



**Louisiana Tech University  
University of Louisiana System**

**GRAD Act Annual Report  
FY 2011-2012 (Year 2)**

**Submitted to the  
Board of Supervisors, University of Louisiana System  
April 1, 2012**

**and to the  
Louisiana Board of Regents,  
May 1, 2012**

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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.**

Even though Louisiana Tech's retention and graduations rate are increasing, the University did not meet its target for baccalaureate completers for this reporting period. When Louisiana Tech's initial targets were set in September of 2010, the completer rates were the most difficult to estimate, primarily because the University had no automated degree audit in place to predict completers accurately in future years. The University is now piloting an automated system with Hobson's (AGILEGrad) which will provide enhanced statistical capabilities for future cohorts.

To establish the initial targets, the University relied heavily on projections from the college departments and deans. And, from early discussions with Dr. Layzell and Board of Regents staff members, we felt that the University was expected to set targets that would show an increase over the baseline year. Though our recruiting efforts have been effective, further analysis has revealed that incoming freshman and transfer numbers should have been weighted more in the determination of initial targets. These numbers have proven to be the hard data that drives the completer numbers. Historical data over a five-year period reveals that the number of baccalaureate graduates each year was an average of 52% of the new incoming students. [Table 1](#) documents this trend and shows that with declining numbers of new students entering the pipeline, fewer degrees will be awarded.

Fewer students entering the pipeline can be explained in part by increased admission standards and small numbers of qualified high school graduates in the six parishes from which Louisiana Tech draws most heavily. For example, the average ACT composite for high school graduates in our area was 18.79 and 18.97 respectively in 2006 and 2007; this compares to averages of 22.7 and 23.2 for Tech students during the same period. To help mitigate the decline in traditional entering students, and without a large metropolitan area to draw from, Tech has stepped up regular recruiting and retention efforts at the same time that we are initiating efforts to attract other types of students such as online and adult learners, dual enrollment, and partnerships with business and industry to help meet our overall enrollment goals.

On the plus side, offsetting the decline in the number of entering freshmen is a 1.1 point increase in average ACT scores from 22.7 in 2006 to 23.8 in 2011. During the same period, retention rates increased six percentage points from 71.4% in 2006 to 77.4% in 2011. This should also contribute to higher six-year graduation rates for the later cohort years.

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

Louisiana Tech raised admission requirements for new freshmen effective Fall 2012 as required by the Board of Regents and will continue to consider raising admission requirements to meet enrollment and graduation rate goals as we did independently of the University of Louisiana System and Board of Regents in 1992, 2001, and 2002.

The primary focus of Louisiana Tech's new student success initiatives during 2011-2012 revolved around purchasing and implementing tools to support the University's student success and retention initiatives. The first purchase was Hobsons' online planning tool and degree audit system, AGILEGrad. Hobsons is an industry leader in higher education constituent relationship management (CRM) products. The contract for AGILEGrad was signed on June 21, 2011 and went live on October 20, 2011. Implementing an effective degree audit system is a major undertaking and Tech elected to begin the process by beta testing with new freshmen in the College of Engineering and Science.

One side of AGILEGrad is a student-facing tool that requires students to login and create a degree plan. Degree plans are created by selecting a major and by answering a few basic questions such as, will you attend part-time or full-time? Then, with the push of a button, students "create a

degree plan.” After creating a plan, students are required to attend each quarter’s mandatory advising session with a plan in hand. Plans of study include a term-by-term, major-specific list of courses all the way through to students’ graduation quarter. Having degree plans (curriculum sheet showing completed courses, and course schedules for current and future quarters) made prior to advising sessions promotes elevated advising conversations that can focus more on how students are progressing toward their educational goals and career planning, rather than planning out course schedules for the upcoming term.

Further, students and their advisors can communicate electronically with each other through personalized wall postings, and advisors can track and monitor all of their advisees. Early alerts are programmed into the system to advise students about time-to-graduation, deadlines, financial aid, and more. Two examples include 1) if a student tries to move enrollment terms for a course that is only offered once per year, AGILEGrad will automatically alert the student about the next time the course will be offered and how it will impact time-to-graduation by automatically calculating a new graduation term, and 2) if a student drops below full-time, messages about the impact on financial aid are built in.

When students are making their plans of study, they start by telling the system how many terms per year they will enroll, how many hours per term they will enroll, and what times and days they are available for class. AGILEGrad then calculates a graduation term based on these parameters. Students can do unlimited “what-if” degree plans within AGILEGrad, but they must designate one plan as their active plan.

There are also planning tools on the administrative side of AGILEGrad. For example, one of the tools looks to see how many students’ plans include course XYZ for the upcoming quarter versus how many seats are available in the course. Should the University decide to open up more sections of course XYZ, a report displays indicating the optimum days and times whereby the largest number of students could enroll without negatively impacting their planned schedules. The system can then automatically send a message to students that another section has been opened at X days/times. Conversely, if another section of the overbooked course cannot be added, the system can send a message to students letting them know about the over-demand situation and providing the opportunity to explore alternate plans.

The University is currently expanding AGILEGrad to include General Studies, Health Informatics and Information Management (HIIM), and the College of Business. We quickly discovered the enormous benefits of AGILEGrad for online programs, which is why General Studies and HIIM went ahead of Business. Online students and their advisors have 24/7 access to their degree plans as well as a means of communicating that will be tracked and logged in the system.

Louisiana Tech’s College of Engineering and Science’s Freshman Enrichment Program (FrEP) is another retention program targeted specifically toward students who do not have the math background to begin in the Integrated Engineering program immediately. To date (2006 – present), FrEP has impacted 315 students (17% of those are female, 19% are minority, and 90% are from Louisiana representing a mix of urban and rural areas). FrEP also includes enrichment topics and academic-year mentoring throughout the freshman year. The program has been very successful in building a cooperative learning community among these students. Retention in STEM disciplines and academic performance in mathematics and engineering classes have been significantly higher for FrEP students than for students in a comparable cohort. The data show a 15% higher retention rate in STEM disciplines for FrEP students as compared to students in a comparable cohort (based on ACT scores). Further, 15% more FrEP students earned a grade of A, B, or C in MATH 240 compared to the comparable cohort. Students who do not perform well in MATH 240 typically end up changing majors.

The Office for Women in Science and Engineering (OWISE) in the College of Engineering and Science has several programs and initiatives to recruit and retain women students in engineering and science. The student Society of Women Engineers Section (SWE) sponsors Study Sessions (before the freshman engineering exams) and focused workshops for freshman engineering students and upper-level students each quarter to prepare them better for exams and success on course assignments. They sponsor Movie and Game Nights each quarter to provide students with opportunities to meet other students, network with upper level students, and develop a stronger sense of belonging and community. They offer multiple service

opportunities (recycling days, K-12 outreach activities) to engage students, as well as special speakers for their monthly meetings to provide mentoring, professional development and positive role modeling for students. They attend the annual National and Regional SWE Conferences, which provide additional community-building, networking, mentoring, professional development opportunities, and opportunities to obtain summer internships and jobs upon graduation. The SWE Section has won four national awards and one regional award in the last two years for their programs.

Through the SWE section and other venues, the OWISE Office participates in a variety of K-12 outreach activities, such as sponsoring the annual Girl Scout/Future Engineers Day, speaking to K-12 girls' organizations (Girls of Promise, Girls Learning About Math and Science (GLAMS) Conference), running the on-campus Engineering & Science (E&S) Day Design competition (which attracts 500 - 1000 high school students from Louisiana and surrounding states), and serving as tour guides for the E&S Day lab demonstrations. The OWISE Office sponsors distinguished speakers, workshops, seminars (Negotiation by Drs. Barbara Butterfield and Jane Tucker; Networking by Dr. Jenna Carpenter; Mentoring by Dr. Virginia Valian; twice-monthly COES Graduate Seminar Series) to enhance women students' skills and provide both support and professional development to increase their success in and out of the classroom. Assessment of activities, workshops, and seminars resulted in an overall *very worthwhile* rating – the highest rating possible, by student and faculty participants.

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

Currently, Tech tracks the 1<sup>st</sup> to 2<sup>nd</sup>, 1<sup>st</sup> to 3<sup>rd</sup>, and 1<sup>st</sup> to 4<sup>th</sup> year retention rates for a myriad of cohort groups. Improvements in retention rates are one validation that our student success initiatives are working. For example, a concerted effort has been made to improve retention rates for undeclared majors. One program infuses career development into University Seminar (freshmen success) courses. Undeclared majors are placed in special sections of University Seminar that include career development and exploration workshops. The University also finalized moving Basic and Career Studies from Admissions to the Bulldog Achievement Resource Center (BARC) during 2011-2012, and, because undeclared majors are advised in Basic and Career Studies, advising for these students was also moved from Admissions to the BARC. Retention rates for the undeclared major cohorts have increased 7% from 71% in 2005 to 78% in 2011. Retention rates are also segmented and tracked by entering ACT average, academic program, distance from home, gender, and on-campus or off-campus housing.

Annual comprehensive surveys/course evaluations are administered in every section of University Seminar each Fall. This assessment assists the University in refining and adjusting course content from year to year. One example of modifying course content based on students' feedback would be the addition of a technology module introducing students to Tech email, Moodle, the Bulldog Online Student System (BOSS), and AGILEGrad during University Seminar courses.

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

The University is implementing another Hobsons CRM product called Retain. This communication and database system is scheduled to go live in June 2012, and it will be a major step forward in our ability to track, monitor, and intervene with students. Funded by the Student Technology Fee Committee, and as a companion to Retain, Louisiana Tech is commissioning Noel Levitz to develop a customized retention predictor for Louisiana Tech students. Data from all first-time, full-time freshman students from the previous three fall quarters will be used to develop a multivariate retention prediction model and to test the model. These data will be divided into two approximately equal parts; the model will be developed using one part, and validated using the other.

Once the regression model has been tweaked so that statisticians and users are satisfied with its predictive capabilities, the model will then be applied to the data obtained from the incoming freshman class during the summer before they arrive. By Fall of 2013 the model will be used to predict which of the incoming first-year students will be at risk of leaving the University. Every incoming student will be assessed and assigned a retention number; the higher the number, the more at risk the students are for leaving.

During the three-year contract with Noel Levitz, the model will be updated and tweaked and students will be targeted for intervention. Further, Hobsons and Noel Levitz have a cooperative agreement that allows plug-in input from the Noel Levitz Retention Predictor Model into the Hobsons Retain CRM. This integration will allow all retention data to be accessed under a single platform, and all of the communication, reporting, and analysis available in the robust Hobsons Retain CRM software can be accessed and used in retention intervention and analysis.

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

Louisiana Tech's [high school feedback reports](#) for feeder high schools are prepared once each year based on fall enrollment and include information about the number of students enrolled, average high school GPA, average ACT scores, rank in class, and the percentage completing the high school core curriculum required for university admission. Additional data are provided about student performance once they enroll at the University including the percent who participated in dual enrollment with Tech and the number achieving sophomore class standing by the end of their first quarter of enrollment. Information about scholarships and financial aid awards are also included in the reports.

