To the Joint Appropriations Interim Committee
From the University of Wyoming

Below is the information that the JAC requested of UW during and subsequent to the hearing on July 31, 2012. As a reminder, UW conveyed reports in late August on two other committee requests - the status of the study of the Family Medical Residency Programs and projected workforce shortages for physicians and dentists.

The remaining requests are:

Provide the following information pertaining to the UW Foundation:

- ***The amounts of the UW Foundation's endowment for the past five years,***
- ***The annual income stream from that endowment,***
- ***The earnings from the state matching funds appropriated to UW and invested in the UW Foundation endowment, as well as how those earnings are being expended, and***
- ***A copy of the current agreement between UW and the Foundation regarding the management of these state matching funds.***

The amounts of the UW Foundation's endowment for the past five fiscal years were:

- FY08: $297.0 million
- FY09: $225.0 million
- FY10: $257.0 million
- FY11: $314.8 million
- FY12: $316.1 million

The amount of the annual income stream from the endowment for FY12 was $13.4 million.

Since 2001, the state has appropriated $88.65 million to the University of Wyoming Endowment Challenge Program (21-16-901 through 904). The State Treasurer holds the state funds until UW, through the Foundation, raises a matching amount from private sources. Private contributions must be at least $50,000. When the private funds have been secured, the State Treasurer conveys a matching amount of state funds to UW.

As directed in 21-16-904(iii), UW transfers the state matching funds to the UW Foundation for permanent investment. The earnings from the endowment are then conveyed back to UW to support university programs and operations. This statute also permits the Foundation to retain some of the earnings for "reasonable costs of administration." This is 1% of the state matching funds. (NOTE: During the July 31st hearing, UW incorrectly stated that there was no administrative fee.)

In FY12, the earnings from the state matching endowment fund yielded $3,055,568.23 for the following UW purposes:

- Academic Support ($977,291.50)
- Faculty ($704,516.52)
- Operations ($20,213.44)
- Services ($89,704.37)

- Student Assistance ($1,120,849.72)
- Technology and Facilities ($100,589.88)
- Other ($42,402.80)

A copy of the agreement between UW and the UW Foundation regarding the management of university funds, including the UW Endowment Challenge Program, is attached.

Provide details of the increase in contracts and grants since FY02

Since FY02, UW has raised a total of $804,102,210 in contracts and grants. Below are the annual amounts:

- FY02: $50,003,257
- FY03: $54,005,147
- FY04: $61,018,154
- FY05: $65,000,653
- FY06: $70,009,713
- FY07: $72,005,342
- FY08: $78,006,884
- FY09: $81,012,837
- FY10: $101,613,246 (includes $27 million in ARRA funds)
- FY11: $85,465,585
- FY12: $85,961,392

A small portion of these totals consist of Pell grants and AML funds that state and federal agencies have awarded to UW through grants. None of the amounts noted above include the AML funds that the legislature has appropriated to UW over the years nor roughly $20 million that UW receives annually in direct student loans. The large EPSCoR grant that UW recently received arrived in FY13 and thus is not reflected above.

Several UW departments and programs generate the many contracts and grants that UW receives annually to support research, instruction and services. At the conclusion of FY12, there were approximately 2,000 active contract and grant accounts, indicating the variety of sources that award funds to UW. Federal government agencies provide the most financial support, but state government and privately-owned companies also convey substantial amounts.

Extrapolating from a report initially prepared in the mid-2000s by Professor David "Tex" Taylor, a UW economist, it is estimated that UW's FY12 contacts and grants created 700 jobs and contributed an additional $82 million to the state's economy through secondary economic activity. In addition, these contracts and grants support partially or completely about 1,500 UW employees and 275 graduate and undergraduate students.

Provide information about UW's cost of instruction by program

Listed below are the UW instructional programs offered through the seven colleges and the amount of Section I funding apportioned to each one in FY13. The budgets consist of salaries

and benefits for faculty and staff assigned to the program, as well as funds for support services. State general funds comprise 68% of UW's Section I revenues.

It is important to note that these figures reflect only a fraction of the resources that UW expends on instruction. They do not include costs of academic support, libraries, research, student services and the outreach school.

