HIGHER EDUCATION RESEARCH - PERFORMANCE MEASURES

Goal 1: Increased research at, and collaboration among, Idaho universities and colleges to advance research strengths and opportunities pertaining to critical issues in Idaho, while also providing a vision for national and global impact.

Objective 1.A: Ensure growth and sustainability of public university research efforts.

Performance Measure	FY 2016	FY 2017	FY2018	FY2019	FY2020	FY2021	FY2022	Benchmark
Statewide amount of total annual research and development expenditures as reported in the National Science Foundation (NSF) Higher Education Research and Development Survey	$154,989,123	$163,093,485	$171,052,983	$166,564,099	$170,635,458	$165,912,523	NA	10% annual increase

Objective 1.B: Ensure the growth and sustainability of the existing collaborative research at the Center for Advanced Energy Studies (CAES).

Statewide amount of U.S. Department of Energy (DOE) research and development expenditures as reported in the National Science Foundation (NSF) Higher Education Research and Development Survey.	$8,561,218	$9,489,612	$11,022,015	$11,724,216	$13,187,742	$13,559,863	NA	10% annual increase

Objective 1.C: Expand joint research ventures among the state universities.

Number of new fully sponsored project proposals submitted by an Idaho University that involve a subaward with another Idaho institution of higher education (in either direction).	92	119	100	82	94	82	50	50% annual increase
Number of new fully sponsored project awards to an Idaho University that involve a subaward with another Idaho institution of higher education (in either direction).	58	70	76	69	50	34	26	30% annual increase
Establish/fund at least one HERC-directed research project per year which collaborates with one other Idaho university that directly addresses issues of particular importance to the State of Idaho.	NA	NA	NA	UI*/BSU/ISU - Dr. Karen Humes - Integrated Water, Energy and Waste Management				1 per year

Goal 2: Create research and development opportunities that strengthen the relationship between state universities and the private sector.

Objective 2.A: Increase the number of sponsored projects involving the private sector.

Performance Measure	FY 2016	FY 2017	FY2018	FY2019	FY2020	FY2021	FY2022	Benchmark
Number of new sponsored projects involving the private sector.	165	163	172	202	206	193	98	50% annual increase

Goal 3: Contribute to the economic development of the State of Idaho.

Objective 3.A: Increase the amount of university-generated intellectual property introduced into the marketplace.

Performance Measure	FY 2016	FY 2017	FY2018	FY2019	FY2020	FY2021	FY2022	Benchmark
Number of technology transfer agreements (as defined by AUTM [Association of University Technology Managers]).	44	33	29	29	28	37	37	15% annual increase
Number of invention disclosures (including biomic varieties)	40	38	45	46	58	49	17	1 for every $2M of research expenditures
Amount of licensing revenues.	$724,316	$1,271,819	$ 1,869,718	$ 2,607,055	$ 3,450,773	$ 2,626,859	$ 14,506	10% annual increase
Number of startup companies.	8	1	1	1	0	0	1	10% annual increase

Goal 4: Enhance learning and professional development through research and scholarly activity.

Objective 4.A: Increase the number of university and college students and staff involved in sponsored project activities.

Performance Measure	FY 2016	FY 2017	FY2018	FY2019	FY2020	FY2021	FY2022	Benchmark
Number of undergraduate students paid from sponsored projects.	1,683	1,811	2,100	1,926	1,993	2,050	1,651	20% annual increase
Number of graduate students paid from sponsored projects.	636	716	656	592	536	530	176	20% annual increase
Percentage of baccalaureate students who graduated in STEM disciplines and had a research experience.	UI: 60.4%, BSU: N/A, ISU: 13%	UI: 66.0%, BSU: N/A, ISU: 12.1%	UI: 62.7%, BSU: N/A, ISU: 19.6%	UI: 64.4% BSU: N/A ISU: 12.7%	UI: 58.1% BSU: N/A ISU: 19.1%	UI: 57.6% BSU: N/A ISU: 19.0%	UI: 0.0% BSU: N/A ISU: 14.1%	20% annual increase
Number of faculty and staff paid from sponsored projects.	2,272	2,383	2,418	2,446	2,484	2,563	1,455	20% annual increase

K-20 Statewide Stratgic Plan Performance Measures	FY 2016	FY 2017	FY2018	FY2019	FY2020	FY2021	FY2022	Benchmark
Percentage of students participating in undergraduate research.	48%	51%	UI: 61%, BSU: 37% ISU: 45%	UI: 58.4% BSU: 43.0% ISU: 37.7%	UI: 59.6% BSU: 43.0% ISU: 36.2%	UI: 55.5% BSU: 34.0% ISU: 37.0%	UI: 52.7% BSU: 36.3% ISU: Note:	30%
Number of student internships	2,294	2,177	2,156	2,127	2,174	2,020	2,038	