Dual enrollment continues to be a primary focus area for the University. Annual enrollment has grown 125% from 1,143 in 2008-2009 to 2,567 in 2011-2012. In addition to the high school feedback reports, we conduct annual meetings with counselors, principals, and teachers from our partner high schools, and we provide feedback about dual enrollment student performance, in aggregate, when they enroll as first-time freshmen at Tech. The University conducted a study that looked at students who enrolled in dual enrollment English or math, and then went on to take a higher level English or math course at Tech. We found that students who enrolled in Tech's dual enrollment courses performed as well in higher level courses as students who took the lower level courses on campus. This is the type of data that is shared in aggregate.

Dr. David Mills, professor of biological sciences and a faculty member in the Center for Biomedical Engineering and Rehabilitation Science has been appointed as a 'Primary Reviewer' for the *Next Generation U.S. Science Standards for Today's Students and Tomorrow's Workforce*. Dr. Mills will work with state and national leaders in a collaborative, state-led process as new K-12 science standards are developed to be rich in content and practice, arranged in a coherent manner across disciplines and grades, and will provide all students an internationally benchmarked science education. The first public draft will be released in April 2012 for public review. It has been 15 years since science standards have been comprehensively reviewed.

Other University faculty members are involved in identifying core competencies that high school students need to demonstrate to be successful when entering College Algebra and English I. Through the Partnership for Assessment of Readiness for College and Careers (PARCC), the Louisiana Tech University team will generate 10-20 essential core competencies and corresponding evidence that demonstrate proficiency. This work is to be concluded by April 30, 2012. During June 2012, all of the PARCC Campus Leadership Teams from across the state will attend a meeting to reach consensus for a statewide list of competencies for College Algebra and English I.

The College of Engineering and Science continued its TechSTEP program to develop partnerships with key feeder high schools. These partnerships have been developed through a series of Teacher Workshops where we build collaborative teams of University faculty and high school teachers. Together we develop engineering and science explorations and design projects for a series of Discovery Weekends for students. Students who participate in this program gain a broader exposure to applications of mathematics and science and are more likely to choose STEM careers. Teachers learn additional practical applications of the mathematics and science fundamentals they already teach, thereby expanding the impact of our program to all of their classes. After five years, the TechSTEP program has directly impacted 17 high schools, 74 teachers, and over 300 high school students. Pre- and post-surveys conducted with both students and teachers show increased understanding and interest in STEM topics. In particular, teachers are finding ways to incorporate engineering topics in their math and science classes. On average there has been a 39% increase in the number of students enrolling in STEM majors at Louisiana Tech from participating high schools.

The Science and Technology Education Center (SciTEC), housed within the College of Education, continues to support the professional development of K-12 teachers with the goal of ensuring that all students are college and career ready when they graduate from high school. In 2011, 225 teachers participated in one of seven professional development projects offered through SciTEC funded by over \$1 million in external funding. These projects addressed mathematics, science, literacy, and comprehensive school reform as determined by needs identified through an analysis of school and district data.

In 2009, the University established the Office of Professional Education Outreach (OPEO). The mission of OPEO is to work with schools and districts to identify specific needs that can be addressed through University-led professional development. Almost 4,000 K-12 educators have participated in professional development offered through OPEO since it began operations. One of the most successful offerings was developed in collaboration with American College Testing (ACT): Using ACT's College and Career Readiness System to Improve School Performance. To date, nearly 1,000 educators have completed this program with 159 completing it in 2011. In addition, a pilot project in 2011 was offered to four school districts to evaluate the effectiveness of the ACT Quality Core end-of-course assessment system. The project required the development of units of instruction aligned to the ACT course standards which are 100% aligned to the Common Core State Standards which have been adopted in Louisiana. This program led to the recent approval by the state GEAR UP program to allocate funds to provide Quality Core to all 33 high schools in the 12 districts served by that program. Louisiana Tech (through OPEO) has been authorized by ACT to design and deliver the necessary professional development required for successful implementation. It is expected that as many as 500 high school teachers will be directly impacted by this project.

a. Implement policies established by the institution's management board to achieve cohort graduation rate and graduation productivity goals that are consistent with institutional peers.

1.a.i Retention of first-time, full-time, degree-seeking students, 1<sup>st</sup> to 2<sup>nd</sup> Year Retention Rate (Targeted)

	Baseline	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
<b>Term of Data</b>	<b>Fall 08 to Fall 09</b>	<b>Fall 09 to Fall 10</b>	<b>Fall 10 to Fall 11</b>	<b>Fall 11 to Fall 12</b>	<b>Fall 12 to Fall 13</b>	<b>Fall 13 to Fall 14</b>	<b>Fall 14 to Fall 15</b>
<b># in Fall Cohort</b>	<b>1509</b>	<b>1451</b>	<b>1528</b>				
<b># Retained to 2<sup>nd</sup> Fall semester</b>	<b>1122</b>	<b>1079</b>	<b>1182</b>				
<b>Rate</b>	<b>74.4%</b>	<b>74.4%</b>	<b>77.4%</b>				
<b>Target</b>		<b>76% (74% - 78%)</b>	<b>76.2% (74.2% - 78.2%)</b>	<b>76.4% (74.4% - 78.4%)</b>	<b>76.6% (74.6% - 78.6%)</b>	<b>76.8% (74.8% - 78.8%)</b>	<b>77.0% (75.0% - 79.0%)</b>
<b>Actual Fall 06 to Fall 07</b>							
<b>Actual Fall 07 to Fall 08</b>							
<b>Actual Fall 08 to Fall 09</b>							
<b>Avg of Prior Three Years</b>							
<b>Actual Fall 09 to Fall 10</b>							
<b>Actual Fall 10 to Fall 11</b>							
<b>Avg of Most Recent Two Yrs</b>							
<b>Target Met?</b>		<b>YES</b>	<b>YES</b>				



## 1.a.ii. Retention of first-time, full-time, degree-seeking students, 1st to 3rd year Retention Rate (Targeted)

	Baseline	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Term of Data	Fall 07 to Fall 09	Fall 08 to Fall 10	Fall 09 to Fall 11	Fall 10 to Fall 12	Fall 11 to Fall 13	Fall 12 to Fall 14	Fall 13 to Fall 15
# in Fall Cohort	1525	1509	1451				
# Retained to 3 <sup>rd</sup> Fall semester	947	980	941				
Rate	62.1%	64.9%	64.9%				
Target		64% (62.0% - 66.0%)	64.2% (62.2% - 66.2%)	64.2% (62.4% - 66.4%)	64.6% (62.6% - 66.6%)	64.8% (62.8% - 66.8%)	65.0% (63.0% - 67.0%)
Actual Fall 05 to Fall 07							
Actual Fall 06 to Fall 08							
Actual Fall 07 to Fall 09							
Avg of Prior Three Years							
Actual Fall 08 to Fall 10							
Actual Fall 09 to Fall 11							
Avg of Most Recent Two Yrs							
Target Met?		YES	YES				

**1.a.iv. Graduation Rate: Same institution graduation rate as defined and reported by the NCES Graduation Rate Survey (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>Fall 2002 cohort through Fall 2008</b>	<b>Fall 2003 cohort through Fall 2009</b>	<b>Fall 2004 cohort through Fall 2010</b>	<b>Fall 2005 cohort through Fall 2011</b>	<b>Fall 2006 cohort through Fall 2012</b>	<b>Fall 2007 cohort through Fall 2013</b>	<b>Fall 2008 cohort through Fall 2014</b>
<b># in Fall Cohort</b>	<b>1936</b>	<b>1948</b>	<b>1644</b>				
<b># Graduated within 150% of time</b>	<b>916</b>	<b>887</b>	<b>786</b>				
<b>Rate</b>	<b>47.3%</b>	<b>45.5%</b>	<b>47.8%</b>				
<b>Target</b>		<b>47.5% (45.5% - 49.5%)</b>	<b>48.0% (46.0% - 50.0%)</b>	<b>48.3% (46.3% - 50.3%)</b>	<b>48.7% (46.7% - 50.7%)</b>	<b>49.0% (47.0% - 51.0%)</b>	<b>50.0% (48.0% - 52.0%)</b>
<b>Actual Fall 00 cohort</b>							
<b>Actual Fall 01 cohort</b>							
<b>Actual Fall 02 cohort</b>							
<b>Avg of Prior Three Years</b>							
<b>Actual Fall 03 cohort</b>							
<b>Actual Fall 04 cohort</b>							
<b>Avg of Most Recent Two Yrs</b>							
<b>Target Met?</b>		<b>YES</b>	<b>YES</b>				

## 1.a.vii. Graduation Rate: Statewide Graduation Rate Utilizing Board of Regents BRGRATERPT (Targeted)

	Baseline	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
<b>Term of Data</b>	<b>Fall 2002 cohort through Fall 2008</b>	<b>Fall 2003 cohort through Fall 2009</b>	<b>Fall 2004 cohort through Fall 2010</b>	<b>Fall 2005 cohort through Fall 2011</b>	<b>Fall 2006 cohort through Fall 2012</b>	<b>Fall 2007 cohort through Fall 2013</b>	<b>Fall 2008 cohort through Fall 2014</b>
<b># in Fall Cohort</b>	1969	1962	1646				
<b># Graduated within 150% of time at any state public institution</b>	1045	1043	892				
<b>Rate</b>	53.1%	53.2%	54.2%				
<b>Target</b>		55.1% (53.1% - 57.1%)	55.2% (53.2% - 57.2%)	55.4% (53.4% - 57.4%)	55.6% (53.6% - 57.6%)	55.8% (53.8% - 57.8%)	56.0% (54.0% - 58.0%)
Actual Fall 00 cohort							
Actual Fall 01 cohort							
Actual Fall 02 cohort							
Avg of Prior Three Years							
Actual Fall 03 cohort							
Actual Fall 04 cohort							
Avg of Most Recent Two Yrs							
<b>Target Met?</b>		<b>YES</b>	<b>YES</b>				

## 1.a.viii. Percent of freshmen admitted by exception by term (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># Freshmen Admitted (Summer)</b>	<b>202</b>	<b>190</b>	<b>190</b>				
<b># Admitted by Exception</b>	<b>16</b>	<b>10</b>	<b>15</b>				
<b>Rate</b>	<b>7.9%</b>	<b>5.3%</b>	<b>7.9%</b>				
<b># in Freshmen Admitted (Fall)</b>	<b>1330</b>	<b>1432</b>	<b>1473</b>				
<b># Admitted by Exception</b>	<b>78</b>	<b>92</b>	<b>62</b>				
<b>Rate</b>	<b>5.9%</b>	<b>6.4%</b>	<b>4.2%</b>				
<b># in Freshmen Admitted (Winter)</b>	<b>58</b>	<b>63</b>	<b>44</b>				
<b># Admitted by Exception</b>	<b>3</b>	<b>4</b>	<b>3</b>				
<b>Rate</b>	<b>5.2%</b>	<b>6.4%</b>	<b>6.8%</b>				
<b># in Freshmen Admitted (Spring)</b>	<b>59</b>	<b>61</b>	<b>58</b>				
<b># Admitted by Exception</b>	<b>4</b>	<b>6</b>	<b>2</b>				
<b>Rate</b>	<b>6.8%</b>	<b>9.8%</b>	<b>3.5%</b>				
<b># in Freshmen Admitted (Total)</b>	<b>1649</b>	<b>1746</b>	<b>1765</b>				
<b># Admitted by Exception</b>	<b>101</b>	<b>112</b>	<b>82</b>				
<b>Rate</b>	<b>6.1%</b>	<b>6.4%</b>	<b>4.7%</b>				

