



**Louisiana Tech University  
University of Louisiana System**

**GRAD Act Annual Report  
FY 2015-2016 (Year 6)**

**Submitted to the  
Board of Supervisors, University of Louisiana System  
April 14, 2016**

**and to the  
Louisiana Board of Regents,  
May 1, 2016**

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## 1. STUDENT SUCCESS

• **An explanation for or observation on any Targeted measure(s) in this objective for which the institution is not reporting as having met or improved for the reporting year.**

Louisiana Tech met all of the targeted Student Success measures during this reporting year. However, three measures, undergraduate, masters, and doctoral completers were down slightly from the previous reporting year. Undergraduate degree completers decreased by 91 students from 1,314 in reporting year five to 1,223 in reporting year six. Master's degree completers decreased by 23 students from 454 in reporting year five, to 431 in reporting year six. Doctoral completers decreased by 2 students from 43 in reporting year five to 41 in reporting year six.

When setting the initial targets for the GRAD Act, Tech relied heavily on projections from the college departments and deans. Also, during early discussions with Dr. Layzell, then interim commissioner, and Board of Regents staff members, there was an expectation that Tech's targets should show an increase over the baseline year. Further analysis revealed that for bachelor's degree completers, incoming freshman and transfer numbers should have been weighted more in the determination of initial targets. More students needed to enter the pipeline in order to exit the pipeline as completers.

Tech has continued to see improvement in undergraduate retention and graduation rates for new freshmen. First- to second-year retention has increased 5.8 percentage points from the Fall 2009 baseline rate of 74.4% to 80.4% for Fall 2015, and is the highest retention rate on record for the University. First- to third-year retention increased 7.6 percentage points from the Fall 2009 baseline rate of 62.1% to 69.7% for Fall 2015. Tech's same institution graduation rate as defined and reported in the NCES Graduation Rate Survey and reported in Table 1.a.iv of this report, shows an increase of 5.1 percentage points from 47.3% in the baseline year (Fall 2002 cohort and graduating by Fall 2008) to 52.4% for this reporting year (Fall 2008 cohort and graduated by Fall 2014).

Further analysis at the master's level revealed that eleven master's degree programs increased the number of completers and eleven programs decreased the number of completers for this reporting year with a net negative result. There are four major themes that emerged among the programs that experienced a decrease: 1.) Three programs are reporting that students are working or taking online classes and are taking longer to graduate (Speech Pathology, Health Informatics, and History); 2.) Three programs are undergoing or have recently undergone program re-design and the elimination of concentrations (Curriculum and Instruction, Elementary Ed, and Sec Ed/Special Ed); 3.) Two programs are expecting an increase in completers for 2015-16 that will reverse the downward trend (Public Accounting and History); and 4.) Two programs report that due to a lack of graduate assistantships or tuition waivers they are struggling to be competitive (Biology and Molecular Science). The College of Education believes that their program redesign will result in more completers over the long term. Doctoral completers were only down two from the previous year and at 41 completers, we are still above our target of 38. Every effort is being made to increase doctoral completers over the long term.

• **Student success policies/programs/initiatives implemented/continued during the reporting year.**

Tech has remained committed to advancing the University's number one strategic priority of recruiting and retaining a diverse undergraduate and graduate student body and university community. This priority includes a goal to increase overall enrollment by 37% from 10,962 in Fall 2013 to 15,000 by Fall 2020. The goals and progress toward meeting them are reviewed at monthly Administrative and Planning Council meetings with the President, Vice Presidents, and Deans who are all expected to actively participate in recruiting and retention initiatives. This renewed emphasis, led by President Les Guice, has been in effect for close to three years and it is positively impacting both recruiting and retention. Total headcount increased 12.5% from 10,962 in Fall 2013 to 12,335 in Fall 2015. First-time freshman enrollment increased 50.3% from 1,306 in Fall 2012 to 1,963 in Fall 2015. In Fall 2015, Tech's first-time freshman enrollment was the highest it has been in over 10 years.

Louisiana Tech has continued implementation of our 2015 Quality Enhancement Plan (QEP) which has communication and interpersonal skills as its core focus. *BLUE FIRE: Igniting Communication Experiences* is a comprehensive plan for student success in academics and in career pursuits and focuses on those communication skills expected by employers and identified by alumni as crucial for Louisiana Tech University graduates. As its cornerstone, *BLUE FIRE* introduced two new GER courses that all new freshmen will enroll in: Communication 101 (COMM 101), and the First-Year Experience 101 (FYE 101). These courses are delivered using new teaching methods such as flipped classrooms and hands-on applied experiences. Courses are team-taught by communication faculty and student development specialists fostering strong connections between students and faculty. Competency assessment for academic content helps measure student learning outcomes such as critical thinking, decision-making, collaboration and teamwork, interpersonal skills, and utilization of social media. Pilot testing began Winter Quarter, 2014-2015, and continued through the 2015-2016 academic year with full implementation planned for Fall 2016. The QEP requires assessment through all stages of implementation. Program assessment is accomplished through student self-evaluation and instructor rating. The Pilot testing was conducted in nine sections on 250 Tech students during the 2015-2016 academic year and produced significant achievement of the Student Learning Outcomes.

A new Bridge to Bulldogs (B2B) program began in Summer 2014 and it will continue in Summer 2016. In Fall 2015, Tech joined the Complete College America initiative with the Louisiana Board of Regents to establish a Pilot program encompassing corequisite remediation. These two programs will be combined during the Summer 2016 Quarter. The first year of the program was a joint initiative between Louisiana Tech University and Bossier Parish Community College (BPCC). Under this program students lived in Louisiana Tech apartment style residence halls and took BPCC classes that were taught on Tech's campus. The courses were then transferred to Tech at the conclusion of the program. However, differences in academic calendars and challenges with processing financial aid led Tech to bring the program in-house for Summer 2015. Students who are just shy of meeting Tech's admission criteria (one or two points below the ACT cut score for math) are hand-selected for the program. In Summer 2015 we added the requirement for students to also have a minimum high school GPA of 3.00 in order to participate. Twenty-two students enrolled in the program in Summer 2014, and 21 successfully completed it. Of the 21 who successfully completed the program, 21 enrolled as new freshmen in Fall 2014, and 15 (71.4%) were still enrolled for Winter Quarter 2015-16 (one year and two quarters later). The average cumulative GPA for the 15 students is 2.5; the average cumulative GPA for the students 6 students who dropped out is 1.60. During Summer 2015, the program enrolled 56 students and 52 (93%) returned for Fall Quarter 2015. By the end of Winter Quarter 2015-16, 46 (82%) students remained. The average cumulative GPA for the 46 students who were retained through Winter Quarter is 2.50. Thirteen of the 46 students had GPAs between 3.00– 4.00, 21 had GPAs between 2.00 – 2.99, and 12 had GPAs below 2.00. Ten of the 56 students transitioned into the Pilot program in Fall 2015 because they did not fulfill

their developmental course requirements during the Summer Quarter. Three of the ten were suspended from the Pilot Program at the end of Winter Quarter for not fulfilling the terms of their Pilot contracts. In Summer Quarter 2016 the program is expanding to include up to three groups of 30 students (90 students total), and students will be able to choose between early summer and later summer five week sessions. Unlike previous summers, these students will enroll under the Pilot Program requirements and will take Math 102, Applied Algebra for College Students (3 credit hours), and a Math 102 co-requisite course (ENGR 189B/Special Topics, 2 credit hours). During the past two summers, students enrolled in this program took remedial math instead of Math 102 which is planned for the upcoming Summer Quarter. As in previous summers, all students will be treated to various guest speakers and will participate in freshman success seminars such as study skills, financial aid/financial literacy and will participate in mandatory study hall sessions. The University feels that for the majority of student participants the program is beneficial. The extra attention and mentoring is making a positive difference for these students who otherwise would not be admissible to Tech.

Louisiana Tech's Department of Residential Life is implementing StarRez, a housing software management system, which will greatly benefit students and staff. The system provides online housing applications, online roommate and room self-selection as well as administrative functions such as billing, reporting, email and mail merge. Students will be able to engage in online communication with potential roommates and self-assign themselves into available rooming options. Upon arrival at the University, students will be able to complete room condition reports online. Residential Life will be able to run occupancy reports and begin to assess the demographics of residents and their needs at a greater level than we have ever known. The assignment process will become more personal and will enable Tech to provide quicker communication to incoming students regarding receipts for payments, application processing, and assignment details. StarRez should be fully implemented by Summer Quarter 2016.

The National Math and Science Initiative (NMSI) and the Howard Hughes Medical Institute (HHMI) awarded the College of Education at Louisiana Tech a \$1.45 million grant to support teacher preparation in science, technology, engineering, and math (STEM) fields as part of the national UTeach program. The 2015-2016 academic marked the first year of the program. As noted last year, the UTeach program was established to address the pressing need for a greater number of highly qualified STEM teachers. The program recruits college students studying STEM subjects into secondary teaching careers by enabling them to receive both a degree in their major and a teaching certificate without additional time or cost, preparing them with a field-intensive curriculum, and promoting retention through induction support and ongoing professional development. We are pleased to report that 84 out of 100 students who registered for the STEP 1 introductory class this Winter Quarter have moved on to STEP 2 coursework in Spring Quarter. The initial cohort of students is well above the national UTeach average of 35 students.

The collaborative partnership between Louisiana Tech University, CSRA (formerly Computer Sciences Corporation), and the Louisiana Department of Economic Development continues moving forward. This partnership, established in 2014, provides \$9M over ten years, enabling Louisiana Tech to add six new faculty members in key academic programs. Undergraduate enrollment in the three key academic programs related to this partnership continues to increase, and the target enrollments for Fall 2015 were exceeded. Applications for admission for first-time freshman in these programs (Cyber Engineering, Computer Science, and Computer Information Systems) are running 56% above the previous year applications (for same time of year). As of February 25, 2016, 270 new first-year students were admitted to these programs, up from 173 at the same time one year earlier. The partnership includes establishment of internships for students, facilitation of professional certifications for students, development of an interactive laboratory for relevant formal and informal learning, course and curriculum updates, multi-institutional cooperation, and initial discussion of research and technology development projects.

For the second year in a row, Admissions and the College of Engineering and Science collaborated on a unique event for future students identifying an interest in engineering or science-based academic programs. Louisiana Tech University, along with CSRA, hosted four Engineering and Science Day events; the first was in Dallas on October 25, 2015, followed by Houston on October 31, 2015, Baton Rouge on November 30, 2015, and New Orleans on December 1, 2015. This represents two more events than were hosted the previous year. Last year's events were held in Dallas and Baton Rouge only. This year, each event consisted of student participants and their guests discovering educational opportunities at Louisiana Tech University which featured our unique first-year engineering program, "Living with the Lab." The student participants and guests also attended informational sessions which included student question & answer panels, participated in hands-on activities that showcased a connection of theory and application of engineering and science topics, explored three of the College's award winning project teams, and had one-on-one conversations with a global IT company seeking to hire engineering and science graduates. The prospective students and their guests also visited with current College of Engineering and Science alumni, faculty, staff, and students. At the Dallas event there were 88 participants (38 students, 50 parents/guests), Houston had an attendance of 60 (20 students, 40 parents/guests), Baton Rouge had 128 participants (60 students, 68 parent/guests), and New Orleans had 126 participants (53 students, 73 parents/guests). The students ranged from high school sophomores to seniors and as a result of the events 80 students have either applied or been admitted to Louisiana Tech University for Fall 2016. All four events are seen as great successes and the University plans to continue them in the future.

• **Data-based evaluation, including student performance, conducted to ascertain effectiveness during the reporting year.**

Louisiana Tech continues to use Hobsons' Retain CRM communication and database system. Retain allows the University to segment and track retention and graduation rates over time and to analyze the differences between students who persist and those who do not. All communications sent through Retain are tracked and attached to individual student records. The system tracks if sent emails were received and opened and the analytics assist in measuring the effectiveness of each communication campaign. Retain is being maintained in the Bulldog Achievement Resource Center.

A new initiative that will help engineering students make decisions that lead to academic success began this year. The National Science Foundation (NSF) has awarded Dr. Marisa Orr, Assistant Professor of Mechanical Engineering, a five-year, \$500,000, Early Career Development (CAREER) grant to support her research in engineering education. Dr. Orr has extensive experience in predicting student success using statistical analysis of large data sets from engineering schools around the country. The data are being used to help develop an online "Academic Dashboard" to help students self-regulate their decision making. The dashboard will help students choose paths that are most likely to lead to success and make adaptive daily choices that help them achieve their goals. Dr. Orr describes the academic dashboard as "putting the student in the driver's seat of his or her education and provide some driving lessons based on what we learn in the research."

- **Tracking/monitoring/reporting mechanisms implemented/continued during the reporting year.**

This is the second fall to have a First-Year Experience Coordinator. The position resides in the Bulldog Academic Resource Center (BARC) and focuses on the success of first-year students. Among other activities, the first-year experience team is committed to providing special events and activities to help students excel academically, find friends, adjust to college life and balance their academic and social schedules. Prior to the beginning of Winter and Spring Quarters, reports are pulled of first-year students who were enrolled in the previous quarter but are not enrolled for the upcoming quarter. Lists of students were also pulled and personal phone calls were made to students whose GPAs were below a 2.5. The purpose of the phone calls was to find out why the students had not registered for the upcoming quarter and to find out if BARC staff members could assist with getting the students connected to the resources that would help them stay in school and progress toward graduation. While we recognize that other factors contribute to improved retention rates of first-year students, early indications are positive. Fall-to-Winter retention rates have been above 95% for the past two fall cohorts. Further, Fall-to-Spring retention has increased four percentage points from 87% for the 2013-14 Cohort to 91% for the 2014-15 Cohort. In addition to emails and phone calls concerning registration, a report was pulled at the beginning of Winter Quarter 2016 of students who had a GPA of 2.5 or less in Fall Quarter 2015, had withdrawn from 2 or more courses in Fall 2015, or earned a D, F, or W in UNIV100 (University Seminar), to encourage their attendance at a new weekly Student Success Series. The Series included five workshops hosted by the first-year experience team and taught by staff from our campus counseling center. Examples of the topics covered include time management, study skills, test anxiety, and reading a college textbook. The series was open to all students, but students in the previously mentioned categories were targeted and specifically invited to attend in order to target problematic behaviors that potentially hindered the success of those students. The first-year experience team also continues to receive and follow-up with students of concern brought to their attention by means of a “faculty concern form.” Faculty members are encouraged to fill out a form alerting the first-year experience staff members of students they are concerned with. Issues range from lack of attendance in class to personal issues that the instructor has become aware of. Staff members attempt to contact students a minimum of three times in order to schedule a meeting and plan follow-up actions for the students.

- **Development/use of external feedback reports during the reporting year.**

The College of Engineering and Science continues to develop and expand partnerships with key feeder high schools. This year, our high school outreach programs are directly impacting 30-35 high schools, 70 teachers, and approximately 210 high schools students. Louisiana Tech’s STEM-Discovery program is being continued and provides a series of Teacher Workshops that build collaborative teams of University faculty and high school teachers. In addition, Cyber Discovery camps continue to build connections with many high schools throughout the region. The camps provide teams of students and teachers from high schools with an engaging experience that examines all issues of cyberspace such as the need and use of security, ethical and social issues, history of cyberspace, and hands-on engineering and computer science applications of technology. The camps are made possible through the University’s partnership with the Cyber Innovation Center (CIC) in Bossier City, as well as internal funding from the College of Engineering and Science. Further, the Cyber Discovery teachers from each school attend professional development workshops before leading their teams in the week-long challenges.