Idaho State University

Performance Measure	FY 2016	FY 2017	FY 2018	FY2019	FY2020	FY2021	FY2022
Statewide amount of total annual research and development expenditures as reported in the National Science Foundation (NSF) Higher Education Research and Development Survey	$20,447,000	$18,564,000	$18,081,000	$14,972,000	$14,478,000	$13,953,000	
Statewide amount of U.S. Department of Energy (DOE) research and development expenditures as reported in the National Science Foundation (NSF) Higher Education Research and Development Survey.	$3,122,000	$3,290,000	$3,383,000	$2,255,000	$3,310,000	$2,810,000	
Number of new fully sponsored project proposals submitted by an Idaho University that involve a subaward with another Idaho institution of higher education (in either direction).	30	29	27	30	43	38	23
Number of new fully sponsored project awards to an Idaho University that involve a subaward with another Idaho institution of higher education (in either direction).	27	32	35	41	18	17	20
Number of new sponsored projects involving the private sector.	65	65	78	86	96	82	69
Number of technology transfer agreements (as defined by AUTM [Association of University Technology Managers]).	2	0	0	0	0	0	0
Number of invention disclosures (including plant varieties)	6	3	7	0	2	3	4
Amount of licensing revenues.	$100,000	$0	$0	$0	$0	$0	$50
Number of startup companies.	3	1	0	0	0	0	
Number of undergraduate students paid from sponsored projects.	150	169	199	158	150	176	217
Number of graduate students supported by sponsored projects	173	172	156	125	118	140	176
Number of baccalaureate students who graduated in STEM disciplines and had a research experience.				325	211	228	145
Percentage of baccalaureate students who graduated in STEM disciplines and had a research experience.	13.00%	12.10%	19.56%	12.70%	19.11%	19.00%	14.06%
Number of faculty and staff paid from sponsored projects.	257	247	192	170	163	187	221
K-20 Statewide Stratgic Plan Performance Measures							
Percentage of students participating in undergraduate research.	43%	42%	41%	38%	36%	37%	37%
Total amount of research expenditures	$27,670,658	$20,447,000	$11,990,499	$9,679,295	$10,373,549	$8,718,443	$10,761,064
Institution expenditures from competitive Federally funded grants	$22,215,191	$19,557,131	$17,798,317	$15,344,558	$13,185,550	$26,853,236	$15,566,020
Institution expenditures from competitive industry funded grants	$1,411,000	$1,940,336	$1,911,606	$1,846,551	$2,450,614	$1,815,117	$2,069,761
Measure of production of intellectual property:							
Number of startups	3	1	0	0	0	0	0
Number of patents	11	0	1	1	1	2	1
Number of Student internships	896	904	898	877	831	926	835
Percentage of students participating in internships	7.1%	7.6%	7.9%	8.0%	7.7%	8.8%	7.9%

University of Idaho

Performance Measure	FY2016	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022
Statewide amount of total annual research and development expenditures as reported in the National Science Foundation (NSF) Higher Education Research and Development Survey (See Note B below)	$102,457,123	$109,537,485	$111,589,983	$111,766,099	$112,850,458	$105,894,523	
Statewide amount of U.S. Department of Energy (DOE) research and development expenditures as reported in the National Science Foundation (NSF) Higher Education Research and Development Survey.	$3,694,218	$4,128,612	$3,926,015	$5,065,216	$5,309,742	$5,408,863	
Number of new fully sponsored project proposals submitted by an Idaho University that involve a subaward with another Idaho institution of higher education (in either direction).	18	30	23	17	16	18	
Number of new fully sponsored project awards to an Idaho University that involve a subaward with another Idaho institution of higher education (in either direction).	12	12	14	9	11	6	
Number of new sponsored projects involving the private sector (see Note A below).	65	65	66	82	77	76	
Number of technology transfer agreements (as defined by AUTM [Association of University Technology Managers]).	13	5	5	4	6	15	
Number of invention disclosures (including plant varieties)	18	21	24	26	35	30	
Amount of licensing revenues.	$570,469	$1,232,588	$1,844,878	$2,549,919	$3,434,777	$2,621,175	
Number of startup companies.	0	0	0	0	0	0	
Number of undergraduate students paid from sponsored projects.	697	696	765	660	657	660	
Number of graduate students supported by sponsored projects	463	544	500	467	418	390	
Number of baccalaureate students who graduated in STEM disciplines and had a research experience (Note B)	366/606	403/611	360/574	386/599	387/666	339/589	
Percentage of baccalaureate students who graduated in STEM disciplines and had a research experience. (***Note B***)	60.40%	65.95%	62.71%	64.44%	58.11%	57.56%	
Number of faculty and staff paid from sponsored projects.	1,231	1,269	1263	1293	1268	1276	
K-20 Statewide Strategic Plan Performance Measures							
Percentage of students participating in undergraduate research. (***Note B***)	58.80%	64.58%	61.07%	58.36%	59.57%	55.53%	52.68%
Total amount of research expenditures	$55,893,584	$57,114,745	$57,082,023	$57,612,801	$57,934,326	$55,878,740	
Institution expenditures from competitive Federally funded grants	$63,328,954	$64,092,411	$65,309,507	$65,138,101	$69,162,654	$68,022,683	
Institution expenditures from competitive industry funded grants (see Note A below).	$5,300,451	$4,801,296	$5,225,755	$5,580,184	$6,610,854	$5,579,950	
private sector	$1,825,722	$1,804,800	$1,758,830	$1,742,295	$2,662,227	$2,004,386	
private sector federal flow through	$3,474,729	$2,996,496	$3,466,925	$3,837,889	$3,948,627	$3,575,564	
Measure of production of intellectual property:							
Number of startups	0	0	0	0	0	0	
Number of patents	3	1	1	0	4	1	
Number of student internships	909	879	812	789	854	691	709
Percent of student internships	6.64% (909 of 13700)	6.42% (879 of 13700)	5.65%	5.62%	6.17%	5.54%	5.68%
Number of students participating in undergraduate research (Note B)	992	1,001	812	789	854	691	709