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)

	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, Baccalaureate</b>	<b>1306</b>	<b>1261</b>	<b>1216</b>				
<b>% Change</b>		<b>-3.4%</b>	<b>-6.9%</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>

	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, Post-Baccalaureate</b>	<b>19</b>	<b>25</b>	<b>41</b>				
<b>% Change</b>		<b>31.5%</b>	<b>115.8%</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>% Change</b>		<b>-2.9%</b>	<b>-5.1%</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 06-07</b>			<b>1368</b>				
<b>Actual AY 07-08</b>			<b>1381</b>				
<b>Actual AY 08-09</b>			<b>1325</b>				
<b>Avg of Prior Three Years</b>			<b>1358</b>				
<b>Actual AY 09-10</b>			<b>1286</b>				
<b>Actual AY 10-11</b>			<b>1257</b>				
<b>Avg of Most Recent Two Yrs</b>			<b>1272</b>				
<b>Target Met?</b>		<b>YES</b>	<b>NO</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>% Change</b>		<b>16.7%</b>	<b>27.8%</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>% Change</b>		<b>-2.7%</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 2009-2010 total includes 5 Doctor of Audiology graduates. The 2010-2011 total includes 2 Doctor of Audiology graduates. The AuD degree was reclassified to a professional CIP during the academic year 2010-2011.*

	<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>% Change</b>		<b>14.9%</b>	<b>24.2%</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>
Actual AY 06-07							
Actual AY 07-08							
Actual AY 08-09							
Avg of Prior Three Years							
Actual AY 09-10							
Actual AY 10-11							
Avg of Most Recent Two Yrs							
<b>Target Met?</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>% Change from baseline</b>		<b>1.1%</b>	<b>1.5%</b>				



**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)**

	<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>Summer</b>	52	17	52				
<b>Fall</b>	584	755	1061				
<b>Winter</b>	308	20	78				
<b>Spring</b>	199	565	1027				
<b>TOTAL</b>	<b>1143</b>	<b>1357</b>	<b>2218</b>				

**1.c.ii. Number of semester credit hours in which high school students enroll, by semester/term (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>Summer</b>	327	99	156				
<b>Fall</b>	2875	3611	5337				
<b>Winter</b>	1044	77	388				
<b>Spring</b>	704	2229	4070				
<b>TOTAL</b>	<b>4950</b>	<b>6016</b>	<b>9951</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)**

	<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>Summer</b>	288	93	156				
<b>Fall</b>	2832	3570	5084				
<b>Winter</b>	1036	77	385				
<b>Spring</b>	699	2219	4029				
<b>TOTAL</b>	<b>4855</b>	<b>5959</b>	<b>9654</b>				

## 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 2010-11
<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%	18	17	94%
<b>Dietician</b>	Commission on Registration (CDR) National Registered Dietitian Exam	Commission on Dietetic Registration of the American Dietetics Association	100%	15	14	93%
<b>Education</b>	All 3 PRAXIS exams	Louisiana State Department of Education				
<b>Early Childhood PK-3</b>	Elementary Education: Content Knowledge (0014) and Principles of Learning and Teaching: Early Childhood (0521)	Louisiana State Department of Education	100%	27	27	100%
<b>Elementary Ed Gr 1-5</b>	Elementary Education: Content Knowledge (0014) and Principles of Learning and Teaching: Grades K-6 (0522)	Louisiana State Department of Education	100%	60	60	100%
<b>Middle Gr 4-8 Math</b>	Middle School Mathematics Content (0069) and Principles of Learning and Teaching: Grades -9 (0523)	Louisiana State Department of Education	100%	10	10	100%
<b>Middle Gr 4-8 Science</b>	Middle School Science Content (0439) and Principles of Learning and Teaching: Grades 5-9 (0523)	Louisiana State Department of Education	100%	5	5	100%

<b>Agriculture Ed Gr 6-12</b>	Vocational Ed -- Agriculture (0700) and Principles of Learning and Teaching: Grades 7-12 (0524)	Louisiana State Department of Education	100%	0	0	N/A
<b>Biology Ed Gr 6-12</b>	Biology: Content Knowledge (0235) and Principles of Learning and Teaching: Grades 7-12 (0524)	Louisiana State Department of Education	100%	13	13	100%
<b>Business Ed Gr 6-12</b>	Principles of Learning and Teaching: Grades 7-12 (0524) and Vocational-Business Education: Content Knowledge (0101)	Louisiana State Department of Education	100%	5	5	100%
<b>Earth Science Ed Gr 6-12</b>	No PRAXIS Content Test for this area. Principles of Learning and Teaching: Grades 7-12 (0524)	Louisiana State Department of Education	100%	1	1	100%
<b>English Ed Gr 6-12</b>	Principles of Learning and Teaching: Grades 7-12 (0524) and English Language, Literature, and Composition: Content Knowledge (0041) and English Language, Literature, and Composition: Pedagogy (0043)	Louisiana State Department of Education	100%	12	12	100%
<b>Family &amp; Consumer Sciences Ed Gr 6-12</b>	Principles of Learning and Teaching: Grades 7-12 (0524) and Vocational-Family and Consumer Sciences (0121)	Louisiana State Department of Education	100%	1	1	100%
<b>Mathematics Ed Gr 6-12</b>	Principles of Learning and Teaching: Grades 7-12 (0524) and Mathematics: Content Knowledge (0061)	Louisiana State Department of Education	100%	12	12	100%

<b>Physics Ed Gr 6-12</b>	Principles of Learning and Teaching: Grades 7-12 (0524) and Physics: Content Knowledge (0061)	Louisiana State Department of Education	100%	0	0	N/A
<b>Social Studies Ed Gr 6-12</b>	Principles of Learning and Teaching: Grades 7-12 (0524) and Social Studies: Content Knowledge (0081) and Social Studies Interpretation of Materials (0083)	Louisiana State Department of Education	100%	8	8	100%
<b>Spanish Ed Gr 6-12</b>	Spanish: World Language (5195) and Principles of Learning and Teaching: Grades 7-12 (0524)	Louisiana State Department of Education	100%	0	0	N/A
<b>Art Ed Gr K-12</b>	Principles of Learning and Teaching: Grades K-6 (0522) or Principles of Learning and Teaching: Grades 5-9 (PDF) (0523) or Principles of Learning and Teaching: Grades 7-12 (0524)	Louisiana State Department of Education	100%	7	7	100%
<b>Health &amp; Physical Ed Gr K-12</b>	Principles of Learning and Teaching: Grades K-6 (0522) or Principles of Learning and Teaching: Grades 5-9 (PDF) (0523) or Principles of Learning and Teaching: Grades 7-12 (0524) and Physical Education: Content Knowledge (0091)	Louisiana State Department of Education	100%	16	16	100%
<b>Music Ed, Instrumental, Gr K-12</b>	Principles of Learning and Teaching: Grades K-6 (0522) or Principles of Learning and Teaching: Grades 5-9 (PDF) (0523) or Principles of Learning and Teaching: Grades 7-12 (0524) and Music: Content Knowledge (0113)	Louisiana State Department of Education	100%	0	0	NA

<b>Music Ed, Vocal, Gr K-12</b>	Principles of Learning and Teaching: Grades K-6 (0522) or Principles of Learning and Teaching: Grades 5-9 (PDF) (0523) or Principles of Learning and Teaching: Grades 7-12 (0524) and Music: Content Knowledge (0113)	Louisiana State Department of Education	100%	1	1	100%
<b>Special Ed Gr 1-12</b>	Principles of Learning and Teaching: Grades K-6 (0522) or Principles of Learning and Teaching: Grades 5-9 (PDF) (0523) or Principles of Learning and Teaching: Grades 7-12 (0524) and Special Education of Exceptional Students: Core CK (0353) and Education of Exceptional Students: MTMD (0542)	Louisiana State Department of Education	100%	7	7	100%
<b>Special Ed Gr 1-5</b>	Core-subject-specific exam appropriate to content being taught (0014, 5014), and Special Education: Core Knowledge and Mild to Moderate Applications (0543, PDF) (5543, Computer)	Louisiana State Department of Education	100%	0	0	NA
<b>Special Ed, Visually Impaired</b>	Special Education: Core Content Knowledge and Applications (0354) and Elementary Education: Content Knowledge (0014)	Louisiana State Department of Education	100%	0	0	N/A
<b>Health Information Technology</b>	AHIMA Registered Health Information Technology(RHIT) Exam	AHIMA: American Health Information Management Association	100%	2	2	100%
<b>Nursing (RN)</b>	NCLEX-RN	Louisiana State Board of Nursing	84%	60	57	95%

## 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 policy of when transfer work is transcribed and posted to the official Louisiana Tech transcript was adjusted during 2011-2012. Prior to this year, transfer work was posted during the transfer students' first quarter of attendance. Because of workload efficiency concerns, the University did not want to spend time posting transfer work for students that would not ultimately enroll.

With the expectation of increasing numbers of transfer students and the desire to serve them well, Tech is now posting transfer work as soon as there is a complete file for newly admitted transfer students. Students applying for financial aid and who list Tech as their first college choice are processed first. Tracking within the financial aid management system (PowerFAIDS) revealed that students who apply for financial aid and list Tech as their first college choice, enroll at a rate of 81%.

Further, once AGILEGrad, our newly acquired degree audit system, is fully implemented, there is a component within AGILEGrad that evaluates transfer equivalencies that have been programmed into the Student Information System. AGILEGrad will pre-populate degree plans for prospective students which will include their transfer work. While it will be some time before AGILEGrad can be opened to prospective students, the University is progressing toward that goal.

To date, there has not been an increase in the number of students transferring with Louisiana transfer degrees; however, there has been an increase in the proportion of new transfer students who transfer from a community college with an associate degree. In Fall 2011, 64% of the students transferring from our largest feeder community college did so with Associate of General Studies degrees.

Louisiana Tech's Transfer Recruiter attended the annual regional convention of Phi Theta Kappa (PTK) held in Greenwood, Mississippi this Spring. PTK is an honor society for community college students who are enrolled in associate degree programs. The students at the convention had a minimum GPA of 3.5, and informational materials from PTK indicate that 85% of their members plan to transfer and earn bachelor's degrees. This was a successful new recruiting event for Tech, and the University is making plans to participate again in the future. Tech is also considering a subscription to COLLEGEFISH.org. Subscriptions include access to tools, including names and contact information, to recruit PTK students nationwide.

