revisit the list of peers and replace institutions that have diverged significantly from UW.

It is my belief that updates to this list of peer institutions should be done using similar methodology as reflected in this document. The method's reliance on a quantitative and formulaic method does have drawbacks, but this method helps eliminate individual and institutional biases in peer selection and allows for many diverse areas of the institution to be equally considered in the selection process.

# Appendix A. List and Ranking of Considered Institutions

Institution Name	Peer Ranking	Total Score
University of Wyoming	1	41.75
University of Idaho	2	31.04
University of Nevada-Reno	3	29.92
New Mexico State University-Main Campus	4	28.40
University of Rhode Island	5	28.02
Utah State University	6	27.29
University of Maine	7	27.28
University of New Hampshire-Main Campus	8	26.87
Oklahoma State University	9	26.63
Montana State University	10	24.65
University of Vermont	11	24.53
South Dakota State University	12	24.08
The University of Montana	13	23.81
North Dakota State University-Main Campus	14	23.75
Mississippi State University	15	23.43
Kansas State University	16	23.21
University of Nebraska-Lincoln	17	23.16
West Virginia University	18	22.55
University of Memphis	19	22.53
University of Arkansas	20	22.34
University of Missouri-Kansas City	21	22.11
Auburn University	22	21.88
University of Southern Mississippi	23	21.82
Wichita State University	24	21.81
University of Alaska Fairbanks	25	21.57
University of North Dakota	26	21.44
San Diego State University	27	21.15
Colorado State University-Fort Collins	28	21.00
Ohio University-Main Campus	29	20.95
University of Toledo	30	20.84
Clemson University	31	20.83
University of North Carolina at Greensboro	32	20.73
Western Michigan University	33	20.72
University of Oregon	34	20.46
Louisiana State University and Agricultural & Mechanical College	35	20.17
Southern Illinois University-Carbondale	36	20.14

	Peer	Total
Institution Name	Ranking	Score
University of Nevada-Las Vegas	37	20.11
University of Akron Main Campus	38	20.06
Northern Illinois University	39	20.02
The University of Texas at El Paso	40	19.98
The University of Alabama	41	19.94
University of California-Riverside	42	19.86
The University of Texas at San Antonio	43	19.81
Oregon State University	44	19.79
University of Maryland-Baltimore County	45	19.79
University of Missouri-St Louis	46	19.72
Florida Atlantic University	47	19.52
Northern Arizona University	48	19.52
Kent State University at Kent	49	19.39
University of Delaware	50	19.38
University of Missouri-Columbia	51	19.09
University of Northern Colorado	52	19.04
Texas State University	53	18.93
Portland State University	54	18.85
University of North Texas	55	18.85
Old Dominion University	56	18.77
University of Mississippi	57	18.68
University of South Dakota	58	18.64
Illinois State University	59	18.58
Texas Tech University	60	18.52
University of North Carolina at Charlotte	61	18.48
Missouri University of Science and Technology	62	18.42
University of Louisiana at Lafayette	63	18.38
Bowling Green State University	64	18.29
University of New Orleans	65	18.23
New Jersey Institute of Technology	66	18.08
SUNY at Binghamton	67	18.06
North Carolina A & T State University	68	18.05
University of Wisconsin-Milwaukee	69	17.90
University of Arizona	70	17.81
The University of Texas at Arlington	71	17.62
University of Massachusetts-Lowell	72	17.52
University of Hawaii at Manoa	73	17.45
Cleveland State University	74	17.37

Institution Name	Peer	Total Score
Java Stata Hairareitu	Ranking 75	17.35
Iowa State University	76	17.31
Miami University-Oxford	77	17.20
Ball State University	78	17.19
Colorado School of Mines		
University of Puerto Rico-Rio Piedras	79	17.17
The University of Texas at Dallas	80	17.16
University of Houston	81	17.10
University of Massachusetts-Amherst	82	17.00
Florida Agricultural and Mechanical University	83	16.88
University of Massachusetts-Boston	84	16.87
University of New Mexico	85	16.86
Michigan Technological University	86	16.37
Rutgers University-Newark	87	16.27
Idaho State University	88	16.21
Florida International University	89	16.00
Wright State University-Main Campus	90	15.59
University of South Alabama	91	15.45
University of Alabama in Huntsville	92	15.33
Jackson State University	93	15.31
University of Georgia	94	15.22
Louisiana Tech University	95	15.20
Washington State University	96	15.18
Temple University	97	15.12
University of Oklahoma-Norman	98	15.10
Georgia State University	99	14.85
East Carolina University	100	14.82
Central Michigan University	101	14.72
College of William and Mary	102	14.60
University of Louisville	103	14.51
The University of Tennessee-Knoxville	104	14.46
University of Connecticut	105	14.35
University of Nebraska at Omaha	106	14.32
Pennsylvania State University	107	14.16
Rutgers University-New Brunswick	108	14.01
Boise State University	109	14.00
Sam Houston State University	110	13.99
University of South Carolina-Columbia	111	13.94
Arizona State University-Tempe	112	13.94
East Tennessee State University	113	13.79
Oakland University	114	13.69