## 1.a.viii. Percent of freshmen admitted by exception by term (Descriptive)

	Baseline	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Term of Data	AY 09-10	AY 10-11	AY 11-12	AY 12-13	AY 13-14	AY 14-15	AY 15-16
# Freshmen Admitted (Summer)	202	190	190	190	141	130	125
# Admitted by Exception	16	10	15	12	10	12	20
Rate	7.9%	5.3%	7.9%	6.3%	7.1%	9.2%	16%
# in Freshmen Admitted (Fall)	1330	1432	1473	1142	1434	1744	1837
# Admitted by Exception	78	92	62	34	48	45	63
Rate	5.9%	6.4%	4.2%	3.0%	3.3%	2.6%	3.4%
# in Freshmen Admitted (Winter)	58	63	44	29	29	46	36
# Admitted by Exception	3	4	3	2	4	2	8
Rate	5.2%	6.4%	6.8%	6.9%	13.8%	4.4%	22.2%
# in Freshmen Admitted (Spring)	59	61	58	45	40	46	29
# Admitted by Exception	4	6	2	4	1	3	0
Rate	6.8%	9.8%	3.5%	8.9%	2.5%	6.5%	0.0%
# in Freshmen Admitted (Total)	1649	1746	1765	1406	1644	1966	2027
# Admitted by Exception	101	112	82	52	63	62	91
Rate	6.1%	6.4%	4.7%	3.7%	3.8%	3.2%	4.5%

**b. Increase the percentage of program completers at all levels each year.**

**1.b.i. Percentage change in number of completers, from baseline year, all award levels (Targeted)**

	<b>Baseline</b>	<b>Year 1</b>	<b>Year 2</b>	<b>Year 3</b>	<b>Year 4</b>	<b>Year 5</b>	<b>Year 6</b>
<b>Term of Data</b>	<b>AY 08-09</b>	<b>AY 09-10</b>	<b>AY 10-11</b>	<b>AY 11-12</b>	<b>AY 12-13</b>	<b>AY 13-14</b>	<b>AY 14-15</b>
<b># of Completers, Baccalaureate</b>	<b>1306</b>	<b>1261</b>	<b>1216</b>	<b>1210</b>	<b>1197</b>	<b>1306</b>	<b>1222</b>
<b>% Change</b>		<b>-3.4%</b>	<b>-6.9%</b>	<b>-7.4%</b>	<b>-8.3%</b>	<b>0.0%</b>	<b>-6.4%</b>
<b>Target</b>		<b>-3.4%</b>	<b>-3.1% (1266)</b>	<b>-2.3% (1276)</b>	<b>-1.0% (1293)</b>	<b>0.0% (1306)</b>	<b>2.0% (1332)</b>

	<b>Baseline</b>	<b>Year 1</b>	<b>Year 2</b>	<b>Year 3</b>	<b>Year 4</b>	<b>Year 5</b>	<b>Year 6</b>
<b>Term of Data</b>	<b>AY 08-09</b>	<b>AY 09-10</b>	<b>AY 10-11</b>	<b>AY 11-12</b>	<b>AY 12-13</b>	<b>AY 13-14</b>	<b>AY 14-15</b>
<b># of Completers, Post-Baccalaureate</b>	<b>19</b>	<b>25</b>	<b>41</b>	<b>17</b>	<b>12</b>	<b>8</b>	<b>1</b>
<b>% Change</b>		<b>31.5%</b>	<b>115.8%</b>	<b>-10.5%</b>	<b>-36.8%</b>	<b>-57.9%</b>	<b>-94.7%</b>
<b>Target</b>		<b>31.5% (25)</b>	<b>56.0% (30)</b>	<b>68% (32)</b>	<b>76% (33)</b>	<b>85% (35)</b>	<b>85% (35)</b>

	<b>Baseline</b>	<b>Year 1</b>	<b>Year 2</b>	<b>Year 3</b>	<b>Year 4</b>	<b>Year 5</b>	<b>Year 6</b>
<b>Term of Data</b>	<b>AY 08-09</b>	<b>AY 09-10</b>	<b>AY 10-11</b>	<b>AY 11-12</b>	<b>AY 12-13</b>	<b>AY 13-14</b>	<b>AY 14-15</b>
<b>Total, Undergraduate Completers</b>	<b>1325</b>	<b>1286</b>	<b>1257</b>	<b>1227</b>	<b>1209</b>	<b>1314</b>	<b>1223</b>
<b>% Change</b>		<b>-2.9%</b>	<b>-5.1%</b>	<b>-7.4%</b>	<b>-8.8%</b>	<b>-.83%</b>	<b>-7.7%</b>
<b>Target</b>		<b>-2.9%</b>	<b>-2.2% (1296)</b>	<b>-1.3% (1308)</b>	<b>0% (1326)</b>	<b>1.2% (1341)</b>	<b>3.2% (1367)</b>
<b>Actual AY 08-09</b>					<b>1325</b>	<b>1286</b>	<b>1257</b>
<b>Actual AY 09-10</b>					<b>1286</b>	<b>1257</b>	<b>1227</b>
<b>Actual AY 10-11</b>					<b>1257</b>	<b>1227</b>	<b>1209</b>
<b>Avg of Most Recent Three Yrs</b>			<b>1358</b>	<b>1330</b>	<b>1289</b>	<b>1257</b>	<b>1231</b>
<b>Actual AY 11-12</b>					<b>1227</b>	<b>1209</b>	<b>1314</b>
<b>Actual AY 12-13</b>					<b>1209</b>	<b>1314</b>	<b>1223</b>
<b>Avg of Most Recent Two Yrs</b>			<b>1272</b>	<b>1242</b>	<b>1218</b>	<b>1262</b>	<b>1268</b>
<b>Target Met?</b>		<b>YES</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>YES</b>	<b>YES</b>

	<b>Baseline</b>	<b>Year 1</b>	<b>Year 2</b>	<b>Year 3</b>	<b>Year 4</b>	<b>Year 5</b>	<b>Year 6</b>
<b>Term of Data</b>	<b>AY 08-09</b>	<b>AY 09-10</b>	<b>AY 10-11</b>	<b>AY 11-12</b>	<b>AY 12-13</b>	<b>AY 13-14</b>	<b>AY 14-15</b>
<b># of Completers, Masters</b>	<b>352</b>	<b>411</b>	<b>450</b>	<b>463</b>	<b>475</b>	<b>454</b>	<b>431</b>
<b>% Change</b>		<b>16.7%</b>	<b>27.8%</b>	<b>31.5%</b>	<b>34.9%</b>	<b>29.0%</b>	<b>22.4%</b>
<b>Target</b>		<b>16.7%</b>	<b>16.0% (408)</b>	<b>16.0% (408)</b>	<b>18.0% (415)</b>	<b>18.0% (415)</b>	<b>20.0% (422)</b>

	<b>Baseline</b>	<b>Year 1</b>	<b>Year 2</b>	<b>Year 3</b>	<b>Year 4</b>	<b>Year 5</b>	<b>Year 6</b>
<b>Term of Data</b>	<b>AY 08-09</b>	<b>AY 09-10</b>	<b>AY 10-11</b>	<b>AY 11-12</b>	<b>AY 12-13</b>	<b>AY 13-14</b>	<b>AY 14-15</b>
<b># of Completers, Doctoral</b>	<b>37</b>	<b>36*</b>	<b>33*</b>	<b>48*</b>	<b>54*</b>	<b>43*</b>	<b>41*</b>
<b>% Change</b>		<b>-2.7%</b>	<b>-10.8%</b>	<b>29.7%</b>	<b>45.9%</b>	<b>16.2%</b>	<b>10.8%</b>
<b>Target</b>		<b>-2.7%</b>	<b>0.0% (37)</b>	<b>0.0% (37)</b>	<b>0.0% (37)</b>	<b>0.0% (37)</b>	<b>2.7% (38)</b>

*\*The 2009-10 total includes 5 Doctor of Audiology graduates; the 2010-11 total includes 2 Doctor of Audiology graduates; the 2011-12 total includes 7 Doctor of Audiology graduates; 2012-13 includes 3 Doctor of Audiology graduates; 2013-14 includes 4 Doctor of Audiology graduates; and 2014-15 includes 3 Doctor of Audiology graduates. The AuD degree was reclassified to a professional CIP during the academic year 2010-11.*

	<b>Baseline</b>	<b>Year 1</b>	<b>Year 2</b>	<b>Year 3</b>	<b>Year 4</b>	<b>Year 5</b>	<b>Year 6</b>
<b>Term of Data</b>	<b>AY 08-09</b>	<b>AY 09-10</b>	<b>AY 10-11</b>	<b>AY 11-12</b>	<b>AY 12-13</b>	<b>AY 13-14</b>	<b>AY 14-15</b>
<b>Total, Graduate Completers</b>	<b>389</b>	<b>447</b>	<b>483</b>	<b>511</b>	<b>529</b>	<b>497</b>	<b>472</b>
<b>% Change</b>		<b>14.9%</b>	<b>24.2%</b>	<b>31.4%</b>	<b>36.0%</b>	<b>27.8%</b>	<b>21.3%</b>
<b>Target</b>		<b>14.9%</b>	<b>14.4% (445)</b>	<b>14.4% (445)</b>	<b>16.2% (452)</b>	<b>16.2% (452)</b>	<b>18.3% (460)</b>
<b>Actual AY 06-07</b>							
<b>Actual AY 07-08</b>							
<b>Actual AY 08-09</b>							
<b>Avg of Prior Three Years</b>							
<b>Actual AY 09-10</b>							
<b>Actual AY 10-11</b>							
<b>Avg of Most Recent Two Yrs</b>							
<b>Target Met?</b>		<b>YES</b>	<b>YES</b>	<b>YES</b>	<b>YES</b>	<b>YES</b>	<b>YES</b>

	<b>Baseline</b>	<b>Year 1</b>	<b>Year 2</b>	<b>Year 3</b>	<b>Year 4</b>	<b>Year 5</b>	<b>Year 6</b>
<b>Term of Data</b>	<b>AY 08-09</b>	<b>AY 09-10</b>	<b>AY 10-11</b>	<b>AY 11-12</b>	<b>AY 12-13</b>	<b>AY 13-14</b>	<b>AY 14-15</b>
<b># of Completers, TOTAL All Degrees</b>	<b>1714</b>	<b>1733</b>	<b>1740</b>	<b>1738</b>	<b>1738</b>	<b>1811</b>	<b>1695</b>
<b>% Change from baseline</b>		<b>1.1%</b>	<b>1.5%</b>	<b>1.4%</b>	<b>1.4%</b>	<b>5.7%</b>	<b>-1.1%</b>



c. Develop partnerships with high schools to prepare students for postsecondary education.

1.c.i. Number of high school students enrolled at the postsecondary institution while still in high school (as defined in Board of Regents' SSPS, student level "PR"), by semester/term (Descriptive)

	Baseline	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Term of Data	AY 08-09	AY 09-10	AY 10-11	AY 11-12	AY 12-13	AY 13-14	AY 14-15
Summer	52	17	52	64	54	44	55
Fall	584	755	1061	1166	1290	1627	1689
Winter	308	20	78	193	269	263	215
Spring	199	565	1027	1155	1171	1272	1408
<b>TOTAL</b>	<b>1143</b>	<b>1357</b>	<b>2218</b>	<b>2578</b>	<b>2784</b>	<b>3206</b>	<b>3367</b>

1.c.ii. Number of semester credit hours in which high school students enroll, by semester/term (Descriptive)

	Baseline	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Term of Data	AY 08-09	AY 09-10	AY 10-11	AY 11-12	AY 12-13	AY 13-14	AY 14-15
Summer	327	99	156	234	196	265	340
Fall	2875	3611	5337	6121	6670	8240	8733
Winter	1044	77	388	969	1076	1067	846
Spring	704	2229	4070	4816	4796	5497	5692
<b>TOTAL</b>	<b>4950</b>	<b>6016</b>	<b>9951</b>	<b>12140</b>	<b>12738</b>	<b>15069</b>	<b>15611</b>

1.c.iii. Number of semester credit hours completed by high school students with a grade of A,B, C, D, F or P, by semester/term (Descriptive)

	Baseline	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Term of Data	AY 08-09	AY 09-10	AY 10-11	AY 11-12	AY 12-13	AY 13-14	AY 14-15
Summer	288	93	156	234	196	238	292
Fall	2832	3570	5084	5908	6396	7964	8509
Winter	1036	77	385	947	1061	989	802
Spring	699	2219	4029	4650	4656	5338	5586
<b>TOTAL</b>	<b>4855</b>	<b>5959</b>	<b>9654</b>	<b>11739</b>	<b>12310</b>	<b>14529</b>	<b>15189</b>

**d. Increase passage rates on licensure and certification exams and workforce foundational skills.**

**1.d.i. Passages rates on licensure exams (Tracked)**

DISCIPLINE	EXAM THAT MUST BE PASSED UPON GRADUATION TO OBTAIN EMPLOYMENT	ENTITY THAT GRANTS REQUIRED LICENSURE/CERTIFICATION (source for reporting)	2009-10 BASELINE YEAR Passage Rate*	# Students who took exam	# Students who met standards for passage	Calculated Passage Rate for 2014-15
<b>Clinical Laboratory Sciences/Medical Laboratory Technology</b>	American Society for Clinical Pathology Board of Certification (ASCP BOC)	Louisiana State Board of Medical Examiners (LSBME)	100%	3	3	100%
<b>Dietitian</b>	Commission on Registration (CDR) National Registered Dietitian Exam	Commission on Dietetic Registration of the Academy of Nutrition and Dietetics (formerly ADA)	100%	19	17	89%**
<b>Health Information Technology</b> Program canceled May 2011	AHIMA Registered Health Information Technology(RHIT) Exam	AHIMA: American Health Information Management Association	100%	0	0	0%***
<b>Nursing (RN)</b>	NCLEX-RN	Louisiana State Board of Nursing	84%	45	45	100%

\* *Baseline Year Passage Rate = data reported under Calculated Passage Rate in 2010 GRAD Act report.* Current reporting year is 2015-16 (Year 6).

\*\* For January 1, 2015 – December 31, 2015 the RD Exam - First time Pass Rate: 19 took the exam and 17 passed for an 89% pass rate  
Passed within 1 year of taking exam: 19 took the exam and 18 passed for 95%.

\*\*\*Health Information Technology (HIT) was a 2 year program; we no longer have the degree as of May 2011. There are no longer students in this program, the remaining three students graduated and passed the RHIT exam in academic year 2013-14.