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

Two transfer student focus groups were conducted during the academic year, one in December 2010, and one in January 2011. Approximately 200 new transfer students from Fall 2011 were randomly selected and invited to attend. A sub-committee of the University Recruitment and Retention Council sent personal email invitations to students and followed up with phone calls. The purpose of the focus groups was to find out what was

working well and where there might be room for improvement. The turnout for the focus groups was small, but there was a consistent message from the eight students who participated.

In the focus groups, we were delighted to learn that Tech's faculty members have been instrumental to students' transitions to Louisiana Tech. We heard story after story about how faculty members reached out to them, made them feel welcome, and assisted them in being successful. One story was about a single mother who commuted over 50 miles per day to campus. When her child became ill and she had to miss class, her teachers encouraged her to stay in school and they made alternate arrangements for her to complete her coursework. As a result of this encouragement, this student will soon begin her master's degree.

All of the students who participated in the focus groups felt that within a few weeks of enrollment, they felt acclimated and accepted by fellow students and faculty members. However, it was revealed that the first few days on campus were lonely, and that finding their way around campus was challenging. The students requested a more intrusive orientation program. They requested that we make certain aspects of the program, such as the campus tour and lunch program, mandatory. We heard that if they were not required to do something at orientation, they probably would not, even though they recognized it would be good for them. Since then, Tech has made plans for a more formal Summer orientation this year. As a result of what was learned in the focus groups, a Facebook account for newly admitted transfer students has been activated, and plans are underway to offer up to three sections of a University Seminar/student success course specifically for transfer students.

The implementation of Retain during the upcoming summer will also greatly increase our ability to evaluate the success of transfer student initiatives in the future. Please see the Student Success narrative, bullet number 2 for additional information.

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

To date, our ability to track and monitor transfer students has been limited, and much of the tracking that is done has been done by hand because of constraints within the student information system.

Currently, incoming transfer students are manually tracked from Fall through Summer and their retention in future Fall quarters is assessed. The transfer student retention rate has increased from the baseline of 59.4% for students entering Tech in 2008-2009, to 64.8% for students entering in 2010-2011. The 1<sup>st</sup> to 2<sup>nd</sup> year retention rate of students who transfer in with an associate degree has increased from 62.7% for those entering in 2008-2009, to 74% for students entering in 2010-2011.

Implementation of Retain will greatly increase the University's ability to track, monitor, and report transfer student progress. Integral to this is the capability for centralized communication and tracking within Retain. Retain will track and record all email, text, and traditional communication with students. If an email or text message is sent, Retain has analytics detailing if the email was opened and if the student then took action, such as clicking on an active link within an email.

Once fully implemented, AgileGrad will allow centralized monitoring of progress toward graduation.

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

As provided in the Memorandums of Understanding with [Louisiana Delta Community College](#) (May 15, 2008), [Bossier Parish Community College](#) (November 12, 2010), and [South Arkansas Community College](#) (November 29, 2011 – new this reporting year), students sign Intent to Participate agreements that will expedite program progression and allow seamless record transferability and data sharing in compliance with the Family Educational Rights and Privacy Act (FERPA). These agreements can be initiated by either the community college or by Louisiana Tech University and shared with the partner school.

In addition, Louisiana Tech has the following program-specific articulations agreements:

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

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)

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 – [Grambling State University](#), and [Northwestern State University](#) (new in 2012)

Students who do not qualify for admission to Louisiana Tech are advised that they can follow the above degree plans, the ASLT/AALT degree plans, or others, at the community colleges and transfer back to Tech once they have obtained an associate's degree.

The agreement with Louisiana Delta Community College (LDCC) provides a dual admission program for students who sign Intent to Participate Agreements whereby students who are admitted into LDCC and who choose an approved common degree plan will receive automatic admission to Louisiana Tech upon satisfactorily completing an associate degree.

The agreement with Bossier Parish Community College (BPCC) establishes an Associate of Science to a Bachelor of Science in Engineering Progression Program. Students sign Intent to Participate Agreements and, in exchange, are provided advisors who are available by phone, online, and on-site appointments. Louisiana Tech advisors will encourage students to complete the Associate of Science prior to progressing to the Bachelor of Science program at Louisiana Tech, and they will encourage BPCC students to become engaged in professional student organizations at Tech.

During Fall 2011, twenty-two (41%) out of fifty-four transfer students from our largest feeder community college transferred in with associate degrees. Of the twenty two, six transferred with articulated program specific degrees, fourteen transferred with the Associate of General Studies



degree, and two transferred with other associate degrees. No students elected to sign Intent to Participate agreements this year; however, the agreements do provide effective self-help tools for prospective students.

Annual feedback reports are prepared for Louisiana Tech's feeder community colleges. The [summary report](#) provides an overview of the number of students transferring, how many transferred with associate degrees, the average number of transfer hours, credit hours pursued/earned, and GPA data. A [detailed report](#) is also provided enabling community colleges to review student-by-student data (personally identifiable information removed), including what fields of study their transfer students are pursuing, and student academic performance pre- and post-transfer.

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

2.a.i. 1st to 2nd year retention rate of baccalaureate degree-seeking transfer 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 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># enrolled</b>	<b>620</b>	<b>689</b>	<b>642</b>				
<b># retained to next Fall semester</b>	<b>368</b>	<b>435</b>	<b>416</b>				
<b>Rate</b>	<b>59.4%</b>	<b>63.1%</b>	<b>64.8%</b>				

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># who began as transfers</b>	<b>302</b>	<b>292</b>	<b>317</b>				
<b>Percentage who began as transfers</b>	<b>23.1%</b>	<b>23.2%</b>	<b>26.1%</b>				

*Note: Files of 2008-09, 2009-10, and 2010-11 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)

	<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># Transfers Admitted (Summer)</b>	<b>77</b>	<b>88</b>	<b>64</b>				
<b># Admitted by Exception</b>	<b>5</b>	<b>2</b>	<b>4</b>				
<b>Rate</b>	<b>6.5%</b>	<b>2.3%</b>	<b>6.3%</b>				
<b># Transfers Admitted (Fall)</b>	<b>364</b>	<b>375</b>	<b>423</b>				
<b># Admitted by Exception</b>	<b>29</b>	<b>24</b>	<b>20</b>				
<b>Rate</b>	<b>8.0%</b>	<b>6.4%</b>	<b>4.7%</b>				
<b># Transfers Admitted (Winter)</b>	<b>80</b>	<b>118</b>	<b>74</b>				
<b># Admitted by Exception</b>	<b>5</b>	<b>8</b>	<b>7</b>				
<b>Rate</b>	<b>6.3%</b>	<b>6.8%</b>	<b>9.5%</b>				
<b># Transfers Admitted (Spring)</b>	<b>176</b>	<b>167</b>	<b>163</b>				
<b># Admitted by Exception</b>	<b>11</b>	<b>8</b>	<b>7</b>				
<b>Rate</b>	<b>6.3%</b>	<b>4.8%</b>	<b>4.3%</b>				
<b># Transfers Admitted (TOTAL)</b>	<b>697</b>	<b>748</b>	<b>724</b>				
<b># Admitted by Exception</b>	<b>50</b>	<b>42</b>	<b>38</b>				
<b>Rate</b>	<b>7.2%</b>	<b>5.6%</b>	<b>5.2%</b>				

**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># retained to next Fall semester</b>	<b>37</b>	<b>59</b>	<b>71</b>				
<b>Rate</b>	<b>62.7%</b>	<b>74.7%</b>	<b>74%</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># who began as transfers w assoc degree</b>	<b>40</b>	<b>29</b>	<b>68</b>				
<b>Percentage who began as transfers w assoc degree</b>	<b>3.1%</b>	<b>2.3%</b>	<b>5.6%</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				

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				
<b># retained to next Fall semester</b>	N.A.	N.A.	3				
<b>Rate</b>	N.A.	N.A.	75.0%				

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				

### 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.**

Individual academic Department Heads, along with the respective College Dean, and the Dean of Enrollment Management and Office of Academic Affairs closely monitor program enrollment, retention, and completer data provided by our IR Office on a quarterly basis. External members of Advisory Boards/Councils in each college are also actively engaged in providing input to address workforce issues and curriculum improvements.

As a result of the Board of Regents Low Completer Review, April 2011, Louisiana Tech terminated one associate degree program (AS in Health Information Technology), and 23 undergraduate degree programs were either terminated or terminated and consolidated. The BA in Geography; BS in Wildlife Habitat Management; BS in Speech, Language and Hearing (certification degree); BA in French Education; and BS in Speech Education were terminated. Eighteen undergraduate degrees including several teacher certification degrees were consolidated into existing degrees. Three graduate degrees (EdD in Curriculum and Instruction, MAT in Special Education - replaced by a redesigned degree, and MS in Family and Consumer Science) were also terminated.

As part of the BOR program reviews, the University requested continuance of specific degree programs based on workforce demands and increasing numbers of program graduates. These included the BS in Geographic Information Systems, BS in Environmental Science, BS in Nanosystems Engineering and Masters in Health Informatics. These programs have been continued and strengthened. In particular, the GIS degree program was modified to remove the foreign language requirement and to develop recurring internships. There is an enormous and growing need for graduates with Geographic Information Systems (GIS) training, as indicated in the fact that placement of graduates from our Geographic Information Science program is at 100%, with employers requesting additional qualified employees. The US Department of Labor, in its *Occupational Outlook Handbook, 2010-2011 Education*, notes job outlook for GIS professions “should experience faster than average employment growth,” and that “increasing demand for geographic data, as opposed to traditional surveying services, will mean better opportunities for mapping technicians and professionals who are involved in the development of and use of GIS and digital mapmaking.” We have developed an articulation agreement with Bossier Parish Community College for the GIS degree at Tech, and our faculty members have presented lectures to BPCC classes to encourage student transfer into this area of study. The GIS degree is particularly important for companies and government entities involved in land and resource use management in areas associated with the oil and natural gas industry, one that is crucial for North Louisiana.

- **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.**

The University added a BS in Cyber Engineering to the degree inventory for Fall 2011. A proposal to establish a PhD in Molecular Sciences and Nanotechnology is currently under review by the Board of Regents. Two add-on teacher certification areas are now offered totally online – (1) Adult Education and (2) English as a Second Language. With the added internship requirement to the BS in Merchandising and Consumer Science this year, the College of Applied and Natural Sciences currently has an internship component in all 11 undergraduate degree programs. The College of Education has replaced its 1-credit hour Directed Observation (30 hours of observation) course with a 3-credit hour practicum (90 hours in the

classroom) for all secondary teacher education degree programs. This is the initial step toward development of a year-long Clinical Residence progression.

Louisiana Tech and Northwestern State University have signed a 2+2 MOU designed to facilitate the transfer of RN graduates from Louisiana Tech into the BSN program at Northwestern. This agreement will address the employment demand for nursing professionals and administrators.

Louisiana Tech is participating in the development of a University of Louisiana System Letter of Intent for a BA degree in Organizational Leadership. This online degree program is designed to meet the needs of many returning adult learners as they advance in careers in many different occupations within the State of Louisiana.