	Peer	Total
Institution Name	Ranking	Score
University of California-Santa Cruz	115	13.55
Virginia Commonwealth University	116	13.53
University of Colorado Boulder	117	13.52
University of Maryland-College Park	118	13.52
SUNY at Albany	119	13.46
George Mason University	120	13.38
University of Kentucky	121	13.33
University of Colorado Denver	122	13.19
University of Arkansas at Little Rock	123	13.15
University of Illinois at Chicago	124	13.14
University of Utah	125	12.76
Florida State University	126	12.74
Indiana University-Purdue University- Indianapolis	127	12.68
Tennessee State University	128	12.68
Texas Woman's University	129	12.65
Prairie View A & M University	130	12.42
Georgia Southern University	131	12.40
Indiana University of Pennsylvania- Main Campus	132	12.22
University of Minnesota-Twin Cities	133	12.14
Eastern Michigan University	134	12.13
California State University-Fresno	135	12.13
University of Central Florida	136	12.08
University of Massachusetts-Dartmouth	137	12.04
San Francisco State University	138	11.94
North Carolina State University at Raleigh	139	11.90
Wayne State University	140	11.83
California State University-Fullerton	141	11.78
Middle Tennessee State University	142	11.78
The University of West Florida	143	11.46
The University of Texas - Rio Grande Valley	144	11.43
University of Kansas	145	11.42
Texas A & M University-Kingsville	146	11.37
Tennessee Technological University	147	11.24
Texas Southern University	148	11.21
University of Alabama at Birmingham	149	11.20
Indiana State University	150	11.18
Texas A & M University-Commerce	151	10.71
University of California-Santa Barbara	152	10.71
Kennesaw State University	153	10.68

	Peer	Total
Institution Name	Ranking	Score
University of South Florida-Main Campus	154	10.57
University of Louisiana at Monroe	155	10.50
Valdosta State University	156	10.42
Texas A & M University-College Station	157	10.32
Texas A & M University-Corpus Christi	158	10.31
University at Buffalo	159	10.19
University of Illinois at Urbana- Champaign	160	10.14
Ohio State University-Main Campus	161	10.13
University of California-Irvine	162	9.98
University of Iowa	163	9.83
University of West Georgia	164	9.65
Lamar University	165	9.58
University of Cincinnati-Main Campus	166	9.56
SUNY College of Environmental Science and Forestry	167	9.49
Indiana University-Bloomington	168	9.36
Montclair State University	169	9.33
University of California-Davis	170	9.30
University of Maryland Eastern Shore	171	9.21
Purdue University-Main Campus	172	9.19
University of Florida	173	8.93
Virginia Polytechnic Institute and State University	174	8.90
Stony Brook University	175	8.77
University of Wisconsin-Madison	176	8.60
Michigan State University	177	8.59
Morgan State University	178	8.57
Naval Postgraduate School	179	8.23
CUNY Graduate School and University Center	180	7.90
University of California-Berkeley	181	7.71
University of Pittsburgh-Pittsburgh	182	7.12
The University of Texas at Austin	183	6.66
Georgia Institute of Technology	184	6.49
University of California-San Diego	185	6.06
University of Hawaii at Hilo	186	5.82
University of Washington-Seattle Campus	187	5.08
Air Force Institute of Technology- Graduate School of Engineering & Management	188	4.14

University of Virginia-Main Campus	189	4.14
University of North Carolina at Chapel Hill	190	2.38
University of Michigan-Ann Arbor	191	1.15
University of California-Los Angeles	192	0.86

## Appendix B. Formula Scoring Weights

Overall Weights (Total Max. Score – 41.75)

Score Area	Carnegie Characteristics	Institutional Characteristics	Faculty	Research	Student Body	Previous & Existing Peer Groups	Private Giving
Weight	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Max. Score	13.75	9.00	2.00	6.00	4.00	4.00	3.00

#### Carnegie Characteristics (Total Max. Score – 13.75)

Area	Basic Score	UG Score	Grad Score	Enroll profile Score	UG profile Score (split into three on snapshot for clarity)	Size & Setting	Basic 2010	UG Program 2010	Grad Program 2010	UG Profile 2010	Enrollment Profile 2010	Size& Setting 2010	Basic 2000
Weight	3.00	1.00	1.00	1.00	1.00	1.00	1.00	0.75	0.75	0.75	0.75	0.75	1.00

#### Institutional Characteristics (Total Max. Score – 9.00)

Score Area	Is land grant score	Is Flagship Institution	Institution is both Land Grant and Flagship	Distance Score	Has Hospital Score	Grants Med. Degree Score
Weight	3.00	1.00	2.00	2.00	0.50	0.50

#### Faculty (Total Max. Score - 2.00)

Score Area	Score T	Score TT	Score - Tot TT& T	Score - Not TT
Weight	0.50	0.25	1.00	0.25

#### Research (Total Max. Score - 6.00)

Score Area	2013 Fed Grants & Contracts Score	State Operating Grants and Contracts Score	Local/Private Operating Grants and Contracts Score	Local Operating Grants and Contracts Score	NSF Earned Doctorates Score	NSF Full-Time Graduates Score	NSF Total Federal Obligations Score
Weight	1.00	1.00	1.00	1.00	0.75	0.50	0.00

#### Admissions and Student Body (Total Max. Score – 4.00)

Score Area	Is land grant score	Is Flagship Institution	Institution is both Land Grant and Flagship	Distance Score	Has Hospital Score	Grants Med. Degree Score
Weight	3.00	1.00	2.00	2.00	0.50	0.50

#### Previous and Existing Peers (Total Max. Score – 4.00)

Score Area	NCES Comparator Score	Does this institution consider us a peer -	Prevalence on Institutional Peer lists -	Prevalence on College Peer lists -
	·	Score	Score	Score
Weight	1.00	1.00	1.00	1.00

#### Private Giving (Total Max. Score – 3.00)

Score Area	2013 Endowment Score	2010 Endowment Score	2007 Endowment Score
Weight	1.00	1.00	1.00