**1.d.i.b. Passage rate on licensure exam in Education (PRAXIS); licensure granted by Louisiana Department of Education (Targeted)**

	<b>Year 3</b>	<b>Year 4</b>	<b>Year 5</b>	<b>Year 6</b>
<b>Term of Data</b>	<b>10-11</b>	<b>11-12</b>	<b>12-13</b>	<b>13-14</b>
<b>Number of students who took exams</b>	<b>171</b>	<b>226</b>	<b>175</b>	<b>144</b>
<b>Number of students who met standards for passage</b>	<b>171</b>	<b>226</b>	<b>175</b>	<b>144</b>
<b>Calculated Passage rate</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>
<b>Target</b>	<b>98.0% (96.0% - 100%)</b>	<b>98.0% (96.0% - 100%)</b>	<b>98.0% (96.0% - 100%)</b>	<b>98.0% (96.0% - 100%)</b>
<b>Actual Year 06-07</b>				
<b>Actual Year 07-08</b>				
<b>Actual Year 08-09</b>				
<b>Avg of Prior Three Years</b>				
<b>Actual 09-10</b>				
<b>Actual 10-11</b>				
<b>Avg of Most Recent Two Yrs</b>				
<b>Target Met?</b>	<b>Yes</b>	<b>Yes</b>	<b>Yes</b>	<b>Yes</b>

## 2. ARTICULATION AND TRANSFER

- **Articulation and transfer policies/programs/initiatives implemented/continued during the reporting year, especially as they relate to the Louisiana Transfer Degree programs.**

The first- to second-year retention rate of baccalaureate degree-seeking transfer students decreased 3.8 percentage points from 73.7% to 69.9% from last reporting year to this reporting year (entered Fall 2013, Winter 2013-14, Spring 2014, and returned Fall 2014) to this reporting year (entered Fall 2014, Winter 2014-15, Spring 2015, and returned Fall 2015). Further analysis indicates that the high retention rate of 73.7% last reporting year is an anomaly. During the other reporting years that were targeted for the GRAD Act, retention rates were 62.8%, 61.0%, and 65.9% respectively from reporting years three, four, and six. At 69.9%, the retention rate exceeds the target rate of 63.0% by 6.9 percentage points and is the highest recorded retention rate with the exception of the outlier year.

On December 1, 2014, Tech promoted one of our most effective recruiters to Transfer Coordinator. With just over a year's experience in this position, the Transfer Coordinator has become immersed in the unique aspects of transfer students and has learned where Tech has recruiting niches at various community colleges. We are establishing a new communication flow for transfer students, working on a website redesign, and planning targeted recruiting travel for the Transfer Coordinator. A transfer back-up person has been assigned within the Admissions Office to help ensure that applications for admission, telephone calls, and email responses continue in a timely manner when the Coordinator is out recruiting.

Louisiana Tech is continuing its "Partner in Excellence" relationship, which began in January of 2015, with Phi Theta Kappa, and we are promoting our transfer student scholarships on their website. Phi Theta Kappa is a transfer student honor society that requires student members to be enrolled in a regionally accredited institution offering an associate degree program; have completed at least 12 hours of coursework that may be applied to an associate degree; have a minimum grade point average of 3.5, and receive an invitation to membership from the chapter at the college where presently enrolled. Phi Theta Kappa's profile indicates that 91% of their membership completes their associate degree and/or transfers to a four year college or university. The average GPA of their members is 3.80. In February 2016 we purchased 2,000 names from Phi Theta Kappa for the purpose of recruiting these students to Tech.

As previously reported in the Student Success narrative, Tech's Bridge to Bulldogs (B2B) program began as a transfer partnership with Bossier Parish Community College during Summer Quarter 2014. Due to differences in academic calendars which are exacerbated during the summer term, as well as the resulting financial aid challenges, Tech brought the program in-house the following summer. In Summer 2015, Tech taught Math 099 as a no-grade workshop and administered a pre- and post-workshop COMPASS test to determine which students were admissible to the University for Fall Quarter. In Summer 2016 we will be merging the Board of Regents' Pilot Program with the B2B program. We believe the continuous program enhancements and modifications are resulting in a stronger program.

- **Data-based evaluation, including student performance, conducted to ascertain effectiveness during the reporting year.**

Most of the initiatives reported in the Student Success narrative also support efforts to recruit and retain transfer students. Transfer cohorts are identified in Retain and can be tracked from fall-to-fall and term-to-term. New initiatives have not been in place long enough to provide a strong data-based evaluation of their efforts during this reporting year.

- **Tracking/monitoring/reporting mechanisms implemented/continued during the reporting year, especially as they pertain to student transfer issues.**

Louisiana Tech continues to use the Transfer Evaluation System (TES), a College Source product, which began implementation in January of 2015. As previously reported, TES is a cloud-based database system that allows colleges and universities to track, manage, and store course equivalency data and to publish it for students to use as a self-help tool on their websites. The system has over 82,000 college catalogs in the database and it facilitates efficient and timely evaluations of course equivalencies. Administrators of the system can email side-by-side catalog course descriptions to faculty department heads for equivalency approval all within the TES software system. Since last reporting year, Louisiana Tech has successfully exported thousands of course equivalencies from our student information system into TES. We are currently working on the ability to build new equivalencies within TES and export them to Tech's primary student information system which will tie the equivalencies to Tech's transcript system for the purpose of checking pre- and co-requisites as well as degree checkout. Until the export is built, we are double-keying newly evaluated equivalencies into both TES and Tech's student information system in order to ensure the maximum benefit to our current and prospective students.

Last year Tech reported that we were in the process of expanding our document imaging and records management system with ImageNow by Perceptive Software. However, due to State purchasing rules and timing and budget constraints, Undergraduate Admissions and the Registrar's Office implemented a home grown imaging system that utilizes scanners and a shared network drive. The system has significantly improved workflow efficiency and processing time of transfer student transcripts. It is also more environmentally friendly because it eliminated the need for physical storage space and it reduced paper consumption. Tech is now in the process of expanding this system to include records for new freshmen such as high school transcripts, AP/CLEP scores, dual enrollment applications, and college transcripts for work completed prior to high school graduation.

The University's ability to track and monitor transfer students has improved with the implementation of Retain. As previously reported under the Student Success narrative of this report, the system is managed by BARC staff members and there are plans to continue to expand the use of the software. Staff members attended Hobsons University, the annual users' conference, in July 2015, which deepened their proficiency with Retain and provided a foundation for best practices through collaboration with other users.

- **Development/use of agreements/external feedback reports during the reporting year.**

Louisiana Tech and BPCC have continued a [Cross Enrollment](#) Memorandum of Understanding that was initially signed on February 6, 2013. This program is for Louisiana Tech students who were admitted as admission exceptions and who are in need of a developmental math or English course. The Cross Enrollment agreement allows students to pay all tuition and fees to Tech and to transfer seamlessly the developmental course credit upon completion of coursework. Spring 2013 was the first quarter that students enrolled under this agreement and it remains in effect today.

In addition and as previously reported, Louisiana Tech has the following program-specific articulations agreements:

Biology – Louisiana Delta Community College (see [Louisiana Delta Community College](#) MOU)

Biology – Bossier Parish Community College (see [BPCC BISC](#) – new in 2012)

Business (all majors: Accounting, Business Administration, Economics, Finance, Computer Information Systems, Management, and Marketing) – Louisiana Delta Community College and Bossier Parish Community College (see [Louisiana Delta Community College](#) MOU, and [BPCC Business](#))

Early Childhood Education – Louisiana Delta Community College ([LDCC ECE](#))

Engineering & Science – Bossier Parish Community College (see [Bossier Parish Community College](#) MOU)

Engineering & Science – Bossier Parish Community College (see [Baton Rouge Community College](#) MOU – new in 2013)

Geographic Information Science, Natural Resources Concentration and Social Sciences Concentration – Bossier Parish Community College ([Bossier Parish Community College GIS](#) – new in 2012)

Health Informatics and Information Management – Bossier Parish Community College, Delgado Community College, and Southern University – Shreveport ([HIM](#))

Nursing – [Northwestern State University](#) (new in 2012)

While it is a goal to expand program specific articulation agreements, having TES fully operational has transformed the ability of all transfer students in all majors to acquire an immediate evaluation of transfer credits through a self-service portal. Coupled with the curriculum sheets that are published in Tech’s catalog, prospective students now have the ability to receive an early and accurate assessment of their transfer credits.

a. Phase in increased admission standards and other necessary policies in order to increase transfer student retention and graduation rates.

2.a.i.a. 1st to 2nd year retention rate of baccalaureate degree-seeking transfer students (Targeted)

	Year 3	Year 4	Year 5	Year 6
<b>Term of Data</b>	<b>AY 11-12</b>	<b>AY 12-13</b>	<b>AY 13-14</b>	<b>AY 14-15</b>
<b># enrolled in the academic year</b>	<b>600</b>	<b>551</b>	<b>494</b>	<b>468</b>
<b># retained to the next Fall semester</b>	<b>377</b>	<b>336*</b>	<b>364</b>	<b>327</b>
<b>Rate</b>	<b>62.8%</b>	<b>61.0%</b>	<b>73.7%</b>	<b>70.0%</b>
<b>Target</b>	<b>62.0% (60.0% - 64.0%)</b>	<b>62.4% (60.4% - 64.4%)</b>	<b>62.6% (60.6% - 64.6%)</b>	<b>63.0% (61.0% - 65.0%)</b>
<b>Actual Year 07-08</b>				
<b>Actual Year 08-09</b>				
<b>Actual Year 09-10</b>				
<b>Avg of Prior Three Years</b>				
<b>Actual 10-11</b>				
<b>Actual 11-12</b>				
<b>Avg of Most Recent Two Yrs</b>				
<b>Met?</b>	<b>YES</b>	<b>YES</b>	<b>YES</b>	<b>YES</b>

*\*An additional 19 students for whom there were Social Security Number discrepancies were retained; including them in the calculation raises Tech's retention rate to 64.4%. Eighteen of the nineteen students were international students; one student's record had a data entry error.*

**2.a.ii. Number of baccalaureate graduates that began as transfer students (Descriptive)**

	<b>Baseline</b>	<b>Year 1</b>	<b>Year 2</b>	<b>Year 3</b>	<b>Year 4</b>	<b>Year 5</b>	<b>Year 6</b>
<b>Term of Data</b>	<b>AY 08-09</b>	<b>AY 09-10</b>	<b>AY 10-11</b>	<b>AY 11-12</b>	<b>AY 12-13</b>	<b>AY 13-14</b>	<b>AY 14-15</b>
<b># of bacc completers</b>	<b>1306</b>	<b>1261</b>	<b>1216</b>	<b>1212</b>	<b>1197</b>	<b>1306</b>	<b>1222</b>
<b># who began as transfers</b>	<b>302</b>	<b>292</b>	<b>317</b>	<b>298</b>	<b>285</b>	<b>291</b>	<b>281</b>
<b>Percentage who began as transfers</b>	<b>23.1%</b>	<b>23.2%</b>	<b>26.1%</b>	<b>24.6%</b>	<b>23.8%</b>	<b>22.3%</b>	<b>23.0%</b>

*Note: Files of 2008-09, 2009-10, 2010-11, 2011-12, 2012-13, 2013-14, and 2014-15 baccalaureate graduates (minus duplicates) were matched with datawarehouse student files (going back to 2002) to determine “transfer” entry code status. Those students entering prior to 2002 were then matched against the transcript file in the Student Information System to determine entry code status.*



## 2.a.iii. Percent of transfer students admitted by exception (Descriptive)

	Baseline	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Term of Data	AY 09-10	AY 10-11	AY 11-12	AY 12-13	AY 13-14	AY 14-15	AY 15-16
# Transfers Admitted (Summer)	77	88	64	62	72	57	50
# Admitted by Exception	5	2	4	1	4	2	0
Rate	6.5%	2.3%	6.3%	1.6%	5.6%	3.5%	0.0%
# Transfers Admitted (Fall)	364	375	423	390	369	363	372
# Admitted by Exception	29	24	20	8	10	19	1
Rate	8.0%	6.4%	4.7%	2.1%	2.7%	5.2%	0.3%
# Transfers Admitted (Winter)	80	118	74	96	46	55	64
# Admitted by Exception	5	8	7	4	6	0	1
Rate	6.3%	6.8%	9.5%	4.2%	13.0%	0.00%	1.6%
# Transfers Admitted (Spring)	176	167	163	133	157	114	147
# Admitted by Exception	11	8	7	4	6	4	6
Rate	6.3%	4.8%	4.3%	3.0%	3.8%	3.5%	4.1%
# Transfers Admitted (TOTAL)	697	748	724	681	644	589	633
# Admitted by Exception	50	42	38	17	26	25	8
Rate	7.2%	5.6%	5.2%	2.5%	4.0%	4.2%	1.3%

**b. Provide feedback to community colleges and technical college campuses on the performance of associate degree recipients enrolled at the institution.**

**2.b.i. 1st to 2nd year retention rate of those who transfer in with an associate degree from any two-year institution. (Descriptive)**

	<b>Baseline</b>	<b>Year 1</b>	<b>Year 2</b>	<b>Year 3</b>	<b>Year 4</b>	<b>Year 5</b>	<b>Year 6</b>
<b>Term of Data</b>	<b>AY 08-09</b>	<b>AY 09-10</b>	<b>AY 10-11</b>	<b>AY 11-12</b>	<b>AY 12-13</b>	<b>AY 13-14</b>	<b>AY 14-15</b>
<b># transfers in</b>	<b>60</b>	<b>79</b>	<b>96</b>	<b>99</b>	<b>86</b>	<b>89</b>	<b>70</b>
<b># retained to next Fall semester</b>	<b>37</b>	<b>59</b>	<b>71</b>	<b>60</b>	<b>57</b>	<b>73</b>	<b>44</b>
<b>Rate</b>	<b>62.7%</b>	<b>74.7%</b>	<b>74%</b>	<b>60.6%</b>	<b>66.3%</b>	<b>82.0%</b>	<b>62.9%</b>

**2.b.ii. Number of baccalaureate graduates that began as transfer students with associate degrees from any two-year institution. (Descriptive)**

	<b>Baseline</b>	<b>Year 1</b>	<b>Year 2</b>	<b>Year 3</b>	<b>Year 4</b>	<b>Year 5</b>	<b>Year 6</b>
<b>Term of Data</b>	<b>AY 08-09</b>	<b>AY 09-10</b>	<b>AY 10-11</b>	<b>AY 11-12</b>	<b>AY 12-13</b>	<b>AY 13-14</b>	<b>AY 14-15</b>
<b># of bacc completers</b>	<b>1306</b>	<b>1261</b>	<b>1216</b>	<b>1210</b>	<b>1197</b>	<b>1306</b>	<b>1222</b>
<b># who began as transfers w assoc degree</b>	<b>40</b>	<b>29</b>	<b>68</b>	<b>51</b>	<b>54</b>	<b>64</b>	<b>52</b>
<b>Percentage who began as transfers w assoc degree</b>	<b>3.1%</b>	<b>2.3%</b>	<b>5.6%</b>	<b>4.3%</b>	<b>4.5%</b>	<b>4.9%</b>	<b>4.3%</b>

c. Develop referral agreements with community colleges and technical college campuses to redirect students who fail to qualify for admission into the institution.

2.c.i. Number of students referred at any time during the given academic year to two-year colleges and technical colleges. (Descriptive)

	Baseline	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
<b>Term of Data</b>	<b>AY 09-10</b>	<b>AY 10-11</b>	<b>AY 11-12</b>	<b>AY 12-13</b>	<b>AY 13-14</b>	<b>AY 14-15</b>	<b>AY 15-16</b>
<b># of students referred</b>	23	49	74	347	806	904	754

d. Demonstrate collaboration in implementing articulation and transfer requirements provided in R.S. 17:3161 through 3169.