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

Dr. Davy Norris, Director of the Enterprise Center and Assistant Professor of Economics, is one of ten principals appointed by the Governor to serve on the Occupational Forecasting Conference of the Workforce Investment Council. Dr. Norris is able to provide the University with deeper insights and understandings of the data and projections for regional workforce needs.

Louisiana Tech received a grant in July 2011 from the Louisiana Office of Community Development's Disaster Recovery Unit, to implement a training program to augment the State's current workforce training efforts with demand-driven, sector-based training centered on three factors: workforce employment; existing workforce retention; and, increasing skills development for new jobs in sectors related to recovery efforts and a future growth economy. Courses are being provided to a minimum of 250 participants at no cost to participants; 51% of all participants must be individuals with a low-to-moderate household income. A primary focus is to capture recent or "soon to be" graduates of community colleges and universities and to provide them with some skills training so they can immediately be employed and be productive for current and new local businesses. Efforts are being made to capture high school students for future employment needs through internships. Our grant entitled "Advanced Certifications and Training for Technology (ACTT) is providing free training programs in Cyber Security, Geographic Information Systems, Information Technology, Data Management Systems, Telecommunications, Computer-aided Drafting and Design and other areas. Many of these courses are led by our faculty and staff.

The ACTT team has reached out to companies across the region in targeted sectors to develop the program to train prospective and existing employees, customize training materials to meet the employer's specific needs, allow training to take place at the leisure of the company and the employee, to assist the company in developing a well-defined career ladder tied to training, and create an environment of assessment and response to meet changing workforce needs.

The ACTT program has advertised across the State of Louisiana through the program website, mailing and handing out of brochures and posters, a Facebook site, and many other networks. We have worked directly with employers such as CenturyLink, Hunt Guillot & Associates, and the Cyber Innovation Center. We have reached out to educational institutions such as Bossier Parish Community College, Delta Community College, and the Louisiana Technical College (LTC) campuses in various locations in north Louisiana. We have also worked directly with state entities such as the

Louisiana Workforce Commission, their Workforce Investment Boards, local government, and Chambers of Commerce, along with numerous churches and organizations in the community.

Tech's Division of Continuing Education and Distance Learning (CEDL) has sustained continuous contact with LWC, LED FastStart, the Louisiana Recovery Authority (LRA), local business and industry, local officials including Chambers of Commerce, and Economic Development entities to stay abreast of the workforce and economic development needs of Louisiana with a major focus on North Louisiana. CEDL has created additional partnerships with employers since the beginning of the program year in July of 2011. Those new partnerships, primarily to provide targeted employee training, include Management Seven LLC, Center Management LLC, Hunt Guillot & Associates, Mid-South Extrusion, and the Cyber Innovation Center. During the current year, CEDL has provided training for 304 people through its online partnerships and for over 289 employees through Incumbent Worker Training Program grants.

In the College of Education, the Office of Professional Education Outreach is charged with determining the professional development needs of our school district partners and then creating programs to address those specific needs. In Spring 2011, OPEO hosted the first Professional Development Planning Conference in an effort to bring school and district administrators together to discuss challenges they are facing and to explore ways in which the University might be able to provide assistance in meeting those challenges. As a result, nearly 1,400 educators completed professional development programs through Louisiana Tech in the Fall 2011. The second annual Professional Development Planning Conference was held in February 2012 and was attended by 56 school and district administrators representing 24 Louisiana school districts—40% of the school districts in the state.

- **Other means of tracking students into the workforce outside of the 2011 Employment Outcomes Report.**

Each academic college collects an exit survey from graduating seniors, gathering information regarding employment and professional plans. As an example, the College of Business' Student Success assistant and/or dean meets with each graduating senior prior to graduation. The University's latest reporting of graduating senior data (2010-11 academic year) reflects that 60% of Louisiana Tech graduates either have accepted employment or will be pursuing employment after graduation; 31% have indicated that they will be enrolling in graduate or professional studies; 4% plan to return for additional undergraduate studies (which is a category with increased response over previous years); 2% will be in military positions; and 2% will enter voluntary service. A number of disciplines have job placement rates of 90% or higher. Most departments conduct periodic mailouts and follow-up surveys of graduates but, no official University-level reporting is compiled at intervals after graduation.

- **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. By policy, STFB funds are expended on projects directly related to the enhancement of technology for instruction and infrastructure improvements. Many funded projects relate directly to increased technologies that expand access to online delivery of complete courses or significant portions of instructional materials. Annual STFB revenue for technology enhancements on campus approximates \$1.2 million.



The number of distance-delivered courses (duplicated count) offered at Louisiana Tech has shown a modest growth since 2008-09. In 2010-11, the number of distance-delivered courses was 284, an increase of 13.6% over 2009-2010's distance delivered courses (250), and an increase of 30.8% over 2008-2009. The overall percentage of SCHs delivered by distance technology remains relatively small and stable – averaging 5.4% of the total university SCH production for the past two years. Building on the 2007-2008 inventory of 88 distance learning offerings, the University added 109 new distance-delivered courses in 2008-2009, 75 new courses in 2009-2010, and 59 new courses in 2010-2011. The number of new courses added to the unduplicated distance-delivered inventory since 2007-2008 is 243, an increase of 176% in the courses offered. The innovations and enhancements for infrastructure, software, and web portals over the last two years are still operational and meet current needs for course delivery.

The University has carefully and deliberately shaped its inventory of distance-delivered course offerings to respond to needs identified by assessment and perceived demand. In order to accommodate the provision of sections of courses delivered by distance technology, the University increased its additional support of online course instruction for DL sections by 45% from \$99,656 in 2009-2010 to \$144, 583 in 2010-2011.

**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>				

**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>				

*\*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 .*

**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>114</b>				
<b># of programs aligned with needs</b>			<b>114</b>				
<b>% of programs aligned</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># of course sections that are 100% distance delivered</b>	<b>287</b>	<b>384</b>	<b>361</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># of students enrolled in courses that are 100% distance delivered</b>	<b>4225</b>	<b>6340</b>	<b>6270</b>				

**3.b.iii. Number of programs offered through 100% distance education by award level (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>Associate</b>	<b>1</b>	<b>1</b>	<b>0</b>				
<b>Baccalaureate</b>	<b>1</b>	<b>2</b>	<b>2</b>				
<b>Post-Baccalaureate</b>	<b>2</b>	<b>3</b>	<b>5</b>				
<b>Masters</b>	<b>1</b>	<b>5</b>	<b>6</b>				
<b>Doctoral</b>	<b>0</b>	<b>0</b>	<b>0</b>				
<b>Professional</b>	<b>0</b>	<b>0</b>	<b>0</b>				
<b>TOTAL</b>	<b>5</b>	<b>11</b>	<b>13</b>				

*Changes in 2010-2011:*

*The Associate Degree in Health Information Technology is no longer a degree offering at Louisiana Tech.*

*Two Post Baccalaureate Certificates in Adult Education and in Teaching English as a Second Language are now offered totally online.*

*The Masters in Engineering and Technology Management can now be completed in a 100% online format.*

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

- **Context for research reporting for the 11-12 year: how alignment of Research & Development activities with key economic development industries was determined, sources of reported data and information, method for isolating data related to key economic areas, and any other critical factors in approaching specific GRAD Act reporting requirements.**

Most of Louisiana Tech's externally funded research activities are focused in interdisciplinary science and engineering research centers that are closely aligned with [\*FIRST Louisiana\*](#) and key economic development industries as described therein. Our centers, as described below, are all actively engaged in fundamental research, applied research, technology development, and technology commercialization. It is important to note that Louisiana Tech faculty have active R&D projects and industry partnerships associated with almost every industry sector and every research focus area identified in *FIRST Louisiana*. Our R&D programs are aligned well with State of Louisiana needs and national interests. We are building new partnerships and programs that will enable the institution to contribute more significantly to economic development of the State in the future.

The **Institute for Micromanufacturing** (IfM) is our largest research center in terms of facilities as well as faculty, staff, and student involvement. The IfM has built strong research programs in *materials science and nanotechnology* with linkages to *computational science* and *biotechnology*, all core areas of *FIRST Louisiana*. Dr. Yuri Lvov, Chief Scientist, is an international leader in the area of Layer-by-Layer (LbL) nanoassembly. LbL assembly is a Core Enabling S&T Research area as defined by *FIRST Louisiana*. Dr. Lvov and other IfM researchers have applied LbL to translational research areas of importance to Louisiana and have led to several start-up companies and industry partnerships. For example, LbL has been applied with private sector partners to drug delivery systems (*biomedical*), pulp & paper technologies (*agricultural*), and corrosion-inhibitor paints (*coastal*). Several IfM alternative energy technologies have recently received international interests, such as a nanocatalyst used by two start-up companies to convert natural gas into diesel fuel (*energy*) and a nanomaterial licensed to a shoe company for energy generation for portable devices (*renewable energy*). Four IfM faculty have received prestigious NSF CAREER awards.

The **Center for Biomedical Engineering and Rehabilitation Science** (CBERS) is physically connected to the IfM and intellectually connected through research and education activities. With research focuses in bionanotechnology and neural engineering, CBERS has been able to contribute to scientific and technological advancements that impact the *biomedical* and *healthcare industries* in Louisiana. CBERS faculty have numerous research collaborations with the LSU Health Sciences Center in Shreveport. One of those collaborations led to a seizure defibrillator device that was licensed to a company that received funding from a Louisiana venture capital group. The company is now developing the device for commercial use. CBERS also has a special rehabilitation engineering systems group that conducts research and supports Louisiana Rehabilitation Services in providing assistive technologies and services for the disabled across the State of Louisiana (*specialty healthcare*).

The **Trenchless Technology Center** (TTC) has had very strong connections to the nation's construction and manufacturing industries since 1989. The TTC's research focus has been guided by an Industry Advisory Board representing over 30 national and international companies and municipalities. These connections have led to many research advancements that are positively impacting municipalities and companies in Louisiana and across the nation. For example, the TTC is in the midst of a \$6M three-year R&D project funded by the National Institute of Standards and Technology (NIST) that, in partnership with two major companies, is resulting in the development of a robotic system for inspecting sewer pipes

(*environmental*). A Louisiana-based start-up company is supporting the project and demonstrations are scheduled this spring for the City of Slidell, LA. In January 2012, one of the partner companies, CUES, established an R&D subsidiary in Tech Pointe to capitalize more fully on the innovations emerging from the TTC. Computational tools developed by faculty and students in one of our other research centers, the **Center for Applied Physics Studies**, have played a major role in the successful development of these technologies (*computational science*).