COLLEGE OF AGRICULTURE	
Summer Session EPBs	5,513
Admin Support	45,000
Microbiology	15,000
Academic Program Support	49,150
Academic Program Summer School	24,987
Ag Economics	438,017
Ag Economics Supplemental	43,308
Animal Science	634,656
Animal Science Supplemental	58,452
Family Consumer Science	677,378
Family Consumer Science Supplemental	88,458
Molecular Bio	702,071
Molecular Bio Supplemental	70,312
Plant Science	274,151
Plant Science Supplemental	26,910
Renewable Resources	754,912
Renewable Resources Supplemental	100,105
Vet Science	413,916
Vet Science Supplemental	39,876
Admin	473,702
Hydrology	15,500
TOTAL COLLEGE OF AGRICULTURE	4,951,374
COLLEGE OF ARTS & SCIENCES	
Summer Session EPBs	103,754
Instruction - A & S	203,846
A & S Summer School	470,246
Anthropology	1,032,034
American Studies	400,466
Art	885,350
Botany	1,348,699
Chemistry	1,654,866
Communication/Mass Media	1,003,831
English	2,487,199
Religious Studies	505,564
Geography	713,897
Geology/Geophysics	2,084,371

History	723,164
Mathematics	2,129,622
Modern & Classical Languages	971,121
Music	1,406,939
Philosophy	480,767
Physics & Astronomy	1,319,135
Political Science	789,779
International Studies	366,727
Psychology	1,263,308
Sociology	803,145
Statistics	537,005
Theatre & Dance	1,269,626
Zoology & Physiology	2,345,144
Natural Science	65,868
Criminal Justice	744,774
Women's Studies	371,294
Chicano Studies	108,832
Master of Fine Arts	10,830
Biology Program	267,737
TOTAL COLLEGE OF ARTS & SCIENCES	28,868,940
COLLEGE OF BUSINESS	
Summer Session EPBs	12,623
Instruction-Business	644,923
Business Summer School	57,377
Graduate Business Programs	35,004
Accounting	1,147,020
Management and Marketing	1,994,180
Economics & Finance	2,097,208
Sustainable Business	453,001
MBA Tuition Differential	140,435
TOTAL COLLEGE OF BUSINESS	6,581,771
COLLEGE OF EDUCATION	
Summer Session EPBs	25,757
Instruction-Education	221,853
Education Summer School	116,743
Education Partnerships	102,504
Science Math Teaching Center	45,168
Undergrad Studies	343,600
Educational Studies	622,241
Graduate Studies & Research	16,000
Education Course Fees	69,365
Elem & Early Childhood Educ	1,461,372

Secondary Education	686,076
Special Education	63,408
Public Relations and College Climate	18,182
Professional Studies	1,602,264
TOTAL COLLEGE OF EDUCATION	5,394,533
COLLEGE OF ENGINEERING	
Summer Session EPBs	12,291
Computer Science	1,170,058
Instruction-Engineering	796,446
Engineering Summer School	27,709
Atmospheric Science	1,271,588
Civil/Architectural Engineering	1,845,770
Chemical Engineering	1,567,445
Electrical/Computer Engr	1,877,211
Engineering Science	35,498
Mechanical Engr	1,569,665
TOTAL COLLEGE OF ENGINEERING	10,173,681
COLLEGE OF HEALTH SCIENCES	
Summer Session EPBs	28,016
Instruction-Health Science	182,964
Health Science Summer School	126,984
Nursing	1,868,413
Social Work	931,757
Communication Disorders	1,082,674
Pharmacy	2,401,413
Kinesiology and Health	1,156,792
Pharmacy Tuition Differential	1,107,192
Division of Disability Studies	163,364
TOTAL COLLEGE OF HEALTH SCIENCES	9,049,569
COLLEGE OF LAW	
Instruction - Law	2,835,812
Law Tuition Differential	1,236,444
TOTAL COLLEGE OF LAW	4,072,256

Source: University of Wyoming Operating Budget, FY 2013, pages 17-20

Identify the needs in the state's job market and UW funding for the academic programs related to those needs

The response below consists of two sets of data. The first pertains to the projected needs in the state's job market from 2011-2021. The Department of Workforce Services' Office of Research and Planning compiled this information. The second set noted at the end of this response was taken from UW's FY13 operating budget.

DWS projects that Wyoming will add 40,874 jobs from 2011-21, in addition to replacing 27,747 positions vacated as a result of retirements, death, departure from the state or other reasons. This totals 68,621 jobs that will need to be filled between 2011 and 2021. The age of the current workforce will have quite an impact during this period. Educational services, health care, social assistance and public administration are particularly reliant upon workers who are 55 and older and thus will likely experience the greatest turnover. For example, DWS projects that educational institutions will add 811 jobs between 2011 and 2021 but will need to fill 2,556 openings that are currently occupied.