2.d.iii. 1st to 2nd year retention rate of those who transfer with AALT, ASLT, or AST degrees (Descriptive)

	Baseline	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
<b>Term of Data</b>	<b>AY 08-09</b>	<b>AY 09-10</b>	<b>AY 10-11</b>	<b>AY 11-12</b>	<b>AY 12-13</b>	<b>AY 13-14</b>	<b>AY 14-15</b>
<b># of transfer degree students enrolled</b>	0	0	4	0	0	1	1
<b># retained to next Fall semester</b>	N.A.	N.A.	3	N/A	N/A	1	1
<b>Rate</b>	N.A.	N.A.	75.0%	N/A	N/A	100.0%	100%

2.d.iv. Number of degree graduates that began as transfer students with AALT, ASLT, or AST degrees (Descriptive)

	Baseline	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
<b>Term of Data</b>	<b>AY 08-09</b>	<b>AY 09-10</b>	<b>AY 10-11</b>	<b>AY 11-12</b>	<b>AY 12-13</b>	<b>AY 13-14</b>	<b>AY 14-15</b>
<b># of completers who began as transfer degree students</b>	0	0	0	0	0	0	2

### 3. WORKFORCE AND ECONOMIC DEVELOPMENT

- **Activities conducted during the reporting year to identify programs that have low number of completers or are not aligned with current or strategic regional and/or state workforce needs.**

Louisiana Tech continues to review its program offerings to ensure attainment of mission-specific and programmatic goals.

As noted in the Year 5 report, Tech received approval from the University of Louisiana System (ULS) in April 2015 to terminate the MAT in Special Education-Early Intervention: Birth to 5 as a low completer.

The ULS Board approved (in August 2015) and the Board of Regents approved (in October 2015) the termination of the BS in Middle School Education Grades 4-8 (Math & Science) as a low completer.

The ULS Consortium (consisting of the nine member institutions) for the BA in Organizational Leadership requested and received approval from the ULS Board for the consolidation of the existing consortial program into one more narrowly defined curriculum offered by ULM. The combined program did not attract a sufficient number of students to make it viable across the nine institutions.

- **Activities conducted during the reporting year to identify/modify/initiate programs that are aligned with current or strategic workforce needs as defined by Regents\* utilizing Louisiana Workforce Commission and Louisiana Economic Development published forecasts.**

ULS approved (In August 2015) the alignment of the Computer Information Systems Group from the School of Accountancy and Information Systems to a separate entity, the Computer Information Systems Department, in the College of Business. The separate entity more clearly identified the overarching influence and involvement of CIS in all programmatic initiatives in the College.

ULS approved (in August 2015) Louisiana Tech to offer six existing Graduate Certificate Programs and four existing Master's Degree programs in the College of Education through distance learning technologies: Graduate Certificates in Academically Gifted, Visual Impairments-Blind Education, Special Education-Early Intervention, Higher Education Administration, Special Education Mild/Moderate for Elementary Education and for Secondary Education; Master of Education in Curriculum & Instruction; Masters of Arts in Teaching in Elementary Education and Special Education Mild/Moderate Grades 1-5 and Grades 6-12; and Master of Arts in Teaching, Secondary Education Grades 6-12. Offering these certificates and degree programs online increases accessibility to advanced certification and training to practicing educators regardless of geographical location.

ULS approved (in October 2015) Louisiana Tech to offer the Master of Science in Engineering-Industrial Engineering concentration through distance learning technologies to provide increased accessibility to professionals and other workforce personnel seeking specialized training at the graduate level.

ULS approved (in October 2015) the consolidation of Tech’s Department of Agricultural Sciences and the School of Forestry into a single School of Agricultural Sciences and Forestry within the College of Applied & Natural Sciences. The two disciplines are closely aligned in academic areas related to natural resources and will accrue efficiencies and interdisciplinary interaction in teaching, outreach, and research.

- **Activities conducted during the reporting year with local Workforce Investment Board**

Dr. Dave Norris, Chief Innovation Officer at Louisiana Tech, supports workforce and economic development efforts of a variety of communities and business partners in the region. Dr. Norris also leads our Rural Jobs and Business Accelerator program funded by the U.S. Department of Commerce, the U.S. Department of Agriculture, and the Delta Regional Authority. This program recently completed its fourth year. Since the beginning of the program in 2012—one of 12 funded nationally—58 entrepreneurs and new startup companies have entered the program, and 42 have graduated. The other 16 represent the third-year cohort, and they will complete the program in May 2016. The program has already resulted in nine new business startups and six business expansions in the region. Most of these have been focused in high growth sectors such electronics, high performance building materials, consumer products, and biosciences with significant job creation opportunities. In addition, the Rural Jobs and Business Accelerator program has provided 12 communities in the north Louisiana region with extended support for economic and workforce development planning and strategy development.

In 2016, we began another business/workforce development partnership with CenturyLink. CenturyLink is one of the largest telecommunications companies in the world and the largest company headquartered in Louisiana (Monroe). Our collaboration with CenturyLink involves the development in an Internet-of-Things (IOT) Laboratory and student innovation space in our Enterprise Campus to more fully engage CenturyLink with the development of students for the telecommunications field and more fully engage students and faculty in the development of innovations that support CenturyLink’s corporate mission. We have also begun delivering an internal innovation accelerator program for CenturyLink through their new Integrated Technology Center at their corporate headquarters in Monroe. This program delivered by Louisiana Tech will help shepherd new product innovations from CenturyLink employees and vendors through a development process and into the CenturyLink product line.

In addition, we have expanded our partnership with the Fenway Group and their Xperience™ program for software engineers. The company, located in our Enterprise Campus, has expanded the program from 4 employees in 2012 to over 60 employees in March 2016, and they have continued to expand their footprint in the Louisiana Tech Enterprise Campus. The program consists of part-time, paid employment for current Tech students with extensive mentoring from senior, full-time technical leaders from Fenway. In addition to providing a key component of the Fenway Group’s workforce, the program is designed to accelerate the skill set of students in computing fields and place them in above entry-level employment with clients or the Fenway Group upon graduation. Ninety percent of the students who have graduated (18) from the Xperience program and from Louisiana Tech have been placed in above entry-level positions with clients or with the Fenway Group.

Another company, BlueArx LLC, has established a similar program in our Enterprise Campus that began in April 2014. This company hires current students into a mentoring environment to work in fields such as technical writing, journalism, graphic design, and marketing. During the last year, they have integrated 12 new students into their program—a total of 22 since the program’s inception.

Radiance Corporation, also an Enterprise Campus tenant, employs current students in our graduate engineering and science programs and attempts to hire or place those students upon graduation. Radiance is a military intelligence contractor in the hardware and software industry, and they have employed 24 graduate engineering and science students at their Enterprise Campus location since 2013, and placed 16 of those either with Radiance or a partner company upon graduation.

Finally, in support of the workforce needs of the new Computer Sciences Corporation (CSC) in Bossier City, the University has launched an effort to expand our production of IT-related graduates significantly in programs such as computer sciences, cyber engineering, and computer information systems. Our goal is to grow enrollment in these programs by 50% by the end of 2015.

Tech's Division of Continuing Education and Distance Learning (CEDL) has continued to develop and maintain contact with local and State agencies, such as LWC, LED, LABI, chambers of commerce and regional economic development entities. Activities this year include a continued and renewed partnership with Management Seven LLC through nursing training provided (state-wide), Central Management LLC through nursing training provided (state-wide), Vintage Realty through workforce training (state-wide), Ates Construction Company of Dubach in their fourth year of Small Business Employee Training (SBET), two of the companies of the three at Green Clinic (the clinic & management also covering four parishes), Hunt Guillot of Ruston, and First National Bank of Bienville. Educational partnerships continue to include Partners for Strategic Advantage of Shreveport, Delta Community College, and Gettechnical banking training of Baton Rouge. Continuing Education has provided CEU certificates to 226 professions for professional hours, licensing requirements, and growth in their respective fields. Workforce Development has trained 51 employees in one IWTP grant as the primary training provider, resulting in 3 new jobs created, 51 jobs retained as a result of the training, and an average wage increase of 5.0% for employees over the grant. Continuing Education and Workforce Development also partnered with providers to train 253 participants for a total of 11,574 classroom hours. These partners include, but are not limited to Virtual Education Software for professional education required for teacher certification in Louisiana, and certification in various demand occupation fields through Education Consulting Associates and 360training. In addition to direct training, CEDL consults individuals on their educational path to achieve their desired effect, whether it is training for a current job, immediate employment, or educational paths for a future career.

- **Other means of tracking students into the workforce outside of the 2012 Employment Outcomes Report.**

Each academic college collects preliminary information in an exit survey from graduating seniors, gathering information regarding employment and professional plans. These survey results are captured prior to graduation while we have access to students, and many of the students have not aggressively pursued job search activities at that point. Applied & Natural Sciences' most recent data report that, of those responding, 25.48% of their graduates were employed, 25.81% were seeking employment, 37.30% planned to attend professional/graduate school, 9.35% planned to seek further undergraduate study, 0.3% were entering the military, and 0.7% intended to participate in volunteer service. Business' most recent data report that, of those responding to the survey, 46% of their graduates had found employment, 36.5% were seeking initial or other employment, 16% planned to continue their education, and 1.5% planned to enter the military or other. Education's most recent data indicate that, of those responding to the survey, 30.85% of their graduates had found employment and 50% were seeking employment, 3.75% intended to participate in volunteer service, 52.44% planned to attend graduate school, and 3.7% planned to enter the military. Engineering & Science's most recent data reflect that 44.4% of their graduates found employment, 42.3% were still seeking employment, 12.5% planned to attend graduate school, and 0.8% were entering the

military at the time of commencement. Liberal Arts' most recent data report that 50% of those responding were seeking or had found employment, 32% planned on attending graduate or professional school, 5% were going to undergraduate studies, 5% planned to enter the military, and 8% intended to participate in volunteer service or seek other options.

- **Improved technology/expanded distance learning offerings during the reporting year.**

Each year, all units at the University assess their technology needs and aspirations and submit their proposals through established budget planning channels and through the Student Technology Fee Board (STFB) which allocates funds accrued from approved student assessments. As reported in Year 5, The STFB allocated approximately \$1million to enhance technology for instruction and infrastructure improvements. An additional \$318,000 was awarded in Spring 2015 for new projects, including enhancements to Tech TV, Registrar's Office, Human Ecology, the University Police Department, School of Design, the 2015 Smart Classroom Project, and The Thingery. In the Fall 2015, the STFB awarded approximately \$1.2 million for enhancements, including Prescott Memorial Library, Nutrition and Physiology, Biological Sciences, Human Ecology, Kinesiology, Electrical Engineering and Forestry, College of Engineering & Science, Chemistry, School of Design, Performing Arts, Smart Classroom Project, the Computing Center, SGA and Union Board, Residential Life – Housing, Testing & Disability Services, Counseling and Career Services, and the First-year Experience & QEP. All projects directly impact the education and co-curricular experiences of the University's students.

The number of distance-delivered course sections has shown modest growth since baseline 2008-09, and has been relatively stable over the past five years. The number of courses sections that are 50-99% distance delivered has increased from a baseline of 16 in 2008-2009 to 32 in 2014-15. The number of course sections that are 100% distance delivered has increased from a baseline of 287 in 2008-2009 to 383 in 2014-15. The number of students enrolled in courses that are 50-99% distance delivered has increased from a baseline of 204 in 2008-2009 to 409 in 2014-2015. The number of students enrolled in courses that are 100% distance delivered has increased from a baseline of 4,225 in 2008-2009 to 6,276 in 2014-2015. The innovations and enhancements for infrastructure, software, and web portals implemented by the Center for Instructional Technology, the University Computing Center, and the technology centers in the academic colleges continue to address and meet current needs for course delivery.

The number of programs offered through 100% distance education by award level has decreased by one program, as evidenced by the dissolution of the University of Louisiana System's censorial program, the BA in Organizational Leadership.

a. Eliminate academic programs offerings that have low student completion rates as identified by the Board of Regents or are not aligned with current or strategic workforce needs of the state, region, or both as identified by the Louisiana Workforce Commission.

3.a.i. Number of programs eliminated as a result of institutional or Board of Regents review (Descriptive)

	<b>Baseline</b>	<b>Year 1</b>	<b>Year 2</b>	<b>Year 3</b>	<b>Year 4</b>	<b>Year 5</b>	<b>Year 6</b>
<b>Term of Data</b>	<b>AY 09-10</b>	<b>AY 10-11</b>	<b>AY 11-12</b>	<b>AY 12-13</b>	<b>AY 13-14</b>	<b>AY 14-15</b>	<b>AY 15-16</b>
<b># of eliminated programs</b>	<b>0</b>	<b>0</b>	<b>27*</b>	<b>0</b>	<b>3***</b>	<b>5*****</b>	<b>3*****</b>



**3.a.ii. Number of programs modified or added to meet current or strategic workforce needs, as identified by the institution in collaboration with LWC and LED (Descriptive)**

	<b>Baseline</b>	<b>Year 1</b>	<b>Year 2</b>	<b>Year 3</b>	<b>Year 4</b>	<b>Year 5</b>	<b>Year 6</b>
<b>Term of Data</b>	<b>AY 09-10</b>	<b>AY 10-11</b>	<b>AY 11-12</b>	<b>AY 12-13</b>	<b>AY 13-14</b>	<b>AY 14-15</b>	<b>AY 15-16</b>
<b># of programs modified or added</b>	<b>9</b>	<b>17</b>	<b>5**</b>	<b>3</b>	<b>5****</b>	<b>10*****</b>	<b>17*****</b>

*\*These were actions resulting from the BOR low completer review in April of 2011, which took place after completing the GRAD Act report for year one. At Louisiana Tech, 27 degree programs were either terminated or terminated and consolidated into other existing degree programs.*

*\*\*Addition of B.S. in Cyber Engineering; two teacher certification PBC's now online (Adult and English as a Second Language); internship requirement in B.S. in Merchandising and Consumer Studies; increase in required clinical hours for all Secondary Teacher Education degree program concentrations.*

*\*\*\*One proposal for termination is currently under review at the Board of Supervisors, and one is at the Board of Regents.*

*\*\*\*\*Addition of I-Tec Certificate, addition Certificate in Business Foundations, realignment of BA in Communications, consolidation of School of Design and curricular consolidation in Art, and consolidation of BS in Management.*

*\*\*\*\*\*Eliminated Programs: 1. GC Rural Development; 2. BA Speech; 3. BA Journalism; 4. BS Multiple Levels Grades K-12; 5. MA–Multiple Levels Grades K-12.*

*\*\*\*\*\*Added Programs: 1. BA Communication Program with three concentrations; 2. GC Higher Education Administration. 3. BFAG Art – Graphic Design. 4. BS Health & Physical Education Grades 6-12. Changed Programs: 5. BFA Art-Communication Design was renamed BFA Communication Design 6. BA Communication Program change name of one concentration from Speech to Communication Studies; 7. Added BS Computer Science concentration, Cloud Computing and Big Data; 8. Added BGS General Studies concentration, Basic & Career Studies; 9. Added MA Counseling and Guidance concentration, Rehabilitation Teaching for the Blind. 10. Renamed BS Merchandising & Consumer Studies to Fashion Merchandising & Retail Sales.*