The **Center for Secure Cyberspace** (CSC) was established in 2007 to support an emerging Louisiana industry and an area of urgent national need related to *cyber security*. The CSC is a collaborative research effort with LSU that was established through the Regents' Post-Katrina Support Fund Initiative. In a short period of time, the CSC has received 30 grants representing \$30M in funding. The faculty have had over 150 publications and 9 patents since 2007. Technologies from the Center have been licensed to the private sector and are also being developed for use by the DoD. The CSC recently partnered with Lockheed Martin in winning a major Department of Defense Cyber Crime Center proposal. Lockheed Martin has established an office in the CIC at Bossier City. The College of Business has established a **Center for Information Assurance** (CIA) that is conducting cyber research and delivering a National Security Agency (NSA) certified academic program to support cyber workforce development needs. In 2011, the NSA and the Department of Homeland Security jointly announced Louisiana Tech as one of 12 institutions designated as National Centers of Academic Excellence in Information Assurance Education (CAE/IAE) for the years 2011 through 2016,

- **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.**

The institution has focused on increasing federal research funding with some measure of success as reflected by an increase of annual federal research expenditures from \$5.5M in FY 2005 to \$12.0M in FY 2011, representing an increase of 118% over that period of time and 11% over the past year. Total annual research expenditures have increased from \$18.6M to \$27.6M, representing an increase of 48% over the same period and 6% over the past year. There has also been an increased focus on research productivity as measured by high-quality journal publications. Success has been demonstrated through higher numbers of publications, citations, and prestigious journal covers featuring our faculty's research. 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.

In an AY 2011-12 external review conducted by the Board of Regents of the Research Competitiveness and Industrial Ties sub-programs, Louisiana Tech reported that our previous faculty recipients of BoRSF awards (35 RCS and 8 ITRS) had obtained \$26 M in additional research funding while at Louisiana Tech averaging approximately \$580,000 per principal investigator. This equated to a return on investment of 475% when considering the BoRSF funds as the baseline. The 35 faculty who had been recipients of RCS awards from 2001-2010 had over 1200 publications post award with more than 25,000 citations with an average h-index of over 9.1. Those same faculty had 119 invention disclosures, 35 patent applications, 10 issued patents and 14 licenses/options. We believe these numbers reflect very highly on the research and innovation productivity of our faculty.

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*). The grant 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 Louisiana Tech, LSU, Tulane, UNO, Southern, Xavier, and Grambling. LA-SiGMA expects to benefit the public through the development of faster and energy-efficient computers, better and cheaper

industrial catalysts and energy storage materials, and precisely targeted drug delivery systems. The recent investments by the State in LONI and the Board of Regents in the LONI Institute were important in making LA-SiGMA possible. LA-SiGMA is also making substantial contributions to the creation of a diverse and technologically sophisticated workforce in Louisiana through summer programs aimed at K-12 and two-year college students and teachers. Dr. Bala Ramachandran of Louisiana Tech is a co-PI of the LA-SiGMA grant. In 2011, LA-SiGMA was required to undergo a very rigorous NSF Reverse Site Visit before a national panel of reviewers. The LA-SiGMA team received very positive reviews from the panel.

In October 2011, Louisiana Tech received a \$1.2M grant from the Economic Development Administration (EDA), EPA, and NSF to establish a Proof of Concept Center (PoCC) serving the I-20 corridor region in north Louisiana. This EDA i6 Green Challenge grant was ***one of only six such awards made nationally***. *The grant further validates Louisiana Tech's leadership as a model program in the regional and national innovation ecosystem.* The PoCC funding focuses on increasing the speed with which new technology innovations enter the market. It addresses the most significant gaps in our regional innovation ecosystem for the greatest regional economic impact. Our substantial group of innovative private and public partners will be the major drivers of new innovations from inside the University to the market. Over 30 private companies, municipalities, economic development organizations, and other regional partners have committed to participate through direct collaboration on development projects and by serving on an Advisory Board that provides expertise on commercialization. The PoCC takes projects with University intellectual property as well as projects from private sector partners, determines the regulatory and performance standards the product must meet to be able to enter the market rapidly and successfully, field/site tests the product, and provides direct guidance for the final stage of product development.

One of the projects to be supported by the PoCC is related to a “green” high durability concrete for harsh environments. Dr. Erez Allouche of the TTC has developed a novel geopolymer concrete that is made from the waste fly ash produced by CLECO’s coal-burning power plants. The geopolymer has demonstrated excellent performance as a construction material, particularly as a refractory material. M.L. Smith, LLC, a refractory construction company in Ruston is partnering with the TTC to field test the geopolymer in industrial settings as well as at NASA Stennis where it will be exposed to direct rocket blast to enable assessment of the geopolymer to very high temperatures and pressures. M.L. Smith is expected to make this a key part of their product offerings across the Southeastern U.S. Several other companies in Louisiana, the U.S., and internationally are in discussions with Louisiana Tech about commercialization of the geopolymer concrete around the world. We believe that the potential commercial impacts and opportunities for Louisiana are quite significant.

Some other notable projects are being piloted in the PoCC for the first year including (1) Energy Efficient Large-Scale and Personalized Internet Broadcasting (with Network Foundation Technologies of Ruston), (2) High Efficiency Solar Panels (with Nu-Cell Technologies in West Monroe), (3) Energy Harvesting from Waste and Storm Water Conveyance Systems (with IPEX, Inc.), and (4) Nano-coating for Deep-water Metal Corrosion Protection (with Cameron International).

- **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.**

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 (C100), the Council for a Better Louisiana (CABL), and the North Louisiana Economic Partnership (NLEP), among others, in our R&D facilities. Louisiana Tech hosted CABL's Leadership Forum in 2011 and provided overviews of our R&D and innovation activities. The institution has also organized and hosted research conferences related to *Energy Systems*, *Sustainable Infrastructure Systems (environmental)*, and *cyber security* (in 2011) in Shreveport to engage the private sector in our R&D and economic development programs. As evidence of their support of Louisiana Tech's economic development leadership, the cities of Bossier City, Monroe, and Ruston have all made substantial financial contributions to our research and economic development programs. As Chair of the LA EPSCoR Committee, Vice President Les Guice has been instrumental in organizing three statewide University-Industry Collaborative Workshops in the areas of Materials and Energy, Digital Media, and Biosciences (scheduled in April 2012 in New Orleans). All workshops target Louisiana's key economic development industries. LED and other economic development organizations have been involved in these workshops.

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. Our faculty members have had almost daily collaborations with the CIC through a variety of research and workforce development activities. For example, our faculty piloted a Cyber Discovery Workshop for ninth-grade students and teachers that has served as a model for cyber science programs and curricula in other higher education institutions and the K-12 community. In 2012, this program received a \$2.5M grant from the Department of Homeland Security and is being considered for additional funding next year to support national deployment.

Louisiana Tech has also had extensive collaborations with major employers across North Louisiana, such as a graduate certificate curriculum in Communications Systems for CenturyLink in Monroe (in a cooperative effort with LED). With the rapid growth of CenturyLink through their acquisitions of Embarq and Qwest, there are tremendous education and training needs for existing employees. The first class of 25 CenturyLink employees graduated with their Communications Systems Certificates in November 2011. Our faculty have also conducted research and published papers jointly with CenturyLink employees. Louisiana Tech also has a significant partnership with Murphy Oil USA, a Fortune 125 company in Southern Arkansas, to provide on-line education to their employees across 22 states, including Louisiana. In addition to the workforce development effort, Louisiana Tech is supporting some R&D needs of the company and Murphy USA is exploring the establishment of a physical presence at our Enterprise Campus which could play a significant role in enhancing Louisiana's oil and gas industry. This partnership offers an innovative approach for collaborations between academia and industry that can have major impacts in the region.

- **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.**

Since 2003, Louisiana Tech has had 14 companies that have started up for the purpose of licensing and commercializing Louisiana Tech technologies. Each of these start-ups has involved our faculty or their graduate students in the company development, and each has received some government or private sector funding to develop the business. Of those 14 companies, ten are still surviving and are listed in Table 1. Those that have received SBIR or federal/state technology transfer grants or private investments are noted. There are some other prospective Louisiana Tech start-up companies that have not yet obtained a license or funding and, therefore, are not included in Table 1. For example, Nanogaia (M. DeCoster), organicNANO (D. Mills) and Nanovations (R. Null and Y. Lvov) are all companies that have been started by Tech faculty but are not considered in

Table 1 because they have not yet obtained funding from investors or grants that would enable them to be considered a start-up company. Nevertheless, we believe this level of activity is a positive reflection of the high level of entrepreneurial activity among our faculty.

**Table 1 Louisiana Tech Surviving Start-up Companies**

<b>Company Name</b>	<b>Founded</b>	<b>Affiliated Faculty</b>	<b>Grant Funding</b>
Artificial Cell Technologies*	2003	D. Haynie, Y. Lvov	NIH SBIR
Advanced Aerospace Reconnaissance*	2009	S. Forrest	Contracts
Beyond Vision*	2008	E. Allouche	NIST TIP
BrainVital*	2006	W. Besio	NIH SBIR
Carbon Capture Energy Technologies*	2009	C. Wilson, J. McDonald	BoR Indust. Ties
Jupiter Fuels	2012	C. Wilson, J. McDonald	Private funding
Nano Pulp & Paper*	2006	Y. Lvov, G. Grozdits	USDA SBIR
Network Foundation Technologies*	2003	M. O'Neal	NSF SBIR
Plutonyx*	2007	E. Allouche	Private funding
Red Box Technologies*	2009	C. Wilson, V. Kaajakari	Found. grants

*\*These companies were discussed in previous GRAD Act reports and not repeated in this section*

Bioventions is a company that is led by one of our biomedical engineering faculty members, Dr. Eric Guilbeau, and is based upon a gene sequencing technology that he developed while at Arizona State University. Dr. Guilbeau recently received an NSF SBIR Phase 1 grant and has located his company in our Enterprise Center. However, his company is not considered in Table 1 because the technology was not originated at Louisiana Tech.

It should be noted that there are several other start-up or young companies that have licensed our technologies but were not started as a direct result of those innovations and, therefore, are not considered as “University” start-up companies in Table 1 of this report. AdmitOne, Holochip, and Nemucore are three such companies that are currently using the University’s technologies as a central part of their business plans.

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. For example, Radiance Technologies, headquartered in Huntsville, AL, has offices in our Enterprise Center and is expanding operations into the University’s new multi-tenant facility, Tech Pointe, in our research park, Enterprise Campus. Fenway Group of Dallas has recently moved into Tech Pointe where they have established a software development company to support CenturyLink and other national companies. 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. Several other defense, information technology, software development, and telecommunications companies have visited the campus as they consider establishing operations in the region, and all of these companies are depending upon Louisiana Tech for R&D and workforce support.

Jupiter Fuels was recently founded by an Engineering/IfM faculty member, Dr. Chester Wilson, and IfM Research Engineer, Dr. John McDonald. The company uses a special catalyst technology for converting natural gas into diesel fuel and plans to capitalize upon the large Haynesville shale field for diesel production. Jupiter Fuels has secured commitments from major North Louisiana investors and is planning the design of a sizable pilot plant along the I-20 corridor in North Louisiana. Jupiter Fuels aligns closely with *FIRST Louisiana (Energy Production)* and *LED's Blue Ocean initiative (Next Wave Oil and Gas)*.

Since 2005, Louisiana Tech partner companies have received approximately 27 SBIR awards from NSF, NIH, DoD, and USDA. Several of those awards have been Phase 2 awards indicating significant progress that the companies have achieved in partnership with the institution.