Below is a list of the top ten ***industries*** that will experience the largest net growth in hiring over the next decade:

Industry	**Net Growth Job Openings**
Healthcare/Special Assistance	9,258
Mining	8,458
Educational Assistance	8,109
Public Administration	2,878
Transportation/Warehousing	2,737
Construction	2,039
Wholesale Trade	1,814
Professional, Scientific, Technology Services	1,718
Accommodation/Food Services	1,578
Other	1,226

There is quite a decrease between 3rd and 4th places. Of the positions that are projected to be filled, 38% will occur in just three industries – health care, mining and education.

Below is a list of the top ten occupations that will have the highest projected number of ***average annual openings*** during this period. Since the JAC's question includes an academic component, educational preparation and estimated wages are also included.

Occupation	**Typical Education**	**Average Annual Wage**
Truck Drivers, Heavy and Tractor-Trailer	High School or Less	$43,266
Secretaries, except Legal, Medical, and Executive	Some College or Certificate	$30,456
Registered Nurses	Associate's Degree	$60,929
General/Operations Business Managers	Bachelor's Degrees	$87,270

Construction Equipment Operators	High School or Less	$47,929
Bookkeeping, Accounting, and Auditing Clerks	High School or Less	$34,920
Office Clerks, General	High School or Less	$29,682
Teacher Assistants	Some College or Certificate	$25,469
Service Unit Operators, Oil, Gas, and Mining	High School or Less	$46,984
Nursing Aides, Orderlies, and Attendants	High School or Less	$27,566

As the table indicates, general/operations business manager is the only occupation requiring a bachelor's degree, and relatedly, it is the highest paying job on the list. However, the DWS data does not take into account that an increasing number of registered nurses have bachelor's degrees as opposed to associate's degrees.

The data in the table above is based upon annual average openings over a ten year period. Due to retirements, vacancies in K-12 education will increase steadily each year throughout the decade. By 2021, educators will surpass business managers as the job with the highest demand for bachelor's degrees.

This is reflected in the charts below, which lists the top ten occupations with the ***highest number of total openings between 2011 and 2021*** and that require bachelor and graduate degrees.

Bachelor's Degree	**Total Openings**	**Ave. Wage**
Elementary School Teachers, except Special Education	838	$57,442
General/Operations Business Managers	693	$87,270
All other Teachers, Primary, Secondary, & Adult	691	$34,557
Secondary School Teachers, except Special & Vocational Education	542	$58,016
Middle School Teachers, except Special & Vocational Education	340	$60,024
Accountants & Auditors	235	$60,498
Special Education Teachers	208	$55,451
Child, Family, & School Social Workers	186	$43,266
Social & Human Service Assistants	184	$28,444
Petroleum Engineers	184	$98,284

Master's Degree	**Total Openings**	**Wage**
Educational, Vocational, & School Counselors	168	$58,581
Physical Therapists	134	$78,574
Education Administrators	127	$87,399
Speech-Language Pathologists	99	$64,462
Occupational Therapists	85	$64,364
Instructional Coordinators	85	$58,522
Financial Managers	74	$84,458

Mental Health Counselors	74	$50,034
Clinical, Counseling, & School Psychologists	72	$67,209
Mental Health & Substance Abuse Social Workers	68	$44,424

Doctoral or Professional Degree	**Total Openings**	**Wage**
Postsecondary Teachers, All Other	125	$64,715
Family & General Practitioners	116	$187,538
Lawyers	106	$90,344
Physicians & Surgeons, All Other	61	$213,276
Dentists, General	49	$150,587
Pharmacists	43	$105,952
Veterinarians	21	$71,433
Health Specialties Teachers, Postsecondary	10	$73,522
Chiropractors	10	$56,322
English Language & Literature Teachers, Postsecondary	9	$63,042

Because DWS categorizes registered nurses as a profession requiring an associate's degree, the charts do not include nurses. The department projects that nurses will fill 1,325 jobs over the next decade, which will be greater than the demand for educators. Many, if not most, of them will have a bachelor's degree, and some will have masters and doctorate degrees.