*\*\*\*\*\*Eliminated Programs: 1. MAT Special Education Early Intervention: Birth to5; 2. BS Middle School Education; 3. BA Organizational Leadership. \*\*\*\*\*Added/Modified Programs: 1. BS Nutrition & Dietetics added a Minor in Culinary Management; 2. MEd Curriculum & Instruction added one new concentration - Applied Behavior Analysis; 3. Added one concentration to the Bachelor of Science Biomedical Engineering program: Microsystems Engineering; 4. Added Criminal Justice as a concentration choice to the Associate of General Studies program (DAF MOU - Barksdale AFB only); 5. Added Criminal Justice as a concentration choice to the Bachelor of General Studies programs at both Barksdale AFB (DAF MOU) and on Main Campus; 6. Added Minor in Actuarial Science to the BS Mathematics program; 7. Corrected: Minor in Fashion Merchandising & Retail Studies. 8. Added - Literature and Creative Writing Concentrations to BA English program; 9. Changed - CIP Code for the Master of Science, Kinesiology program: From 13.1314 to 31.0505; 10. Added Photography as a MINOR to the Bachelor of Fine Arts – Studio degree program. 11. Added concentration in Composition to the BA Music program; 12. Added - Audiology Concentration to BA Pre-Professional Speech-Language Pathology (SPPY); 13. Added 3 Concentrations – to BS Marketing - Key Account Development, Marketing Analytics, and Sports Marketing; 14. Added concentration in Computer Engineering to the BSCS Computer Science program; 15. Added one concentration to the Bachelor of Science Biomedical Engineering, Biomedical Engineering program: Microsystems Engineering. 16. Deleted: 9 concentrations from the MEd Curriculum & Instruction (Biology; Chemistry; Early Childhood; Early Intervention Special Education; Economics; English; History; Mathematics; Physics; 17. Changed BGS General Studies to BIS Interdisciplinary Studies.*

**3.a.iii. Percent of programs aligned with workforce and economic development needs as identified by Regents\* utilizing LWC or LED published forecasts. (Descriptive)**

	<b>Baseline</b>	<b>Year 1</b>	<b>Year 2</b>	<b>Year 3</b>	<b>Year 4</b>	<b>Year 5</b>	<b>Year 6</b>
<b>Term of Data</b>	<b>AY 09-10</b>	<b>AY 10-11</b>	<b>AY 11-12</b>	<b>AY 12-13</b>	<b>AY 13-14</b>	<b>AY 14-15</b>	<b>AY 15-16</b>
<b># of programs, all degree levels</b>			<b>123</b>	<b>126</b>	<b>125</b>	<b>123</b>	<b>120</b>
<b># of programs aligned with needs</b>			<b>123</b>	<b>126</b>	<b>125</b>	<b>123</b>	<b>120</b>
<b>% of programs aligned</b>			<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>

**b. Increase use of technology for distance learning to expand educational offerings.**

**3.b.i. Number of course sections with 50% and with 100% instruction through distance education (Tracked)**

	<b>Baseline</b>	<b>Year 1</b>	<b>Year 2</b>	<b>Year 3</b>	<b>Year 4</b>	<b>Year 5</b>	<b>Year 6</b>
<b>Term of Data</b>	<b>AY 08-09</b>	<b>AY 09-10</b>	<b>AY 10-11</b>	<b>AY 11-12</b>	<b>AY 12-13</b>	<b>AY 13-14</b>	<b>AY 14-15</b>
<b># of course sections that are 50-99% distance delivered</b>	<b>16</b>	<b>24</b>	<b>38</b>	<b>19</b>	<b>21</b>	<b>24</b>	<b>30</b>
<b># of course sections that are 100% distance delivered</b>	<b>287</b>	<b>384</b>	<b>361</b>	<b>366</b>	<b>402</b>	<b>339</b>	<b>377</b>

**3.b.ii. Number of students enrolled in courses with 50% and with 100% instruction through distance education, duplicated headcount (Tracked)**

	<b>Baseline</b>	<b>Year 1</b>	<b>Year 2</b>	<b>Year 3</b>	<b>Year 4</b>	<b>Year 5</b>	<b>Year 6</b>
<b>Term of Data</b>	<b>AY 08-09</b>	<b>AY 09-10</b>	<b>AY 10-11</b>	<b>AY 11-12</b>	<b>AY 12-13</b>	<b>AY 13-14</b>	<b>AY 14-15</b>
<b># of students enrolled in courses that are 50-99% distance delivered</b>	<b>204</b>	<b>272</b>	<b>544</b>	<b>304</b>	<b>370</b>	<b>365</b>	<b>431</b>
<b># of students enrolled in courses that are 100% distance delivered</b>	<b>4225</b>	<b>6340</b>	<b>6270</b>	<b>5808</b>	<b>6642</b>	<b>5653</b>	<b>6323</b>

## 3.b.iii. Number of programs offered through 100% distance education by award level (Targeted)

	<b>Year 3</b>	<b>Year 4</b>	<b>Year 5</b>	<b>Year 6</b>
<b>Term of Data</b>	<b>AY 12-13</b>	<b>AY 13-14</b>	<b>AY 14-15</b>	<b>AY 15-16</b>
<b>Associate</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>1</b>
<b>Baccalaureate</b>	<b>3</b>	<b>3</b>	<b>3</b>	<b>2</b>
<b>Post-Baccalaureate</b>		<b>1</b>	<b>1</b>	<b>1</b>
<b>Grad Cert</b>	<b>4</b>	<b>4</b>	<b>5</b>	<b>6</b>
<b>Masters</b>	<b>5</b>	<b>5</b>	<b>5</b>	<b>9</b>
<b>PMC</b>				
<b>Specialist</b>				
<b>Doctoral</b>				
<b>Professional</b>				
<b>TOTAL</b>	<b>13</b>	<b>14</b>	<b>15</b>	<b>19</b>
<b>Target (Total Programs)</b>	<b>12 (11-13)</b>	<b>13 (12-14)</b>	<b>13 (12-14)</b>	<b>13 (12-14)</b>
<b>Actual Year 08-09</b>				
<b>Actual Year 09-10</b>				
<b>Actual Year 10-11</b>				
<b>Avg of Prior Three Years</b>				
<b>Actual 11-12</b>				
<b>Actual 12-13</b>				
<b>Avg of Most Recent Two Yrs</b>				
<b>Met?</b>	<b>YES</b>	<b>YES</b>	<b>YES</b>	<b>YES</b>

### 3. WORKFORCE AND ECONOMIC DEVELOPMENT for RESEARCH

**c. Increase research productivity especially in key economic development industries and technology transfer at institutions to levels consistent with the institution's peers.**

- **Research productivity and technology transfer activities related to Louisiana's key economic development industries that have taken place during the reporting year; provide any relevant metrics to demonstrate impact.**

#### **Research Productivity**

The institution has focused on increasing federal research funding with some measure of success as reflected by an increase of annual federal research expenditures. Despite increased workloads due to increased enrollment and unfilled faculty vacancies, research expenditures have remained near \$25M over the last few years, including FY 15. The increasing research activities have also spurred a high level of innovation as reflected in reports of invention, patents, licenses, start-up companies, and industry partnerships as described later in this narrative.

Faculty from Louisiana Tech play important leadership roles in a five-year \$20 million grant from NSF to the Board of Regents' EPSCoR program (materials and computational science). In 2014, Dr. Ramachandran helped lead a \$20M multi-institution proposal to establish a Consortium for Innovations in Materials and Manufacturing. The grant was awarded in 2015. Louisiana Tech receives the largest distribution of funds, with the most investigators participating. This follows a previous \$20M, five-year grant from NSF that established the Louisiana Alliance for Simulation-Guided Materials Applications, or LA-SiGMA, a virtual organization for materials science research and education that includes faculty from multiple universities in the state.

#### **Technology Transfer and Economic Development**

A license is an agreement that grants a company rights to our invention in exchange for some consideration (typically royalty payment) and the company's commitment to further develop and commercialize the invention. The specific terms and conditions are determined through a complex negotiation process. Often before committing to a license agreement a company will enter into an option agreement. During the option period (which typically runs from 6-12 months) we agree to discontinue marketing the technology to others while the company evaluates the technology in-house. In exchange for this exclusive look we generally will receive a payment. During this reporting period we executed a total of 5 licenses and options (2 licenses and 3 options) giving a percentage of license/options executed to ROIs received of 42%. According to the AUTM 2014 survey data, we are above the national average of 32%. Louisiana Tech currently receives license income from 11 companies; funds received in FY15 totaling \$186,724.26.

#### **Licenses:**

- **Southern Biomedical Products, LLC:** Southern Biomedical Products is a start-up firm founded by former Louisiana Tech University students based on technology they co-invented while at La Tech. This team of researchers developed an innovative method for using affordable, consumer-grade 3D printers and materials to fabricate custom medical implants that can contain antibacterial and

chemotherapeutic compounds for targeted drug delivery. This highly innovative approach has the potential to overcome many of the limitations encountered in current drug delivery system.

- **Pelican Defense Technologies:** is a new start-up firm formed by Louisiana Tech professor Chester Wilson to commercialize his graphene technology. Dr Wilson has developed a cost effective method for manufacturing graphene in large scale. Graphene has numerous applications in industry but its wide application has been hampered by its high cost. This process has the potential to overcome this limitation.

#### Options:

- **Charles Machine Works, Inc:** We entered into an option with Charles Machine to allow them to evaluate a novel sensor technology that can be placed on drill heads to warn the operator in real-time of a potential obstruction. The company is currently also sponsoring further research and development on the technology and we expect the option will mature into a license in the coming year.
  - **Alchemy Geopolymer Solutions, LLC:** Alchemy acquired an option to acquire a license to our novel geopolymer retardant formulation. While geopolymer concrete has many properties that are superior to traditional Portland cement, its one major drawback is that it sets very quickly limiting its applications. We have discovered additives that can be formulated into geopolymer which will retard or lengthen the time it takes for it to harden or cure without affecting its properties significantly. Most commonly used retardant additives tend to decrease the strength of the geopolymer concrete, whereas ours does not. Another advantage of our formulation is that we can tailor the curing time for particular applications.
  - **Prospective Start-up:** We granted an option to one of our faculty who was considering creating a start-up company with a colleague at another institution. Each researcher brought complimentary technologies to the prospective business. Our researcher brought his optical biosensor platform and the partner brought his diagnostic marker. The option provided the business partners time to seek investment funding.
- **Collaborations during the reporting year with Louisiana Economic Development, Louisiana Association of Business and Industry, industrial partners, chambers of commerce, and other economic development organizations to align Research & Development activities with Louisiana's key economic development industries, discuss any changes from previous year.**

Dr. Richard Kordal, Director, Office of Intellectual Property and Commercialization was an invited panelist for Proof-of –Concept Centers at American Chemical Society Entrepreneur Summit held October 13-14, 2014 in Washington, DC. Dr. Kordal attended Export Control workshop and conference June 7-9, 2015 in Washington, DC sponsored by Association of University Export Control Officers (AUECO). Dr Kordal continues his leadership role within statewide organization of technology transfer directors, Network of Technology Transfer Professional of Louisiana (NTTPL).

The institution has had extensive involvement with Louisiana Economic Development (LED), statewide associations, regional economic development organizations, municipalities, and the private sector in support of economic development. We have hosted economic development meetings of the Committee of 100, the Council for a Better Louisiana, and the North Louisiana Economic Partnership, among others, in our R&D facilities. Louisiana Tech jointly hosted CABL's Leadership Forum in 2014 with the Cyber Innovation Center in Bossier City, and provided overviews of our R&D and innovation activities.

In 2013, Louisiana Tech identified its 5 STEM Priority Areas (Science & Engineering for Health & Quality of Life; Cyber & Information Systems; Infrastructure, Energy, and Environmental Systems; Matter, Materials, and Multiscale Systems; STEM Education, Entrepreneurship & Innovation). Five key faculty leaders at Tech contributed to the state Science and Technology Master Plan, commissioned by the Board of Regents Master Plan Research Advisory Committee (MRPAC). President Guice was also appointed by Governor Bobby Jindal as Chair of the Louisiana Innovation Council in February 2014. Louisiana Tech participated in a statewide Research Summit in February 2016, organized by Senator Bill Cassidy, focused on biomedical research.

Dr. Stan Napper, Vice President for Research and Development, serves on the Board of Directors of the Louisiana Biotechnology Industry Organization (LaBIO), an affiliate of the national BIO. The LaBIO assists biotechnology companies (biomedical, agricultural and food, pharmaceutical, and other related companies) to collaborate for policy and resource advocacy and economic impact.

Louisiana Tech continues to work very closely with the Cyber Innovation Center (CIC) in Bossier City and LED to attract cyber-related companies and government agencies to Louisiana. In 2015, Louisiana Tech and the CIC established the Louisiana Tech Research Institute, a 501c3 organization. Louisiana Tech Research Institute (LTRI) is the formal recognition of the existing and productive partnership efforts between Louisiana Tech University and the Cyber Innovation Center (CIC). The goal of LTRI is to (1) enable Louisiana Tech University and CIC to secure new work (and thus jobs) in new ways from both industry and defense partners, (2) ensure critical work and personnel remain at Barksdale Air Force Base (BAFB) by providing the US Air Force with next-door access to a dedicated R&D/applied research center, (3) build focused competencies to attract talent and industry, and (4) serve as the official home for cyber-, defense-, and intelligence-related education, training, and workforce development programs for North Louisiana.

Louisiana Tech has also had extensive collaborations with major employers across North Louisiana, such as creating a graduate certificate curriculum in Communications Systems for CenturyLink in Monroe (in a cooperative effort with LED). Seventy- six CenturyLink employees have completed and graduated with their Communications Systems Certificates to date. Our faculty have also conducted research and published papers jointly with CenturyLink employees. A Cooperative Endeavor Agreement with the Louisiana Department of Economic Development remains in effect and continues to provide funding support for the academic programs Tech is providing for CenturyLink employees. A new Cooperative Endeavor Agreement has been established with LED to support a new Technology Center in Monroe for the IBM Corporation. As a result of this agreement, and additional funds from LED, Louisiana Tech will be able to enhance its undergraduate computer science curriculum (employing a project-based learning model we are calling Living with Cyber) and to expand its partnership with Bossier Parish Community College.

Louisiana Tech has formed a consortium of North Louisiana companies, called IC3, in the information, cyber, and communications industry. The goal of IC3 is to provide a support structure that facilitates interactions between the companies and Louisiana Tech. Participating companies have included CenturyLink, Amdocs, Fenway Group, and the CIC. Several other companies have been interacting with the consortium. The initial focus has been on increasing the pipeline of skilled workers for these companies.

In February 2014, Louisiana Tech University entered into a partnership with global IT leader Computer Sciences Corporation (CSC), Louisiana Economic Development (LED) FastStart, and the Cyber Innovation Center in Bossier City to offer current and prospective students a comprehensive

suite of cyber-related programs and career opportunities designed to meet the current and future needs of CSC. Using its academic and certificate program strengths in areas such as computer science, computer information systems and cyber engineering, Louisiana Tech will produce graduates with skills that closely align with the needs of CSC while offering graduates unprecedented career opportunities in north Louisiana. A strong collaborative partnership between Louisiana Tech University and CSC and the Louisiana Department of Economic Development has been established through a formal Cooperative Endeavor Agreement. That partnership was embodied in a three day workshop on the Louisiana Tech campus in late September 2014, for which 35 senior executives of CSC met with administrators and faculty in Computer Information Systems, Computer Science, and Cyber Engineering academic programs. The collaboration continues through ongoing dialogue that includes recruitment and retention, professional development of students and faculty (through internships), research projects, corporate presence on campus and throughout north Louisiana, and other collaborative projects. Undergraduate enrollment in the three key academic programs continues to increase, and the target enrollments for Fall 2015 were exceeded. Applications for admission for first-time freshman in these programs are running 56% above the previous year applications (for same time of year). As of February 25, 2016, 270 new first-year students were admitted to these programs, up from 173 at the same time one year earlier. Fall 2016 enrollment numbers will be available by end of September.