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. Macon Ridge Foods, S2S Tutor, HelpFlix and ShuaTech are four of the most successful student start-up companies, but several others are quite active and can serve as an impetus for further entrepreneurial and economic endeavors in Louisiana.

The success of these student businesses and other new ventures throughout the region depends upon their access to counseling and support services. Louisiana Tech established a **Technology Business Development Center** (TBDC) to provide such support. The TBDC 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.

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

In the 2009 NSF national survey (the most recent data available), Louisiana Tech ranks 245 of 697 universities and colleges in research expenditures. LSU-all campuses (43), Tulane (106) and ULL (158) are Louisiana institutions in the survey that are ranked higher than Louisiana Tech. It should be noted that many of the higher ranking institutions in the NSF survey have large medical schools, land-grant agricultural programs, and federal- or state-funded research laboratories.

A summary of Louisiana Tech's intellectual property outcomes for fiscal years 2007 – 2011 (July 1, 2006 to June 30, 2011) is provided below:

- 127 Reports of Invention (ROI)
- 77 Patent Applications (US regular and provisional applications)
- 33 Patents Issued
- 20 Licenses and Options Executed

- 10 Start-up Companies
- 26 Small Business Innovation Research (SBIR/STTR) Awards with partner companies
- Averaged between 12 and 23 ROIs per \$10 million in research expenditures, well above the national average of 4.

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 AUTM 2009 survey data (the most recent data available), Louisiana Tech University ranked high in several technology transfer measures:

- Ranked 7th in the nation in terms of Reports of Invention per \$10 million R&D expenditures
- Ranked 2<sup>nd</sup> in terms of patents issued per \$100 million R&D expenditures
- Tied for 20th in the number of licenses/options executed.

Our Director of Intellectual Property and Commercialization, Dr. Rich Kordal, was recently elected by AUTM to serve on their Board as Vice President for Metrics and Surveys. This further signifies the strength of Louisiana Tech's team to support technology transfer and commercialization.

- **Other**

In 2011, Louisiana Tech was classified by the Carnegie Foundation as a Research University with High Research Activity (RU/H). Prior to that, the institution was classified as a Doctoral Research University. That elevation in classification is a result of the growth in our doctoral and research programs. Other RU/H institutions in the region include ULL, UNO, the University of Mississippi, and Baylor. LSU Baton Rouge is classified as a Research University with Very High Research Activity (RU/VH). The Carnegie Foundation's reclassification of Louisiana Tech is an objective measure of Louisiana Tech's increased research productivity. The higher classification significantly enhances our ability to recruit top faculty, students, and industry partners. It will also enhance the institution's and the State's image as a major player in the national research enterprise.

Louisiana Tech has five academic colleges. All colleges have faculty who are actively engaged in doctoral level research and produce high quality peer-reviewed publications. However, many of our faculty members are in programs that have few, if any, external funding sources. Therefore, most external funding is generated by the College of Engineering and Science, which has approximately 25% of the institution's tenure-track faculty who are eligible to serve as PI or co-PI of grants. The percentages of faculty at the institution holding research grants as reflected in Tables 3.c.i and 3.c.ii are relatively high.

**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>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>Percentage of faculty holding active research and development grants/contracts</b>	<b>39.5%</b>	<b>38.2%</b>	<b>36.9%</b>				

*\* Previously reported numbers were updated based upon end-of-year reports.*

*\*\* The numbers reported are as of March 2012, and are subject to change at the end of the annual reporting period.*

**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>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>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>				

\* Previously reported numbers were updated based upon end-of-year reports.

\*\* The numbers reported are as of March 2012, and are subject to change at the end of the annual reporting period.

**3.c.iii. 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>State and local governments</b>	<b>1,567,000</b>	<b>1,741,000</b>	<b>1,987,000</b>				
<b>Industry</b>	<b>450,000</b>	<b>426,000</b>	<b>391,000</b>				
<b>Institution funds</b>	<b>11,148,000</b>	<b>11,694,000</b>	<b>12,153,000</b>				
<b>All other sources</b>	<b>53,000</b>	<b>41,000</b>	<b>43,000</b>				
<b>TOTAL</b>	<b>\$19,625,000</b>	<b>\$21,106,000</b>	<b>\$23,004,000</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>State and local governments</b>	<b>1,397,000</b>	<b>1,542,000</b>	<b>1,772,000</b>				
<b>Industry</b>	<b>449,000</b>	<b>420,000</b>	<b>384,000</b>				
<b>Institution funds</b>	<b>8,714,000</b>	<b>8,494,000</b>	<b>8,654,000</b>				
<b>All other sources</b>	<b>50,000</b>	<b>37,000</b>	<b>39,000</b>				
<b>TOTAL</b>	<b>\$16,548,000</b>	<b>\$17,307,000</b>	<b>\$18,580,000</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 (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>Patents awarded</b>	<b>5</b>	<b>6*</b>	<b>9</b>				
<b>Disclosures</b>	<b>25*</b>	<b>25</b>	<b>19</b>				
<b>Licenses awarded</b>	<b>2</b>	<b>1</b>	<b>1</b>				
<b>Options awarded</b>	<b>1</b>	<b>1</b>	<b>1</b>				
<b>New companies (start-ups) formed</b>	<b>1</b>	<b>1</b>	<b>1</b>				
<b>Surviving start-ups</b>	<b>9</b>	<b>10</b>	<b>10</b>				

*\* Note: previous data corrected (increase by 1 in each case.)*



#### 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.**

Louisiana Tech University has implemented new admissions criteria effective Fall 2012 that require 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](#).

Louisiana Tech has retained two associate degree programs. The Associate of Science in Nursing, an RN program, and the Associate of General Studies.

**The Associate Degree in Nursing** leading to the RN certification is a robust program and is very important to address the local and state need for nurses, as the demand for nurses to fill new positions and those created by retirements continues to grow. As reported in the *Nursing Education Capacity & Nursing Supply in Louisiana*, LA Center for Nursing, 2009 Report, over 40% of the RN workforce received initial RN preparation at the AD level. As shown in Louisiana Workforce Commission forecasts for RMLA 7 (Shreveport) through 2018, registered nurses will continue to be in short supply; indeed the LWC states that the aging population may actually accelerate the need for trained health professionals. Since the Tech program was established in 1972, it has been a primary source of nursing graduates for our region. Given that both local community colleges have waiting lists to enroll in associate degree nursing programs (as does Tech), Louisiana Tech has not yet engaged in conversations to eliminate this degree. The negative impact on the region would be substantial.

**The Associate Degree in General Studies** is used primarily by military personnel as a degree to enhance their career and workforce opportunities. The degree is a part of the Memorandum of Understanding with Barksdale Air Force Base, a federal installation and as such is not required to use a Louisiana institution to provide educational offerings. The University has offered this degree at the request of the Air Force since 1973. The RMLA 7 section of the Louisiana Workforce Commission states that the Barksdale facility is expecting increased employment through 2018 in federal jobs. The offering of this associate degree is a contractual obligation to meet the needs of the Air Force and Barksdale employees seeking workforce advancement. The program tracks into the four-year general studies degree and other degree programs offered at Tech-Barksdale and on the main campus. Further, the Barksdale education program plays a critically important role in enhancing the University's role with the USAF in supporting the education and R&D needs of the nation and the economic development needs of the region. Barksdale AFB is a key strategic partner of Louisiana Tech University.

Louisiana Tech collaborated with [Louisiana Delta Community College](#) (LDCC) to offer remedial courses and other lower division General Education Required courses to students that apply to Louisiana Tech University and who do not meet the University's admission requirements. LDCC will deliver courses in Ruston as well as at Delta's campus in Monroe, and other technical college locations including Farmerville, Bastrop, Winnsboro, and others where LDCC will offer remedial and college-level classes taught by SACS-qualified faculty members. The first courses were offered at the Northeast Louisiana Technical College campus in Ruston for the Spring 2012 enrollment term.

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

As reflected in the [minutes](#) from the February 25, 2011, regular meeting of the Board of Supervisors for the University of Louisiana System in Room 100, the “Louisiana Purchase Room,” at the Claiborne Conference Center, the Board of Supervisors for the University of Louisiana System approved the 2011-12 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 received initial approval by the University of Louisiana System’s Board of Supervisors on August 27, 2010, and was again approved on August 26, 2011. For FY 2011-12, the minimum full-time tuition and fees for out-of-state students attending Louisiana Tech were \$11,489 per academic year versus the SREB average of \$16,586. Out-of-state fee revenue at Louisiana Tech University is projected to increase by \$611,000 for FY 2011-12. For the upcoming year, the out-of-state tuition and fees will rise by 21% to \$13,061 with additional similar increases to be made each year over the next four years. Out-of-state tuition and fee revenue is projected to increase by \$1,600,000 for FY 2012-13. Baseline data were provided by the University of Louisiana System Office. The University projects that by FY 2015-16, out-of-state tuition and fees at Louisiana Tech University will reach or exceed the SREB average at an estimated cost of \$21,777 per academic year.

The percentage of out-of-state enrollment for Fall 2011-12, including international student enrollment, is approximately 13% at the undergraduate level and approximately 29% at the graduate level. This represents a 1% increase at the undergraduate level and a 7% increase at the graduate level from the previous year. In Fall 2011-12 out-of-state enrollment at the undergraduate level, not including international students, increased by 89 students or 11% from the previous year, and out-of-state graduate enrollment increased by 95 students or 36% compared to Fall 2010-11. Undergraduate international student enrollment increased by 24 students or 8% from the previous year, and international student enrollment at the graduate level decreased by 32 students or -8.5% compared to Fall 2010-11.

For the five year period from 2006 to 2010 there was a downward trend each year both in the number of students enrolled and the proportion of out-of-state students enrolled at the undergraduate level. From 2006 to 2010, undergraduate out-of-state enrollment, not including international student enrollment, decreased from approximately 10.7% to 8.8% of the total undergraduate enrollment. In Fall 2011, the trend reversed slightly and the percentage increased .85% from the previous year. The increase in out-of-state enrollment is partially attributed to increased recruiting efforts, and to improved retention rates. The University will continue focusing on out-of-state recruiting and will closely monitor this enrollment. [See Table I.](#)

While we acknowledge that out-of-state students will still be attracted to Louisiana Tech University, competition for outstanding students at the undergraduate and graduate levels is a national as well as a global challenge. Recruiting and retaining an outstanding teaching and research faculty are predicated upon having the highest quality students at the undergraduate and graduate levels.

We believe that increasing out-of-state fees can, to a certain degree, negatively impact students’ decisions to attend Louisiana Tech University, particularly at the undergraduate level. This is especially true in light of the fact that many of these high-quality students will have lucrative scholarship offers in their home states as well as in-state tuition rates. A key factor to maintaining a diverse student body and to recruiting and retaining non-resident students will be the continuation of a competitive out-of-state fee scholarship program for highly qualified students.