Performance Measure Explanatory Notes:

Note A - Activity with private sector/industry - (a) is funding from private sector, and (b) is funding from private sector, federal flow through.

Note B - Due to process improvement, previous years have been corrected to reflect correct figures.

	2016	2017					
Institution expenditures from competitive industry funded grants (Note A)	$1,825,722 (a); $3,474,729 (b)	$1,804,800 (a); $2,996,496 (b)					

	2016	2017					
Number of new sponsored projects involving the private sector (See Note A above)	47 (a); 18 (b)	47 (a); 19 (b)					

Boise State University

Performance Measure	FY 2016	FY 2017	FY 2018	FY2019	FY2020	FY2021	FY2022
Statewide amount of total annual research and development expenditures as reported in the National Science Foundation (NSF) Higher Education Research and Development Survey	$32,085,000	$34,992,000	$41,382,000	$39,826,000	$ 43,307,000.00	$ 46,065,000.00	
Statewide amount of U.S. Department of Energy (DOE) research and development expenditures as reported in the National Science Foundation (NSF) Higher Education Research and Development Survey.	$1,745,000	$2,071,000	$3,713,000	$4,404,000	$ 4,568,000.00	$ 5,341,000.00	
Number of new fully sponsored project proposals submitted by an Idaho University that involve a subaward with another Idaho institution of higher education (in either direction). [1]	44	60	50	35	35	26	27
Number of new fully sponsored project awards to an Idaho University that involve a subaward with another Idaho institution of higher education (in either direction).[2]	19	26	27	19	21	11	6
Number of new sponsored projects involving the private sector. [3]	35	33	28	34	33	35	29
Number of technology transfer agreements (as defined by AUTM [Association of University Technology Managers]).	29	28	24	25	22	22	37
Number of invention disclosures (including plant varieties)	16	14	14	20	21	16	13
Amount of licensing revenues.*	$53,847	$39,231	$24,840	$57,136	$15,996	$5,684	$14,456
Number of startup companies.	5	0	1	1	0	0	1
Number of undergraduate students paid from sponsored projects.	836	946	1136	1108	1186	1214	1434
Number of graduate students supported by sponsored projects. **							
Number of baccalaureate students who graduated in STEM disciplines and had a research experience (Note B)							
Percentage of baccalaureate students who graduated in STEM disciplines and had a research experience.**							
Number of faculty and staff paid from sponsored projects.	784	867	963	983	1053	1100	1234
K-20 Statewide Stratgic Plan Performance Measures							
Percentage of students participating in undergraduate research.	35.20%	37.40%	37.00%	43.00%	43.00%	34.00%	36.30%
Total amount of research expenditures	$18,865,799	$21,094,099	$27,718,837	$27,011,840	$29,828,258	$34,718,954	$35,272,900
Institution expenditures from competitive Federally funded grants	$19,306,479	$21,172,738	$26,311,205	$26,190,711	$28,502,836	$35,423,892	$42,021,306
Institution expenditures from competitive industry funded grants	$2,020,959	$2,939,578	$3,836,908	$3,620,844	$3,577,275	a. $666,167.25 b. $2,866,041.31	a. $652,559.69 b. $1,983,532.61
private sector	$562,457	$681,147	$674,882	$259,884	$441,074	$666,167	652,559.69
private sector federal flow through	$1,458,501	$2,258,432	$3,162,027	$3,360,960	$3,136,201	$2,866,041	$1,983,533
Measure of production of intellectual property:							
Number of startups	5	0	1	1	0	0	1
Number of patents	4	3	3	2	5	1	8
Number of disclosures	16	14	14	20	21	16	13
Number of Student internships [4]	489	394	446	461	489	403	494
Number of students participating in undergraduate research	490	567	494	459	459	352	400