Based upon the tables above, the degrees that UW offers that will be in the most demand in the coming decade and their FY13 instructional budgets are listed below. Please keep in mind that these figures do not represent the total cost of instructing students pursuing these degrees. They do not include academic support, libraries, research, student services and the outreach school and do not reflect the costs of required and elective courses outside of the students' fields of study. And of course, the number of students pursuing these degrees varies considerably, from 1,109 in K-12 education to 76 in the WWAMI program (family and general practitioners).

- Nurses: $1,868,413
- K-12 teachers: $2,147,448
- Business Managers: $1,994,180
- Accountants: $1,147,020
- Social Workers: $931,757
- Petroleum and Chemical Engineers: $1,567,445
- Educational Counselors: $1,602,264
- Family and General Practitioners (Physicians): $4,929,050
- Lawyers: $2,835,812

The committee requested seven graphs that convey various pieces of information.

These graphs are listed below. In reviewing them, please keep in mind the fiscal history of UW's medical education programs, which were organized into a separate budget (Agency 167) in 2007. Given the JAC's instructions to provide information pertaining only to UW's block grant (Agency 067), the medical education programs are not included in the graphs for years FY07 through FY12. However, before 2007, the budgets of and data collected from the two

Family Medicine Residency Programs were not segmented from the other programs in the College of Health Science, thus making it impossible separate out these budgets from other College of Education activities from FY04 through FY06.

Table: This provides the raw data reflected in the seven graphs.

Graph 1: UW's annual general fund appropriation in its block grant from FY04 through FY12, not including AML and capital construction funds. UW's block grant is defined as the State Aid line item in Agency 067. This does not include AML and capital construction funds, as well as NCAR and other items that were funded separately from the block grant.

Graph 2: Section I revenue, Section II revenue and total revenue (Sections I + II) from FY04 through FY12. Below are definitions of the Section I and Section II sources of revenue.

The Section I Budget reflects UW's general operating expenses and is supported by the following sources of revenue:

- State general funds
- Some of the federal mineral royalties UW receives
- Federal funds generated by the College of Agriculture
- Agricultural College Land Income Fund
- University Land Income Fund
- UW income fund
- Sales and services fund
- Clinic income
- UW Foundation funds
- Some intercollegiate athletic funds

The Section II Budget includes all of UW's self-sustaining operations and is supported by the following sources of revenue:

- Contracts and grants
- Auxiliary operations
- Gifts and contributions
- Student fees
- Some of the federal mineral royalties UW receives
- Some intercollegiate athletic funds

Graph 3: Section I budgeted expenditures, Section II budgeted expenditures and total budgeted expenditures (Sections I + II) from FY04 through FY12

Graph 4: The number of students and the courses they took by college, from FY04 through FY12. This is calculated on a Full Time Equivalency (FTE) basis, which UW calculates by adding full time students (those taking 12 hours or more) with 1/3 of the part time students. Community colleges calculate FTE differently.

The original request was to track the number of students and faculty by course and discipline on a graph. Information about faculty and staff numbers by discipline and program is contained in UW's July 31st report to the JAC and takes up 70 pages. Similar data that breaks down student numbers by course and discipline would likely be about 20-30 pages of tables, which is too long to fit onto a graph, but aggregating this information at the college level is concise enough to display in this manner.

If committee members still wish information about students and courses by discipline from FY04 through FY12, UW can certainly compile it. However, the data may be difficult to compare over time or glean any meaningful trends regarding faculty, students and the courses they take. For instance, there are approximately 75 disciplines (or academic programs) presently, not counting interdisciplinary studies. This menu of disciplines has changed over time; some that existed in 2004 have been retired and new ones created. For instance, the College of Education reorganized its academic programs a couple of years ago, making it impossible to compare many of the courses that students take today with those taken in the past.

Also, this data would not reflect academic policy decisions that all universities make that affect the courses students take. This includes changes in course requirements for University Studies and degree programs, class sizes and whether courses are taught by faculty, adjunct instructors, academic professionals or graduate students.

Graph 5: ***The number of faculty in UW's seven colleges, from FY04 through FY12.*** This is shown as FTEs. Faculty members who do not work for any of the colleges are not reflected on the graph.

Graph 6: ***All other employees broken down by colleges, on an FTE basis and from FY04 through FY12.***

Graph 7: ***The number of students determined on an FTE basis divided by the sum of the Sections I and II budgets, from FY04 through FY12.***