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*				
Course sections in English	8	9	8				
Other developmental course sections	0	0	0				
<b>TOTAL</b>	<b>23</b>	<b>24</b>	<b>30</b>				

\* Seven of the twenty two sections were dual enrollment sections taught in the 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*				
Enrollment in dev English	152	158	122				
Enrollment in other developmental courses	0	0	0				
<b>TOTAL</b>	<b>698</b>	<b>693</b>	<b>690</b>				

\*Twenty four of the five hundred and sixty eight students 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>				

**4.b.ii. Number of students (headcount) enrolled in active associate degree programs (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 students enrolled</b>	<b>367</b>	<b>370</b>	<b>295</b>				

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>Peer non-resident tuition/fees (full-time)</b>	<b>\$15,861</b>	<b>\$16,586</b>	<b>\$16,838</b>				
<b>Percentage difference</b>	<b>-71.7%</b>	<b>-64.6%</b>	<b>-48.0%</b>				

*\*Final Approved non-resident tuition/fees for FY 2011-2012*

# **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 1, 2012**

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 2011*

<b>Undergraduate headcount</b>	<b>9109</b>
<b>Graduate headcount</b>	<b>2409</b>
<b>Total headcount</b>	<b>11518</b>

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

*Source: 2011-2012 Budget Request data submitted to Board of Regents as per SCHBRCRPT.*

<b>Undergraduate FTE</b>	<b>7811.10</b>
<b>Graduate FTE</b>	<b>1300.50</b>
<b>Total FTE</b>	<b>9111.60</b>

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 2011. Instructional faculty is determined by Primary Function = "IN" (Instruction) and EEO category = "2" (Faculty). FTE is determined utilizing the Campus Percent Effort (CPE) field.*

<b>Total Headcount Faculty</b>	<b>469.0</b>
<b>FTE Faculty</b>	<b>390.8</b>



**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 2011.*

<b>Undergraduate headcount enrollment</b>	<b>31597</b>
<b>Total number of sections in which the course number is less than or equal to a senior undergraduate level</b>	<b>1385</b>
<b>Average undergraduate class size</b>	<b>22.81</b>

d. Average number of students per instructor

- Ratio of FTE students to FTE instructional faculty

*Source: Budget Request information 2011-2012 as per SCHBRCRPT and Employee Salary (EMPSAL) Data System, Board of Regents, Fall 2011.*

<b>Total FTE enrollment</b>	<b>9111.60</b>
<b>FTE instructional faculty</b>	<b>390.80</b>
<b>Ratio of FTE students to FTE faculty</b>	<b>23.32</b>

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 2011, EEO category = "I" (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	1	1
Education	1	1
Engineering and Science	2*	2*
Liberal Arts	1	1
<b>Total</b>	<b>6</b>	<b>6</b>

\*Includes one center director position funded through external funds

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

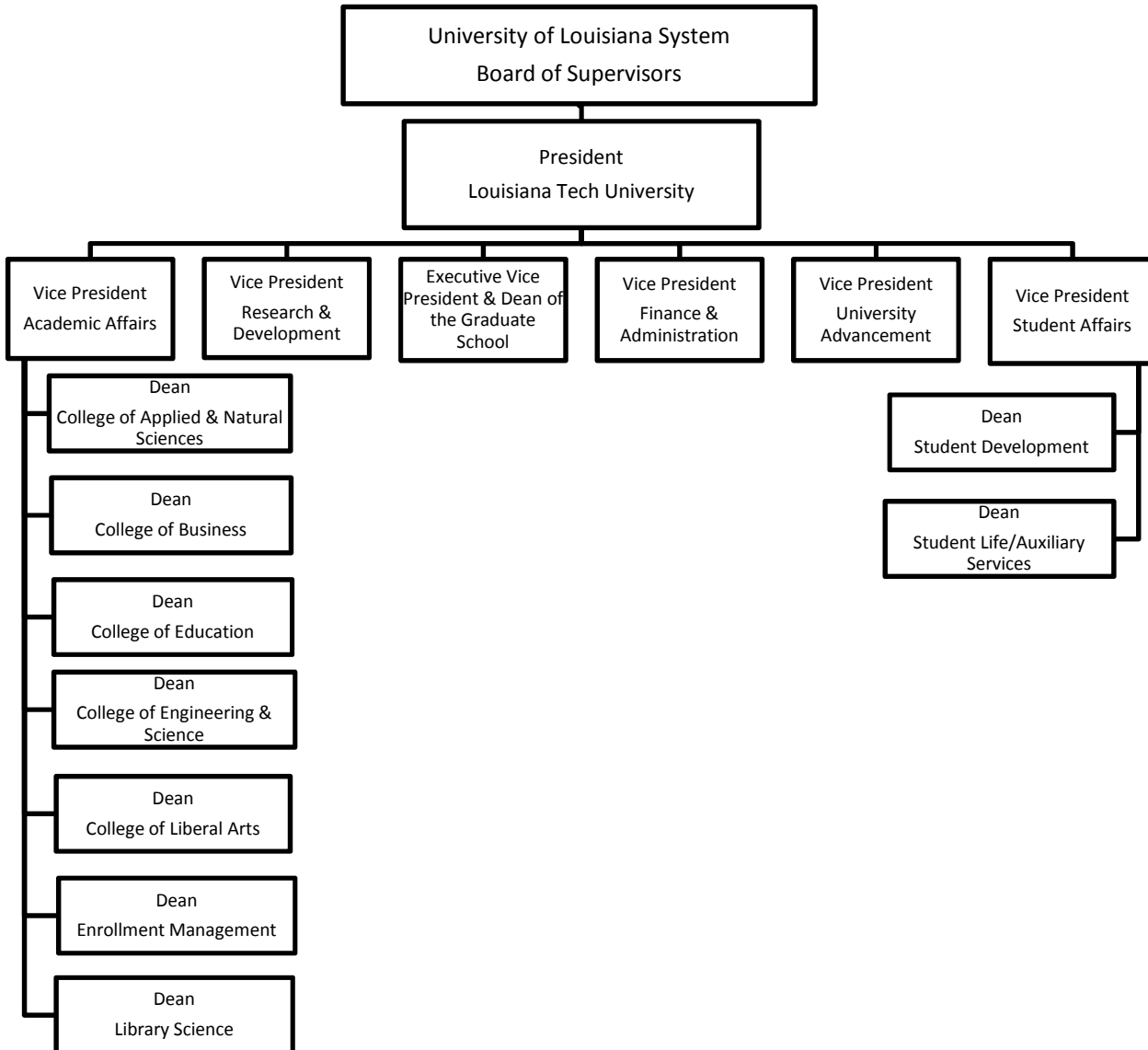
- **Number and FTE of staff as reported in areas other than the academic colleges/schools, reported by division**

*Source: Employee data submitted to the Employee Salary (EMPSAL) Data System, submitted to Board of Regents in fall 2011, EEO category = "I" (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	11	11
Finance and Administration	6	6
Student Affairs	9	9
University Advancement	1	1
Athletics	13	13
President	4	4
Research and Development	1	1
<b>Total</b>	<b>45*</b>	<b>45*</b>

\*21 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 2011).**



**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, 2008**

- A chart listing the title, fall Total Base Salary, and a history of any salary changes (within the same position) since June 30, 2008.

<b>Position</b>	<b>Total Base Salary, reported Fall 2009</b>	<b>Total Base Salary, reported Fall 2010</b>	<b>Total Base Salary, reported Fall 2011</b>
<b>President</b>	<b>\$350,000</b>	<b>\$350,000</b>	<b>\$350,000</b>
<b>Vice President for Academic Affairs</b>	<b>\$168,137</b>	<b>\$168,137</b>	<b>\$168,137</b>
<b>Vice President for Research and Development</b>	<b>\$167,892</b>	<b>\$167,892</b>	<b>\$167,892</b>
<b>Executive Vice President and Dean of the Graduate School</b>	<b>\$127,544</b>	<b>\$127,544</b>	<b>\$127,544</b>
<b>Vice President for Finance and Administration</b>	<b>\$162,690</b>	<b>\$162,690</b>	<b>\$162,690</b>
<b>Vice President for University Advancement</b>	<b>\$122,400</b>	<b>\$122,400</b>	<b>\$122,400</b>
<b>Vice President for Student Affairs</b>	<b>\$121,951</b>	<b>\$121,951</b>	<b>\$121,951</b>
<b>Dean, College of Applied and Natural Sciences</b>	<b>\$123,930</b>	<b>\$123,930</b>	<b>\$123,930</b>
<b>Dean, College of Business</b>	<b>\$173,400</b>	<b>\$173,400</b>	<b>\$173,400</b>
<b>Dean, College of Education</b>	<b>\$122,400</b>	<b>\$122,400</b>	<b>\$122,400</b>
<b>Dean, College of Engineering &amp; Science</b>	<b>\$148,920</b>	<b>\$148,920</b>	<b>\$148,920</b>
<b>Dean, College of Liberal Arts</b>	<b>\$129,183</b>	<b>\$129,183</b>	<b>\$112,000*</b>
<b>Dean, Enrollment Management</b>	<b>\$103,616</b>	<b>\$103,616</b>	<b>\$103,616</b>
<b>Dean, Library Science</b>	<b>\$ 85,000</b>	<b>\$ 85,000</b>	<b>\$ 85,000</b>
<b>Dean, Student Development</b>	<b>\$ 66,211</b>	<b>\$ 66,211</b>	<b>\$ 66,211</b>
<b>Dean, Student Life/Auxiliary Services</b>	<b>\$ 75,925</b>	<b>\$ 75,925</b>	<b>\$ 75,925</b>

\*Previous dean retired – salary of new dean

i. A cost performance analysis

Note: The Board of Regents will provide the data items i. and iii. – vi. Item ii. will be reported by the institution.

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.

As reported on Form BOR-1 during the Operational Budget Process.

Expenditures by Function	Amount	Percentage
Instruction	\$ 34,717,051	35.3%
Research	\$ 11,056,340	11.2%
Public Service	\$ 189,219	0.2%
Academic Support	\$ 10,252,505	10.4%
Student Services	\$ 4,101,801	4.2%
Institutional Services	\$ 8,896,431	9.0%
Scholarships/Fellowships	\$ 12,901,459	13.1%
Plant Operations/Maintenance	\$ 10,934,539	11.1%
Total E&G Expenditures	\$ 93,049,345	94.6%
Transfers out of agency	\$ -	0.0%
Athletics	\$ 5,327,891	5.4%
Other	\$ -	0.0%
Total Expenditures	\$ 98,377,236	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	\$18,864
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iii. Average time to degree for completion of academic programs at 4-year universities, 2-year colleges, and technical colleges.

Utilizing Board of Regents' Time to Degree report for fulltime first time freshmen

(FTF), only when the number of graduates is  $\geq 10$  for the Baccalaureate degree for 4-year universities

Average time to degree	4.6
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iv. Average cost per degree awarded in the most recent academic year.

v. Average cost per non-completer in the most recent academic year.

Utilizing FY Formula Appropriation Per FTE for 4-year universities, 2-year colleges, and technical colleges.

State dollars per FTE	\$4,979
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vi. All expenditures of the institution for that year most recent academic year.

As reported on Form BOR-3 during the Operational Budget Process.

Total expenditures	\$ 182,354,838.00
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