Louisiana Tech faculty and CSC executives completed development of a new laboratory environment for students, **The CSC Lab @ LaTech**, in the key computing programs at Tech. This lab offers a community resource that brings together innovators from computer information systems, computer science, cyber engineering, and other business, engineering, design, and arts fields with the common goal of innovation in information and software systems. Modeled after Louisiana Tech's "Thingery" (open access 3D printing and prototyping "makerspace"), the purpose of the lab is to give students, faculty, and other innovators access to the technical and intellectual resources needed to fully explore their ideas. Resources available in the Laboratory include network hardware, proprietary and open source software, smart devices, tablets and smart sensors, a world class cloud computing infrastructure, training materials and events, professional certification training and testing, and a creative environment for personal development and project implementation. This exploration includes software engineering, database management, cloud computing, networking, information assurance, supply chain, Enterprise Resource Planning, mobile devices and mobile app, cybersecurity, IOT and other current resources. Prime space totaling 1700 sq. ft. on the first floor was allocated in the Tech Pointe building on the Enterprise Campus. This location provides convenient access to computing professionals and students from throughout the campus, and from our corporate partners. These resources are also directly linked with the entire array of entrepreneurial support and business development assistant available from Louisiana Tech University and our regional partners. CSC has made significant investment of in-kind donations to the lab, including networking equipment and hardware and relevant software (totaling over \$350,000 in value), as well as contributions of professional staff to develop and implement the laboratory. On February 4, 2016, Governor John Bel Edwards visited Louisiana Tech to learn more about the impact of the Tech in north Louisiana.

During 2015, the CSC corporation underwent major change as the North American Public Sector division of CSC separated, and subsequently merged with the SRA corporation, to create CSRA. Louisiana Tech is pleased that many of the same executives with whom we have been collaborating will remain with CSRA, and that the Bossier City Technology Center remains a key component of CSRA. At the briefing to Secretary Pierson on February 11, CSRA reported that over 375 employees had been hired in Bossier City to date, that the new ITC is on schedule for opening in summer of 2016, and that CSRA will be expanding to possibly 1500 total jobs in northwest Louisiana. The corporate changes have had no negative effect on the implementation of the partnership, and the announcement of an expansion for new jobs will enhance our ongoing recruitment efforts for the computing programs at Louisiana Tech.



Dr. Dave Norris, Chief Innovation Officer at Louisiana Tech, supports workforce and economic development efforts of a variety of communities and business partners in the region. Louisiana Tech maintains ongoing collaborations with regional chambers and economic development organizations. The Biomedical Research Foundation of Northwest Louisiana (BRF), the Cyber Innovation Center, the North Louisiana Economic Partnership (NLEP), and every major regional chamber have all been partners on our major innovation and commercialization proposals to federal agencies. We have provided support to and shared best practices with to BRF in the development of their new Entrepreneurial Acceleration Program, offered our own innovation and business development services to BRF clients, engaged NLEP on their innovation initiatives and incorporated them into our new program development efforts. We also regularly engage the regional chambers of commerce to connect their members to our entrepreneurial support programs and business expansion assistance through our Regional Accelerator. This is done primarily by collaborating with chambers and local governments so implement workshops for aspiring and emerging entrepreneurs in communities across the I-20 Corridor.

- **Business innovations and new companies (startups) and companies formed during previous years and continuing (surviving startups) resulting from institutional research and/or partnerships related to Small Business Innovation Research/Small Business Technology Transfer (SBIR/STTR) awards.**

Discoveries at Louisiana Tech University led to the creation of two new start-up companies in the last year. One of the new start-up companies (Alchemy) was founded by Louisiana Tech University professor and inventor of the technology Dr Erez Allouche. The other company was spun out of Louisiana State University and is based in part on a joint invention between LSU and Louisiana Tech University researcher, Leland Weiss. It should be noted that Alchemy took first place in the Louisiana startup business plan competition held in Shreveport and took home the \$25,000 first prize award. If we count just the new Louisiana Tech University spin-out company, Alchemy, it brings to 13 the number of surviving companies. Since about May 2014 we have partnered with several companies on **four new SBIR grant funded projects**, three Phase 1, and one Phase 2 award. Those companies are: Radiance (Phase 1 and 2), Intelligent Automation Inc. (Phase 1), and QuakeWrap, Inc. (Phase 1).

It should also be noted that some companies have been formed by our students under the guidance and support of our faculty and staff, but, because they are not using Louisiana Tech technologies, they are not considered “University” start-ups for this report. We also have some companies that have moved into our incubators to capitalize upon the institution’s intellectual property, but they are not considered start-ups. Fenway Group has strategically established a program in which they will provide structured on-the-job training to our undergraduate students to prepare them to be highly skilled employees upon graduation. This program is a model apprenticeship program for workforce development in one of Louisiana’s key industry sectors. The Fenway Group recently doubled their presence in Ruston as the demand for this program as grown.

The institution’s considerable success in technology commercialization can be attributed in part to the investments made in support activities. In 2002, the **Center for Entrepreneurship and Information Technology** (CEnIT) was formed to serve as a catalyst for entrepreneurial activities across the campus and region. Through external funds provided by the NSF, the University developed courses on technology commercialization that have served to accelerate the licensing and venture creation surrounding the University’s research programs. Those courses have also provided motivation and support for entrepreneurship development with faculty and students. CEnIT has initiated Idea Pitch and Business Plan competitions

that have spurred student-led business formation. More information regarding the CEnIT and other business development resources can be found at [http://www.latech.edu/business\\_development\\_resources.pdf](http://www.latech.edu/business_development_resources.pdf).

The **Louisiana Tech Rural Jobs and Business Accelerator** program funded by the U.S. Department of Commerce, the U.S. Department of Agriculture, and the Delta Regional Authority also helps support the development of university research and intellectual property for commercial deployment. This program recently completed its third year. Since the beginning of the program in 2012--one of 12 funded nationally--41 entrepreneurs and new startup companies have entered the program, and 28 have graduated. The other 13 represent the third-year cohort, and they will complete the program in May 2015. Of the 41 participants in the program, 7 have been developing commercialization plans for university intellectual property. The program has already resulted in six new business startups and three business expansions in the region. Most of these have been focused in high growth sectors including electronics, high performance building materials, and biosciences with significant job creation opportunities. In addition, the Rural Jobs and Business Accelerator program has provided 12 communities in the north Louisiana region with extended support for economic and workforce development planning and strategy development.

**The Technology Business Development Center (TBDC)** at Louisiana Tech provides information, counseling services, and educational opportunities for beginning entrepreneurs, emerging business ventures, and existing businesses. Emphasis is placed on enterprises with an innovative business model that demonstrates high growth potential and the ability to generate high quality jobs. The TBDC counsels SBIR applicants and award recipients by helping improve proposals, strengthen commercialization plans, and maximize incentives. For example, recently, one of Tech's graduate students formed a new student organization called "LA New Product Development Team." More information regarding the TBDC and other business development resources can be found at [http://www.latech.edu/business\\_development\\_resources.pdf](http://www.latech.edu/business_development_resources.pdf).

The National Science Foundation (NSF) awarded a prestigious **I-Corps Award** to Dr. Mark DeCoster, Associate Professor in Biomedical Engineering. This award provides funding to develop and commercialize artificially-manufactured cells and cell platforms for educational, research and industry applications. DeCoster, along with a Ph.D. student, and Mr. Shafin Khan, director of technology commercialization at the New Orleans Bioinnovation Center, received the Innovation-Corps program funds to develop and commercialize their artificial cell technology, which will be paired with educational and visualization software to provide hands-on experiments and testing resources for students and assisted by the software learning tools. The development of learning tools for K-12 students in science labs will be the team's first target, starting with outreach to local schools in north Louisiana and in the New Orleans area. As part of commercializing these products, DeCoster is focused on developing a new startup company and website, which will help expand the impact of technology.

- **Using most recent data available, research productivity and technology transfer efforts in comparison with peer institutions, provide any relevant metrics to demonstrate comparisons.**

A summary of Louisiana Tech's IP outcomes for academic years 2011-2015 (September 2011 to August 2015) is shown in table 3.c.v.

The Association for University Technology Managers (AUTM) annually produces national statistics based upon a survey of research and technology transfer data for all institutions. To compare institutional performance, the data are frequently normalized by dividing the respective measures by the size of each institution's research program as reflected by annual research expenditures. According to the most recent AUTM 2014 survey data, Louisiana Tech University ranked high in several technology transfer measures: we ranked in the top 25 (20th) nationally in terms of Reports of Inventions (ROIs) per \$10 million R&D expenditures, 8<sup>th</sup> in the nation in terms of issued US patents per \$10 million R&D, and we ranked 5<sup>th</sup> nationally in terms of startups formed per \$100 million R&D. Our Director of Intellectual Property and Commercialization, Dr. Rich Kordal, continues to be an active member of AUTM, serving on the Metrics & Surveys Committee. In addition, Dr. Kordal is involved in scholarly studies of academic technology transfer, an article he co-authored recently published in National Academy of Inventors journal *Technology and Innovation*. The article, entitled "Prevalence of Serial Inventors within Academia," provide empirical data supporting the commonly held belief that a small percentage of high performing inventors (serial inventors) are responsible for a disproportionate number of patents being generated by a research organization. Its findings are timely given the uncertain budget times. An unintended consequence of cut backs to state support for higher education could be the loss of these top performing researchers to other well-off states that continue to invest in higher education. This loss of key innovators could have long lasting negatives effects on our economic development efforts.

**3.c.i. Percent of research/instructional faculty (FTE) at the institution holding active research and development grants/contracts. (Tracked)**

	<b>Baseline</b>	<b>Year 1</b>	<b>Year 2</b>	<b>Year 3</b>	<b>Year 4</b>	<b>Year 5</b>	<b>Year 6</b>
<b>Term of Data</b>	<b>AY 09-10</b>	<b>AY 10-11</b>	<b>AY 11-12</b>	<b>AY 12-13</b>	<b>AY 13-14</b>	<b>AY 14-15</b>	<b>AY 15-16</b>
<b>Total number of research/instructional faculty (FTE)</b>	<b>332</b>	<b>317</b>	<b>312</b>	<b>310</b>	<b>292</b>	<b>276</b>	<b>279</b>
<b>Total number of research/instructional faculty (FTE) holding active research and development grants/contracts</b>	<b>131</b>	<b>121</b>	<b>115</b>	<b>115</b>	<b>105</b>	<b>108</b>	<b>96</b>
<b>Percentage of faculty holding active research and development grants/contracts</b>	<b>39.5%</b>	<b>38.2%</b>	<b>36.9%</b>	<b>37.1%</b>	<b>36.0%</b>	<b>39.1%</b>	<b>34.4%</b>

**3.c.ii. Percent of research/instructional faculty (FTE) holding active research and development grants/contracts in Louisiana's key economic development industries. (Tracked)**

	<b>Baseline</b>	<b>Year 1</b>	<b>Year 2</b>	<b>Year 3</b>	<b>Year 4</b>	<b>Year 5</b>	<b>Year 6</b>
<b>Term of Data</b>	<b>AY 09-10</b>	<b>AY 10-11</b>	<b>AY 11-12</b>	<b>AY 12-13</b>	<b>AY 13-14</b>	<b>AY 14-15</b>	<b>AY 15-16</b>
<b>Total number of research/instructional faculty (FTE)</b>	<b>332</b>	<b>317</b>	<b>312</b>	<b>310</b>	<b>292</b>	<b>276</b>	<b>279</b>
<b>Total number of research/instructional faculty (FTE) holding active research and development grants/contracts in Louisiana's key economic development industries</b>	<b>94</b>	<b>98</b>	<b>92</b>	<b>89</b>	<b>95*</b>	<b>93*</b>	<b>86</b>
<b>Percentage of faculty holding active research and development grants/contracts in Louisiana's key economic development industries</b>	<b>28.3%</b>	<b>30.9%</b>	<b>29.5%</b>	<b>28.7%</b>	<b>32.5%</b>	<b>33.7%</b>	<b>30.8%</b>

*\*We responded to the Battelle & MPRAC reports in identifying key industries that LA Tech University's researchers have contributed to.*

**3.c.iii.a. Dollar amount of all research and development expenditures reported annually, based on a five-year rolling average, by source (Tracked)**

	<b>Baseline</b>	<b>Year 1</b>	<b>Year 2</b>	<b>Year 3</b>	<b>Year 4</b>	<b>Year 5</b>	<b>Year 6</b>
<b>Term of Data</b>	<b>FY 05 – FY 09</b>	<b>FY 06 – FY 10</b>	<b>FY 07 – FY 11</b>	<b>FY 08 – FY 12</b>	<b>FY 09 – FY 13</b>	<b>FY 10 – FY 14</b>	<b>FY 11 – FY 15</b>
<b>Federal</b>	<b>\$6,406,000</b>	<b>\$7,204,000</b>	<b>\$8,429,000</b>	<b>\$9,535,000</b>	<b>\$9,982,000</b>	<b>\$9,844,000</b>	<b>\$8,837,000</b>
<b>State and local governments</b>	<b>1,567,000</b>	<b>1,741,000</b>	<b>1,987,000</b>	<b>2,284,000</b>	<b>2,382,000</b>	<b>\$2,299,000</b>	<b>\$2,494,000</b>
<b>Industry</b>	<b>450,000</b>	<b>426,000</b>	<b>391,000</b>	<b>368,000</b>	<b>388,000</b>	<b>\$451,000</b>	<b>\$533,000</b>
<b>Institution funds</b>	<b>11,148,000</b>	<b>11,694,000</b>	<b>12,153,000</b>	<b>12,649,000</b>	<b>12,522,000</b>	<b>\$12,980,000</b>	<b>\$13,002,000</b>
<b>All other sources</b>	<b>53,000</b>	<b>41,000</b>	<b>43,000</b>	<b>39,000</b>	<b>37,000</b>	<b>\$35,000</b>	<b>\$304,000</b>
<b>TOTAL</b>	<b>\$19,625,000</b>	<b>\$21,106,000</b>	<b>\$23,004,000</b>	<b>\$24,875,000</b>	<b>\$25,311,000</b>	<b>\$25,609,000</b>	<b>\$25,170,000</b>

**3.c.iii.b. Number of research/instructional faculty (FTE - employee level 01, 02, 03) and dollar amount of research and development expenditures per FTE faculty member**

	<b>Baseline</b>	<b>Year 1</b>	<b>Year 2</b>	<b>Year 3</b>	<b>Year 4</b>	<b>Year 5</b>	<b>Year 6</b>
<b>Term of Data</b>	<b>FY 05 – FY 09</b>	<b>FY 06 – FY 10</b>	<b>FY 07 – FY 11</b>	<b>FY 08 – FY 12</b>	<b>FY 09 – FY 13</b>	<b>FY 10 – FY 14</b>	<b>FY 11 – FY 15</b>
<b>Number of research/instructional faculty</b>	<b>332</b>	<b>317</b>	<b>312</b>	<b>310</b>	<b>292</b>	<b>276</b>	<b>279</b>
<b>Dollar amount of research and development expenditures per faculty member</b>	<b>\$59,111.40</b>	<b>\$66,580.40</b>	<b>\$73,730.80</b>	<b>\$80,241.90</b>	<b>\$86,681.50</b>	<b>\$92,786.20</b>	<b>\$90,215.00</b>

**3.c.iv. Dollar amount of research and development expenditures in Louisiana's key economic development industries (Tracked)**