[1] Represents the number of full proposal submissions that involved a financial relationship with another Idaho institution of higher education.
[2] Represents the number of new awards that involved a financial relationship with another Idaho institution of higher education.
[3] Represents the number of new awards that involved a financial relationship with the private sector.
[4] Internship information is based on estimates by academic year (e.g., FY09=Academic year Summer 2008 through Spring 2009).
* 2013, 2014 - Licensing revenue includes $30k/year for Micron Licensing Restriction Agreement and is not considered net for OTT.
**Undergraduate and Graduate student totals have been combined into one line as BSU does not have the ability to break this information out.
**Undergraduate and Graduate student totals have been combined into one line as BSU does not have the ability to break this information out.
***FY20 data reflects the prior year. Boise State did not administer the Graduating Student Survey in FY20 because of disruptions due to COVID-19.
****Number includes non-profit DOE national laboratory contractors.

	2016	2017
Institution expenditures from competitive industry funded grants	a. $562,457.27 b. $1,458,502.01	a. $681,146.82 b. $2,258,431.54

	2016	2016
Number of new sponsored projects involving the private sector. [3]	a) 22; b) 13	a) 17; b) 16

Definitions - Approved FY16		
Performance Measure	**How collected/reported**	**Benchmark**
Statewide amount of total annual research and development expenditures as reported in the National Science Foundation (NSF) Higher Education Research and Development Survey		10% annual increase
Statewide amount of U.S. Department of Energy (DOE) research and development expenditures as reported in the National Science Foundation (NSF) Higher Education Research and Development Survey.		10% annual increase
Number of new fully sponsored project proposals submitted by an Idaho University that involve a subaward with another Idaho institution of higher education (in either direction).	Collaborative new full proposal submissions that include subawards to or awards from other Higher Education institution in Idaho (excludes private higher education institutions).	50% annual increase
Number of new fully sponsored project awards to an Idaho University that involve a subaward with another Idaho institution of higher education (in either direction).	Collaborative new awards that include subawards to or awards from other Higher Education institutions in Idaho (excludes private higher education institutions).	30% annual increase
Number of new sponsored projects involving the private sector.	New awards with Private Sector – to include those that will be awarded from or has subawards to private sector entities, which includes all for profit companies whether domestic or foreign. Number will be broken out as follows: (a) is funding from private sector, and (b) is federal flow through funding passing through a private sector entity.	50% annual increase
by AUTM [Association of University Technology Managers]).		15% annual increase
varieties)	Self explanatory	1 for every $2M of research expenditures
Amount of licensing revenues.	Self explanatory	10% annual increase
Number of startup companies.	Self explanitory	10% annual increase
Number of undergraduate and graduate students paid from sponsored projects.	Represents the number of students (undergraduate & graduate) paid salary, or receiving tuition from sponsored projects.	20% annual increase
Percentage of baccalaureate students who graduated in STEM disciplines and had a research experience.	Raw numbers and percentages	20% annual increase
Number of faculty and staff paid from sponsored projects.	Represents the number of faculty and staff paid salary from sponsored projects.	20% annual increase
K-20 Statewide Stratgic Plan Performance Measures		
Percentage of students participating in undergraduate research.	Raw numbers and percentages	30%
Total amount of research expenditures		
Institution expenditures from competitive Federally funded grants		$112M annually
Institution expenditures from competitive industry funded grants	New awards with Private Sector – to include those that will be awarded from or has subawards to private sector entities, which includes all for profit companies whether domestic or foreign. Number will be broken out as follows: (a) is funding from private sector, and (b) is federal flow through funding passing through a private sector entity. (same as above)	$7.2M annually
Measure of production of intellectual property:		
Number of startups	Same as above	10% annual increase
Number of patents	Same as above	10% annual increase
Number of disclosures	Same as above	10% annual increase
Number of internships	Internship information is based on estimates by academic year (e.g., FY09=Academic year Summer 2008 through Spring 2009) and includes all student internships with private industry where the student received university academic credit.	