	<b>Baseline</b>	<b>Year 1</b>	<b>Year 2</b>	<b>Year 3</b>	<b>Year 4</b>	<b>Year 5</b>	<b>Year 6</b>
<b>Term of Data</b>	<b>FY 05 – FY 09</b>	<b>FY 06 – FY 10</b>	<b>FY 07 – FY 11</b>	<b>FY 08 – FY 12</b>	<b>FY 09 – FY 13</b>	<b>FY 10 – FY 14</b>	<b>FY 11 – FY 15</b>
<b>Federal</b>	<b>\$5,938,000</b>	<b>\$6,813,000</b>	<b>\$7,730,000</b>	<b>\$8,559,000</b>	<b>\$8,781,000</b>	<b>\$8,476,000</b>	<b>\$7,587,000</b>
<b>State and local governments</b>	<b>1,397,000</b>	<b>1,542,000</b>	<b>1,772,000</b>	<b>2,021,000</b>	<b>2,061,000</b>	<b>\$1,947,000</b>	<b>\$2,023,000</b>
<b>Industry</b>	<b>449,000</b>	<b>420,000</b>	<b>384,000</b>	<b>361,000</b>	<b>380,000</b>	<b>\$444,000</b>	<b>\$527,000</b>
<b>Institution funds</b>	<b>8,714,000</b>	<b>8,494,000</b>	<b>8,654,000</b>	<b>8,823,000</b>	<b>8,411,000</b>	<b>\$8,523,000</b>	<b>\$8,656,000</b>
<b>All other sources</b>	<b>50,000</b>	<b>37,000</b>	<b>39,000</b>	<b>36,000</b>	<b>32,000</b>	<b>\$29,000</b>	<b>\$175,000</b>
<b>TOTAL</b>	<b>\$16,548,000</b>	<b>\$17,307,000</b>	<b>\$18,580,000</b>	<b>\$19,800,000</b>	<b>\$19,665,000</b>	<b>\$19,419,000</b>	<b>\$18,968,000</b>

**3.c.v. Number of intellectual property measures (patents, disclosures, licenses, options, new start-ups, surviving start-ups, etc.) which are the result of the institution's research productivity and technology transfer efforts (Targeted)**

	<b>Year 3</b>	<b>Year 4</b>	<b>Year 5</b>	<b>Year 6</b>
<b>Term of Data</b>	<b>AY 11-12</b>	<b>AY 12-13</b>	<b>AY 13-14</b>	<b>AY 14-15</b>
<b>Patents awarded</b>	7	11	6	8
<b>Disclosures</b>	24	19	17	12
<b>Licenses awarded</b>	4	4	3	2
<b>Options awarded</b>	0	1	3	3
<b>New companies (start-ups) formed</b>	1	2	3	2
<b>Surviving start-ups</b>	10	11	13	15
<b>Other</b>	0	4*	1**	2
<b>Total</b>	<b>46</b>	<b>52</b>	<b>46</b>	<b>44</b>
<b>TARGET</b>	<b>42</b>	<b>43</b>	<b>43</b>	<b>44</b>
<b>Year 07-08</b>				
<b>Year 08-09</b>				
<b>Year 09-10</b>				
<b>Avg of Prior Three Years</b>				
<b>Year 10-11</b>				
<b>Year 11-12</b>				
<b>Avg of Most Recent Two Yrs</b>				
<b>Met?</b>	<b>YES</b>	<b>YES</b>	<b>YES</b>	<b>YES</b>

*\*This includes four foreign patents.*

*\*\*Under the "other" category 1 foreign (Canadian) patent was included.*



**3.c.v. Number of intellectual property measures (patents, disclosures, licenses, options, new start-ups, surviving start-ups, etc.) which are the result of the institution's research productivity and technology transfer efforts (Targeted)**

	<b>Year 3</b>	<b>Year 4</b>	<b>Year 5</b>	<b>Year 6</b>
<b>Term of Data</b>	<b>AY 11-12</b>	<b>AY 12-13</b>	<b>AY 13-14</b>	<b>AY 14-15</b>
<b>Patents awarded</b>	7	11	6	8
<b>Disclosures</b>	24	19	17	12
<b>Licenses awarded</b>	4	4	3	2
<b>Options awarded</b>	0	1	3	3
<b>New companies (start-ups) formed</b>	1	2	3	2
<b>Surviving start-ups</b>	10	11	13	15
<b>Other</b>	0	4*	1**	2
<b>Total</b>	<b>46</b>	<b>52</b>	<b>46</b>	<b>44</b>
<b>TARGET</b>	<b>42</b>	<b>43</b>	<b>43</b>	<b>44</b>
<b>Year 07-08</b>				
<b>Year 08-09</b>				
<b>Year 09-10</b>				
<b>Avg of Prior Three Years</b>				
<b>Year 10-11</b>				
<b>Year 11-12</b>				
<b>Avg of Most Recent Two Yrs</b>				
<b>Met?</b>	<b>YES</b>	<b>YES</b>	<b>YES</b>	<b>YES</b>

*\*This includes four foreign patents.*

*\*\*Under the "other" category 1 foreign (Canadian) patent was included.*

**d. To the extent that information can be obtained, demonstrate progress in increasing the number of students placed in jobs and in increasing the performance of associate degree recipients who transfer to institutions that offer academic undergraduate degrees at the baccalaureate level or higher.**

**3.d.i. Percent of completers found employed (Descriptive)**

	<b>2009-2010 Cohort</b>	<b>2010-2011 Cohort</b>	<b>2011-2012 Cohort</b>	<b>2012-2013 Cohort</b>	<b>2013-2014 Cohort</b>
<b>Associate</b>	<b>77</b>	<b>90</b>	<b>70</b>	<b>83</b>	<b>56</b>
<b>Baccalaureate</b>	<b>1268</b>	<b>1230</b>	<b>1222</b>	<b>1204</b>	<b>1313</b>
<b>Masters</b>	<b>410</b>	<b>449</b>	<b>459</b>	<b>473</b>	<b>451</b>
<b>Doctorate</b>	<b>36</b>	<b>33</b>	<b>41</b>	<b>51</b>	<b>39</b>
<b>Professional</b>	<b>-</b>	<b>-</b>	<b>7</b>	<b>3</b>	<b>4</b>
<b>Educational Specialist</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>
<b>Total Completers</b>	<b>1791</b>	<b>1802</b>	<b>1799</b>	<b>1814</b>	<b>1863</b>
<b>Rate Employed 2014 Q2</b>	<b>54%</b>	<b>42.9%</b>	<b>51.8%</b>	<b>52.0%</b>	<b>49.3%</b>
<b>Rate Employed 2014 Q6</b>	<b>49.6%</b>	<b>49.9%</b>	<b>48.9%</b>	<b>48.2%</b>	<b>-</b>

#### 4. Institutional Efficiency and Accountability

- **Preparation/progress during the reporting year for the elimination of developmental course offerings and associate degrees, including collaboration with 2-year colleges.**

As required by the Master Plan for Public Postsecondary Education, Louisiana Tech University implemented new admission criteria in Fall 2012 that requires students to place out of remedial math and English as a condition of admission to the University. These requirements are posted on Louisiana Tech's admissions web pages for [first-time freshmen](#) and [transfer students](#). As a result of higher admission requirements, first-time freshmen decreased by 322 (-20%) students from 1,628 in Fall 2011 to 1,306 in Fall 2012. By Fall 2013 the trend reversed and first-time freshmen enrollment is now 1,963 which is a 50.31% increase from the low of 1,306 in Fall 2012. At 1,963, first-time freshmen enrollment is now the highest it has been in over 10 years. Transfer enrollment declined from 423 in Fall 2011, to 362 in Fall 2014. However, due to refocused recruiting efforts this trend was reversed in Fall 2015 when Tech enrolled 373 new transfer students and the positive trend has continued with additional enrollment increases in both Winter and Spring Quarters of 2015-2016.

Louisiana Tech does not offer developmental courses to its admitted students. However, in order to serve students who are admitted to Tech as an admission exception and who require remedial mathematics or English, the University has continued a [Cross Enrollment](#) agreement with Bossier Parish Community College that began in Spring 2013. Tech has also continued the collaboration agreement with [Louisiana Delta Community College](#) (LDCC) to offer remedial courses and other lower division General Education Required courses to students who apply to the University and who do not meet Tech's admission requirements.

As reported last year, Louisiana Tech offers two approved associate degree programs: The Associate of Science in Nursing, an RN program, and the Associate of General Studies.

The Associate Degree in Nursing, which leads to the RN certification, continues to be a high-demand program in the region. The Louisiana Center for Nursing, 2009 Report, affirms that the associate degree program is foundational as initial RN preparation. Louisiana Workforce Commission forecasts for RMLA 7 (Shreveport) through 2018 demonstrate that registered nurses will continue to be in short supply. Both local community colleges and Louisiana Tech have waiting lists of students wishing to enroll in associate degree nursing programs. Louisiana Tech has not engaged in plans to terminate this program, as the negative impact on the region would be substantial.

The Associate Degree in General Studies is offered only at the University's Barksdale instructional site as part of the Memorandum of Understanding with Barksdale Air Force Base, a federal installation for whom Louisiana Tech has offered programs specific to the MOU since 1965. The AGS has been offered as a contractual obligation to meet the needs of the Air Force and Barksdale employees seeking workforce advancement since 1973. The program tracks into the four-year general studies degree and other degree programs offered at Tech-Barksdale and on the main campus. The RMLA 7 section of the Louisiana Workforce Commission states that the Barksdale facility is expecting increased employment through 2018 in federal jobs. Louisiana Tech's continued presence at the Barksdale site as a strategic partner also enhances the University's support of education, research, and economic development needs of the region and nation.

- **Progress toward increasing non-resident tuition as compared to SREB averages during the reporting year; impact on enrollment/revenue.**

As reflected in the [July 2, 2015 minutes](#) of the special meeting of the Board of Supervisors for the University of Louisiana System in Room 190, “The Arkansas Room,” at the Claiborne Conference Center, the Special Committee on Tuition and Fees of the Board of Supervisors for the University of Louisiana System approved the 2015-2016 Undergraduate and Graduate Mandatory Attendance Fees and [Non-Resident Fees and Schedule](#) as required by La GRAD Act. Louisiana Tech University’s six-year plan to increase out-of-state tuition and fees to the SREB regional average for institutions in the Doctoral 2 category initial approval by the University of Louisiana System’s Board of Supervisors on August 27, 2010, and was again approved on [August 27, 2015](#). For 2015-16, the minimum full-time tuition and fees for out-of-state students attending Louisiana Tech University were \$21,972 per academic year versus the SREB average of \$21,971. Out-of-state fee revenue at Louisiana Tech University is projected to increase by \$2,500,000 for 2015-16.

As previously reported, we believe that increasing out-of-state fees can, to a certain degree, negatively impact students’ decisions to attend Louisiana Tech University. A key factor in maintaining a diverse student body and to recruiting and retaining non-resident students will be the continuation of a competitive out-of-state scholarship program for highly qualified students. The University is confident that expanded out-of-state recruiting efforts along with our ability to award scholarships helped us achieve a 13% increase in out-of-state undergraduate student enrollment (excludes international students) for Fall 2015. This student population grew by 132 students from 1,006 in Fall 2014 to 1,138 in Fall 2015.

Out-of-state graduate student enrollment increased by one student from 249 in Fall 2014 to 250 students in Fall 2015. International graduate student enrollment decreased by 54 (-18%) students from 301 in Fall 2014 to 247 students in Fall 2015. The decreases may be due in part to higher out-of-state tuition.

a. Eliminate remedial education course offerings and developmental study programs unless such courses or programs cannot be offered at a community college in the same geographical area.

4.a.i. Number of developmental/remedial course sections offered at the institution (Tracked)

	Baseline	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Term of Data	AY 09-10	AY 10-11	AY 11-12	AY 12-13	AY 13-14	AY 14-15	AY 15-16
Course sections in mathematics	15	15	22	9	5*	7**	6***
Course sections in English	8	9	8	2	0	0	0
Other developmental course sections	0	0	0	0	0	0	0
<b>TOTAL</b>	<b>23</b>	<b>24</b>	<b>30</b>	<b>11</b>	<b>5</b>	<b>7</b>	<b>6</b>

\*Four of the five sections were taught at Barksdale Air Force Base in support of our Memorandum of Understanding with the U.S. Air Force; one section was a dual enrollment section taught in the high school.

\*\* Five out of seven sections were taught at Barksdale Air Force Base; two sections were dual enrollment sections taught in high schools.

\*\*\*Four of the six were sections were taught at Barksdale Air Force Base; two sections were dual enrollment sections taught in high schools.

4.a.ii. Number of students enrolled in developmental/remedial courses, duplicated headcount (Tracked)

	Baseline	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Term of Data	AY 09-10	AY 10-11	AY 11-12	AY 12-13	AY 13-14	AY 14-15	AY 15-16
Enrollment in dev mathematics	546	535	568	262	102*	103**	66***
Enrollment in dev English	152	158	122	44	0	0	0
Enrollment in other developmental courses	0	0	0	0	0	0	0
<b>TOTAL</b>	<b>698</b>	<b>693</b>	<b>690</b>	<b>306</b>	<b>102</b>	<b>103</b>	<b>66</b>

\*Ninety-four out of 102 were Barksdale students; 8 were dual enrollment high school students.

\*\* Ninety-three out of 103 were Barksdale students; 10 were dual enrollment high school students.

\*\*\*Sixty-four out of 66 were Barksdale students; 2 were dual enrollment high school students.

**b. Eliminate associate degree program offerings unless such programs cannot be offered at a community college in the same geographic area or when the Board of Regents has certified educational or workforce needs.**

**4.b.i. Number of active associate degree programs offered at the institution (Tracked)**

	<b>Baseline</b>	<b>Year 1</b>	<b>Year 2</b>	<b>Year 3</b>	<b>Year 4</b>	<b>Year 5</b>	<b>Year 6</b>
<b>Term of Data</b>	<b>AY 09-10</b>	<b>AY 10-11</b>	<b>AY 11-12</b>	<b>AY 12-13</b>	<b>AY 13-14</b>	<b>AY 14-15</b>	<b>AY 15-16</b>
<b>Number of associate degree programs</b>	<b>3</b>	<b>3</b>	<b>2</b>	<b>2</b>	<b>2</b>	<b>2</b>	<b>2</b>

**4.b.ii. Number of students (headcount) enrolled in active associate degree programs (Tracked; Unduplicated)**

	<b>Baseline</b>	<b>Year 1</b>	<b>Year 2</b>	<b>Year 3</b>	<b>Year 4</b>	<b>Year 5</b>	<b>Year 6</b>
<b>Term of Data</b>	<b>AY 09-10</b>	<b>AY 10-11</b>	<b>AY 11-12</b>	<b>AY 12-13</b>	<b>AY 13-14</b>	<b>AY 14-15</b>	<b>AY 15-16</b>
<b>Number of students enrolled</b>	<b>367</b>	<b>370</b>	<b>295</b>	<b>315</b>	<b>317*</b>	<b>470**</b>	<b>397***</b>

*\*Two hundred and thirteen out of 317 students were Associate of General Studies students who were taught at Barksdale Air Force Base in support of Tech's MOU with the U.S. Air Force; the remaining 104 students were in the Associate of Science in Nursing Program.*

*\*\* Two hundred and two out of 470 students were Associate of General Studies students who were taught at Barksdale Air Force Base in support of Tech's MOU with the U.S. Air Force; the remaining 268 students were in the Associate of Science in Nursing Program.*

*\*\*\*Sixty-six out of 397 students were Associate of General Studies students who were taught at Barksdale Air Force Base in support of Tech's MOU with the U.S. Air Force; the remaining 331 students were in the Associate of Science in Nursing Program.*

c. Upon entering the initial performance agreement, adhere to a schedule established by the institution's management board to increase nonresident tuition amounts that are not less than the average tuition amount charged to Louisiana residents attending peer institutions in other Southern Regional Education Board states and monitor the impact of such increases on the institution.

4.c.i. Total tuition and fees charged to non-resident students (Tracked)

	<b>Baseline</b>	<b>Year 1</b>	<b>Year 2</b>	<b>Year 3</b>	<b>Year 4</b>	<b>Year 5</b>	<b>Year 6</b>
<b>Term of Data</b>	<b>AY 09-10</b>	<b>AY 10-11</b>	<b>AY 11-12</b>	<b>AY 12-13</b>	<b>AY 13-14</b>	<b>AY 14-15</b>	<b>AY 15-16</b>
<b>Non-resident tuition/fees (full-time)</b>	<b>\$9,237</b>	<b>\$10,077</b>	<b>\$11,376</b>	<b>\$13,212</b>	<b>\$15,888</b>	<b>\$19,302</b>	<b>\$19,302</b>
<b>Peer non-resident tuition/fees (full-time)</b>	<b>\$15,861</b>	<b>\$16,586</b>	<b>\$16,838</b>	<b>\$18,409</b>	<b>\$19,353</b>	<b>\$21,489</b>	<b>\$21,489</b>
<b>Percentage difference</b>	<b>-71.7%</b>	<b>-64.6%</b>	<b>-48.0%</b>	<b>-39.3%</b>	<b>-22.0%</b>	<b>-11.3%</b>	<b>-11.3%</b>

## 4.d.i. Percent of eligible programs with either mandatory or recommended status that are currently discipline accredited (Targeted)

	<b>Year 3</b>	<b>Year 4</b>	<b>Year 5</b>	<b>Year 6</b>
<b>Term of Data</b>	<b>AY 12-13*</b>	<b>AY 13-14</b>	<b>AY 14-15</b>	<b>AY 15-16</b>
<b># programs with Mandatory or Recommended accreditation status</b>	<b>80</b>	<b>79</b>	<b>79</b>	<b>77</b>
<b># programs having discipline accreditation</b>	<b>76</b>	<b>74</b>	<b>74</b>	<b>72</b>
<b>% accredited programs</b>	<b>95.0%</b>	<b>93.7%</b>	<b>93.7%</b>	<b>93.5%</b>
<b>TARGET</b>	<b>93.2%</b>	<b>93.2%</b>	<b>93.2%</b>	<b>93.2%</b>
<b>Year 08-09</b>				
<b>Year 09-10</b>				
<b>Year 10-11</b>				
<b>Avg of Prior Three Years</b>				
<b>Year 11-12</b>				
<b>Year 12-13</b>				
<b>Avg of Most Recent Two Yrs</b>				
<b>Met?</b>	<b>YES</b>	<b>YES</b>	<b>YES</b>	<b>YES</b>

*\*per February 2016 BoR accreditation status report*



# **Organizational Data**

**Submitted to  
the Board of Supervisors of the  
University of Louisiana System and  
the Louisiana Board of Regents**

**In partial fulfillment of the requirements of Act 741  
Louisiana GRAD Act  
Section 5**

**Louisiana Tech University  
University of Louisiana System**

**April 14, 2016**

**a. Number of students by classification**

- **Headcount, undergraduate students and graduate/professional school students**

*Source: Enrollment data submitted by the institutions to the Statewide Student Profile System (SSPS), Board of Regents summary report SSPSLOAD, Fall 2015*

Undergraduate headcount	10,636
Graduate headcount	1,699
Total headcount	12,335

- **Annual FTE (full-time equivalent) undergraduate and graduate/professional school students**

*Source: 2015-16 Budget Request data submitted to Board of Regents as per SCHBRCRPT.*

Undergraduate FTE	8,149.8
Graduate FTE	1,128.6
Total FTE	9,278.4

**b. Number of instructional staff members**

- **Number and FTE instructional faculty**

*Source: Employee data submitted by the institutions to the Employee Salary (EMPSAL) Data System, file submitted to Board of Regents in Fall 2015. Instructional faculty is determined by Primary Function = "IN" (Instruction) and EEO category = "2" (Faculty). FTE is determined utilizing the Campus Percent Effort (CPE) field.*

Total Headcount Faculty	428
FTE Faculty	367.1

**c. Average class student-to-instructor ratio**

- **Average undergraduate class size at the institution in the Fall of the reporting year**

*Source: Credit hour data submitted to the Student Credit Hour (SCH) Reporting System and SPSS, Board of Regents, Fall 2015.*

Undergraduate headcount enrollment	34,487
Total number of sections in which the course number is less than or equal to a senior undergraduate level	1,377
Average undergraduate class size	25.05

**d. Average number of students per instructor**

- **Ratio of FTE students to FTE instructional faculty**

*Source: Budget Request information 2014-2015 as per SCHBRCRPT and Employee Salary (EMPSAL) Data System, Board of Regents, Fall 2015.*

Total FTE enrollment	9,278.4
FTE instructional faculty	367.1
Ratio of FTE students to FTE faculty	25.3

e. **Number of non-instructional staff members in academic colleges and departments**

- **Number and FTE non-instructional staff members by academic college (or school, if that is the highest level of academic organization for some units)**

*Source: Employee data submitted to the Employee Salary (EMPSAL) Data System, submitted to Board of Regents in Fall 2015, EEO category = "1" (Executive, Administrative, Managerial) and a Primary Function not equal to "IN" (Instruction). This item reports staff members that are an integral part of an academic college or equivalent unit.*

Name of College/School	Number of non-instructional staff	FTE non-instructional staff
Applied and Natural Sciences	1	1
Business	2*	2*
Education	1	1
Engineering and Science	2*	2*
Liberal Arts	1	1
<b>Total</b>	<b>7</b>	<b>7</b>

\*Includes two director positions funded through external funds

**f. Number and FTE of staff in administrative areas**

- **Number and FTE of staff as reported in areas other than the academic colleges/schools, reported by division**

*Source: Employee data submitted to the Employee Salary (EMPSAL) Data System, submitted to Board of Regents in Fall 2015, EEO category = "1" (Executive, Administrative, Managerial) and a Primary Function not equal to "IN" (Instruction). This item reports staff members that are not an integral part of an academic college or equivalent unit, e.g. enrollment management, sponsored research, technology support, academic advising, and library services.*

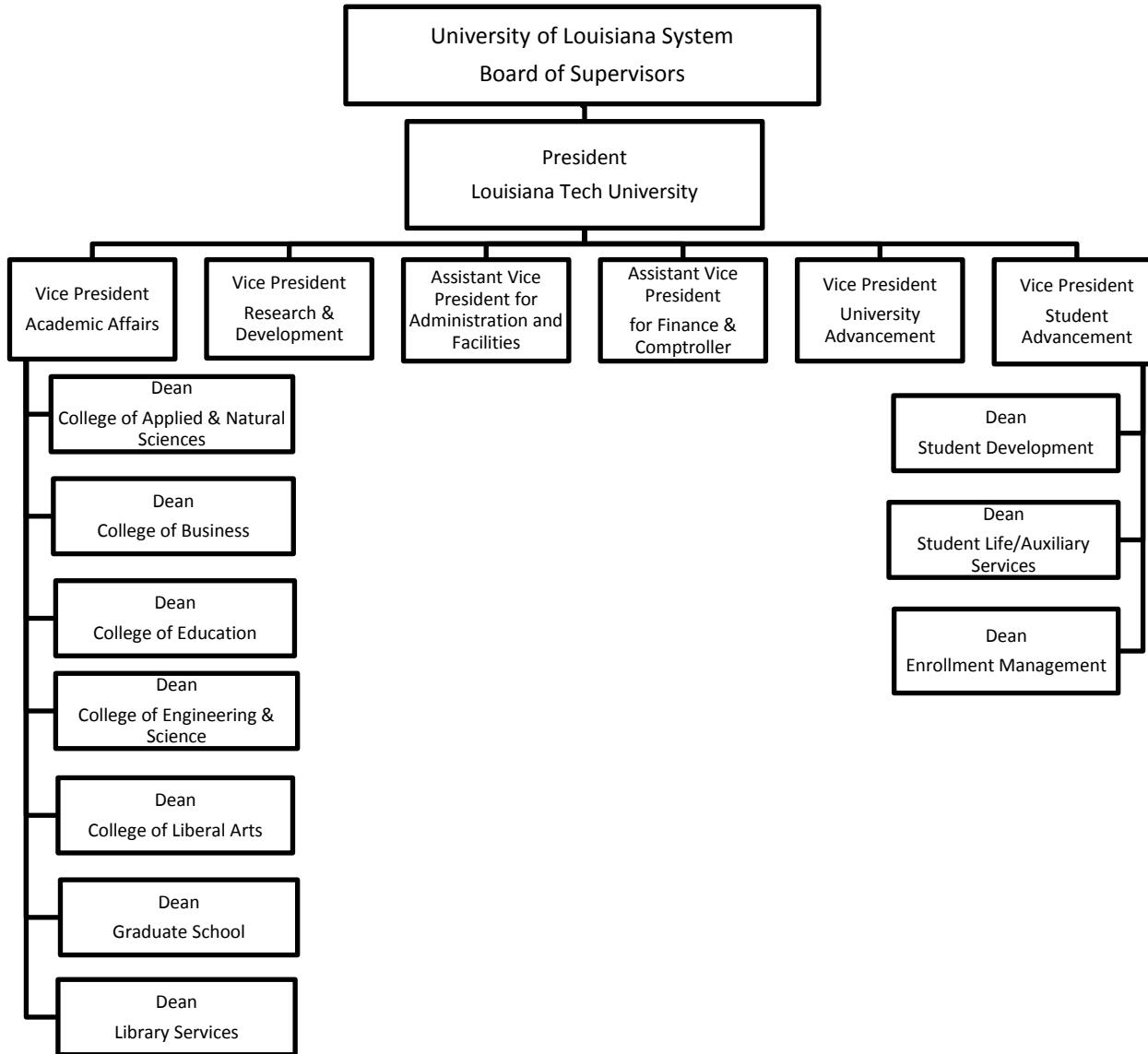
Name of Division	Number of staff	FTE staff
Academic Affairs	4	4
Finance and Administration	9	8.5
Student Affairs	11	11
University Advancement	1	1
Athletics	14	13.5
President	5	5
Research and Development	1	1
<b>Total</b>	<b>47*</b>	<b>46*</b>

\*22 of these positions are funded with external or self-generated funds

- g. Organization chart containing all departments and personnel in the institution down to the second level of the organization below the president, chancellor, or equivalent position (as of Fall 2015).**

See next page.





**h. Salaries of all personnel identified in subparagraph (g) above and the date, amount, and type of all increases in salary received since June 30, 2011.**

- **A chart listing the title, Fall Total Base Salary, and a history of any salary changes (within the same position) since June 30, 2011.**

<b>Position</b>	<b>Total Base Salary, reported Fall 2011</b>	<b>Total Base Salary, reported Fall 2012</b>	<b>Total Base Salary, reported Fall 2013</b>	<b>Total Base Salary, reported Fall 2014</b>	<b>Total Base Salary, reported Fall 2015</b>
President	\$350,000	\$350,000	\$350,000	\$350,000	\$350,000
Vice President for Academic Affairs	\$168,137	\$160,000	\$160,000	\$160,000	\$167,000
Vice President for Research and Development	\$167,892	\$200,000	\$180,000*	\$180,000	\$187,500
Executive Vice President and Dean of the Graduate School	\$127,544	\$000,000	\$000,000**	\$000,000**	\$000,000**
Vice President for Finance and Administration	\$162,690	\$162,690	\$162,690	\$000,000**	\$000,000**
Vice President for University Advancement	\$122,400	\$122,400	\$122,400	\$122,400	\$127,300
Vice President for Student Advancement	\$121,951	\$121,951	\$121,951	\$141,951	\$147,951
Assistant Vice President for Administration and Facilities					
Assistant Vice President for Finance				\$117,590	\$122,590
Dean, College of Applied and Natural Sciences	\$123,930	\$123,930	\$123,930	\$110,000***	\$130,000
Dean, College of Business	\$173,400	\$173,400	\$173,400	\$170,000***	\$210,000
Dean, College of Education	\$122,400	\$125,000	\$125,000	\$105,600***	\$130,000
Dean, College of Engineering & Science	\$148,920	\$148,920	\$147,000***	\$175,000	\$180,250
Dean, College of Liberal Arts	\$112,000	\$112,000	\$112,000	\$112,000	\$120,000
Dean, Enrollment Management	\$103,616	\$103,616	\$103,616	\$103,616	\$105,688
Dean, Library Science	\$ 85,000	\$ 85,000	\$ 60,000***	\$60,000***	\$62,400***
Dean, Student Development	\$ 66,211	\$ 66,211	\$ 66,211	\$66,211	\$68,710
Dean, Student Life/Auxiliary Services	\$ 75,925	\$ 75,925	\$ 75,925	\$75,925	\$84,993
Dean, Graduate School/Professor of Speech	\$000,000	\$000,000	\$105,000***	\$105,000	\$109,200

\*Through reorganization, title changed from Executive Vice President & Vice President for Research and Development to Vice President for Research and Development with commensurate salary adjustment.

\*\*Through reorganization, position eliminated.

\*\*\*Interim Dean

i. A cost performance analysis

- i. Total operating budget by function, amount, and percent of total, reported in a manner consistent with the National Association of College and University Business Officers guidelines.

**Louisiana Tech University:**

<b>Expenditures by Function:</b>	Amount	% of Total
Instruction	\$ 34,070,887	32.6%
Research	\$ 9,854,662	9.4%
Public Service	\$ 127,271	.1%
Academic Support**	\$ 8,312,600	8.0%
Student Services	\$ 3,647,832	3.5%
Institutional Services	\$ 8,355,210	8.0%
Scholarships/Fellowships	\$ 25,979,600	24.9%
Plant Operations/Maintenance	\$ 9,206,279	8.8%
<b>Total E&amp;G Expenditures</b>	\$ 99,554,341	95.3%
Hospital	\$ -	%
Transfers out of agency	\$ -	%
Athletics	\$ 4,857,640	4.7%
Other	\$ -	%
<b>Total Expenditures</b>	\$ 104,411,981	100.0%

- **ii. Average yearly cost of attendance for the reporting year as reported to the United States Department of Education.**

*Source: As defined by the USDoE: “The COA includes tuition and fees; on-campus room and board (or a housing and food allowance for off-campus students); and allowances for books, supplies, transportation, loan fees, and, if applicable, dependent care.” Report institution COA for a Louisiana resident, living off campus, not with parents for the reporting year.*

Average yearly cost of attendance	\$20,840
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- **iii. Average time to degree for completion of academic programs at 4-year universities, 2-year colleges, and technical colleges.**

Average time to bachelor’s degree	4.5
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- **iv. Average cost per degree awarded in the most recent academic year.**

Average cost per degree awarded	\$3,163
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- **v. Average cost per non-completer in the most recent academic year.**

Average cost per non-completer	\$3,163
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- **vi. All expenditures for the most recent academic year.**

All expenditures for the most recent year	\$193,469,332
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